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# Proceedings of The International Conference on Natural Resources, Tourism and Services Management 2015

**"Inclusive responsibility towards sustainable community well-being"**

Editors: MAZLINA MAHDZAR , SIOW MAY LING, MADHAVAN BALAN NAIR & AHMAD SHUIB

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MAZLINA MAHDZAR, SIOW MAY LING,  
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## **PREFACE**

This joint international conference focuses on a wide range of social science and natural resource disciplines, expressing divergent views, searching for common ground, and creating the synergies that can inspire multi-disciplinary collaborations. It seeks to debate and consolidate ideas on issues pertaining to initiatives for establishing hand in hand progress of natural resource conservation, sustainable tourism and development of society.

We would like to thank the authors for their articles, and our team in Universiti Sains Malaysia, Universiti Malaysia Sabah and Universiti Putra Malaysia for taking time out from their busy schedule. Your contribution to this conference is acknowledged with much gratitude.

Mazlina Mahdzar  
Siow May Ling  
Madhavan Balan Nair  
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# NATURAL RESOURCES

# FACTORS INFLUENCING ATTITUDES OF RESIDENT COMMUNITIES TOWARDS MARINE RESOURCES USE IN TUN SAKARAN MARINE PARK, SABAH

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## Abstract

The coral reef ecosystem provides goods and services that are now more than ever needed by growing coastal population. Despite less than 0.2% of seafloor being covered by reefs, they support 25% of marine fish species in the world. Globally, coral reefs are seen as a dynamic ecosystem subjected to natural and anthropogenic disturbances. In terms of anthropogenically driven causes, major disturbance comes from presence and interaction of human dominance on the ecosystem. Located in the heart of the 'Coral Triangle', Semporna's dynamic mix of ecosystems support flora and fauna including mangroves, seagrass beds and coral reefs. Semporna is well known for its extensive marine biodiversity in particular that of its coral reefs. However, a report states that the current situation in Semporna is critical with only 5% of live coral coverage being in excellent condition. Meanwhile, highlighted issues in the Tun Sakaran Marine Park in the northern side of Semporna waters since now and then was heavy fishing pressures combined with destructive fishing practices which left the resources at an unsustainable condition if it continues. One of the main objectives of the TSMP establishment is to ensure the sustainability of resources use and bring environmental, social and economic benefits to the people. Hence, going deeper, this work attempts to assess the interaction between resident communities and marine resource use after being gazette of more than a decade. A closer look into community socio-economic well-being and place attachment might reveal how different identities could possibly emerging critical issues that influencing individual attitudes towards sustainability marine resource use.

Keywords; *Marine resources, Attitudes, Resident community, Sustainability.*

## INTRODUCTION

TSMP strategically sits at the entrance of Darvel Bay and is close to the international marine border. One very obvious factor is, in the vast sea, these people live close to where no physical borders between nations is seen anywhere. Its resident community's background thus comprises Malaysian, non-Malaysian and undocumented people. Being a rare case in the world in which a reserve area is inhabited by a mixture of community groups with different identities; TSMP provide its park managers and marine conservationists a unique experience in terms of managing the people and natural resources.



**Figure 1:** Tun Sakaran Marine Park and international borders  
source: [www.sempornaislandsproject.com](http://www.sempornaislandsproject.com)

By living near coral reefs, sometimes directly on them, local communities are very much an integral part of the coral reef ecosystem and must not be ignored in studies. This is confirmed by the fact that 70% of Semporna fishers state that it is more difficult to find reef fishes than previously (Yusah & Wood, 2014). This recent finding telling us that the fisheries stocks and catches have declined from previous studies in the area (Fisher, 2000; Daw *et al.*, 2002a; Cooke, 2003; Daw, 2004). The issues indicate the growing concerns of the resident communities with regards to the sustainable extraction of the marine resources in the area.

Access to formal education enhances awareness levels relating to the environmental issues and concerns (Oonyu, 2009). Denial of access to education can bring a significant despair which can lead to destructive actions taken by the fishers community in the area. Socio-economic profile which is correlated with financial status and assets, might leave have an impact (Oonyu, 2009; Masud, Kari, Binti Yahaya, & Al-Amin, 2014). 83% of households in the Park had an income of less than RM391/ month (Wood *et al.*, 2006) and this amount lies below Malaysian Poverty Line.

People who have no choice must utilize marine natural resources, and too many fishers concentrated in one fishing ground could have negative impact on the resources in the area. Fishing pressures with no alternate fishing ground and no 'resting time' for the resources to recover likely to be unsustainable. In addition, the usage of inexpensive yet damaging fishing

gear is still practiced. The differences in citizenship status may bring various effect on how people to put value on resource use. The Park is inhabited by various communities whereby approximately 60% of the park population may be stateless, whilst only 17% are Malaysian and the rest unknown (Wood, 2006).

Attachment to the place defines the membership of a person in society; they are being recognized as part of the society (Agrawal, 2009). TSMP Park was established for the benefits of local fishers; hence some of the sites are marked as 'No-Take-Zone' (NTZ) which exclude any form of fishing activity. This requires for each inhabitant's participation. Despite having being gazetted for a decade already, the NTZ sites in TSMP are still receiving fishing intrusion, while destructive and illegal activities are still recorded.

The attitude also may an influence from type of dwelling status in the area, related to the length of residency in an area. Currently, the communities in the Park can be divided into three main resident groups; permanent dwellers, temporary dwellers and free-moving dwellers. Type of dwelling status is a key factor to determine their attachment level to the Park and the presence of sense of ownership to the area. Transient communities comprise the majority of the population in the Park (80%).

Nonetheless, addressing the core of the issue is seen as solving method consequences potentially long-term of environmental impacts on local communities' lives and livelihoods. The results could be useful as a yardstick to the knowledge approaching multi-citizenship resident communities towards the marine conservation which could help resource managers ascertain and address the root causes of resource degradation.

This study attempts to achieve these objectives;

- i. To identify the socio-demographic characteristics resident communities in TSMP.
- ii. To determine the attitude of resident communities towards marine environmental protection in TSMP.
- iii. To identify the relationship between socio-demographic characteristics and sense of ownership with attitudes towards marine environmental protection in TSMP.

Combining all of the inhabitants living in the park as 'one community' and applying methods from 'success stories' of marine conservation from other parts of the world unlikely to work in this case. This study is significant in terms of seeking for the stem of the marine environmental issues in Semporna's coral reefs in which the natural resources are being degraded especially fish stocks. Objectives addressed also include assessing the friction between conservation and resource exploitation in communities in conservation settings and the participatory role in community efforts. If the study reveals any significant differences in attitude, then a single approach being applied to all of the people with different background statuses seems not relevant. These will demonstrate the need for a greater inclusivity and flexibility in marine resource management if policies are to deliver the required conservation outcomes.

## **METHODOLOGY**

Tun Sakaran Marine Park is selected because of its dynamic mix of people and abundance available marine resources. Researches done in the area indicates continuous exploitation of



human uses towards the marine resources were uncertainty in which it may leave the resources in unsustainable condition in the future. The possible links of this relationship should be investigated thoroughly to ensure the survival of both; the people and marine resources.

Comprises of eight scattered islands, not all of those will be visited for some concerns that will be discussed further. Particularly for this study, Selakan island and Maiga island is selected. Selakan and Maiga recorded as the highest populated island in the park followed by Sebangkat and Bohey Dulang (Wood, 2004). Stilt houses were built bridging Selakan-Sebangkat reef flats of Sama Dilaut and Suluk. The same report concluded that approximately 60 per cent of the park's population may be considered stateless, with the Sama Dilaut accounting for around half of this group, whilst only 17% of park residents were Malaysian citizens.

Selakan island and Maiga island were chosen as being representative of the whole TSMP. Based on personal experience and in-field observation, Maiga island is home for more people with more transient, mixed citizenship identities and thus is the best site to represent 'non-Malaysian' and 'undocumented' community comprises of Suluk (Tausug; originally from Sulu archipelago), sub-divisions of Bajau (originally from southern Philippines) and Sama Dilaut (sea gypsies) while Selakan island is known as a home for a 'Malaysian' local community of Bajau Kubang (Bajau Tempatan) with minorities of Sama Dilaut dwellers. This unique characteristic of the sites provides a good sampling frame. Other islands in the park are more of scattered settlements and found in smaller numbers. Communities on these two islands will then represent the whole population of TSMP.

### **Sampling Technique**

This research survey will be conducted using a combination of two sampling techniques in determining the size of the sample sufficiently. First, proportional stratified sampling will be used, which is employed to separate the several discrete elements in the total population and to select from each of strata a fractional sample proportionately representative of the numerical strength of each of the components within the entire population. In this case, citizenship of respondents is taken as stratifying factor.

After screening the population size using proportional stratified sampling, non-probability sampling technique of '*convenience sampling*' is applied. Often called as *haphazard* or *accidental sampling*, this technique is proposed in consideration on the nature of the sample availability. Based on a previous study done using the same technique in Semporna, some places in the park are quite difficult to reach; depending on the scattering houses/ boat (mostly are located at the back reefs) and tide patterns. Furthermore, Selakan and Maiga provide a very good sampling unit to represent the whole population in TSMP where we can find every category in the Park in these two islands.

### **Sample Size**

According to Malhotra (2008), a sampling size refers to 'a representation of the elements of the target population'. The target population for the study is defined according to the needs of the sampling unit of the study. Determining adequate sample size plays a vital role in gaining explanations of outcomes (Hair *et al.*, 2010). To date, the question of sample size adequacy remains a debate in the application of structural equation modeling (SEM) which will be applied in the analyses. However, following advice from Leedy (1997), if the population size is  $N \geq 1500$ ,

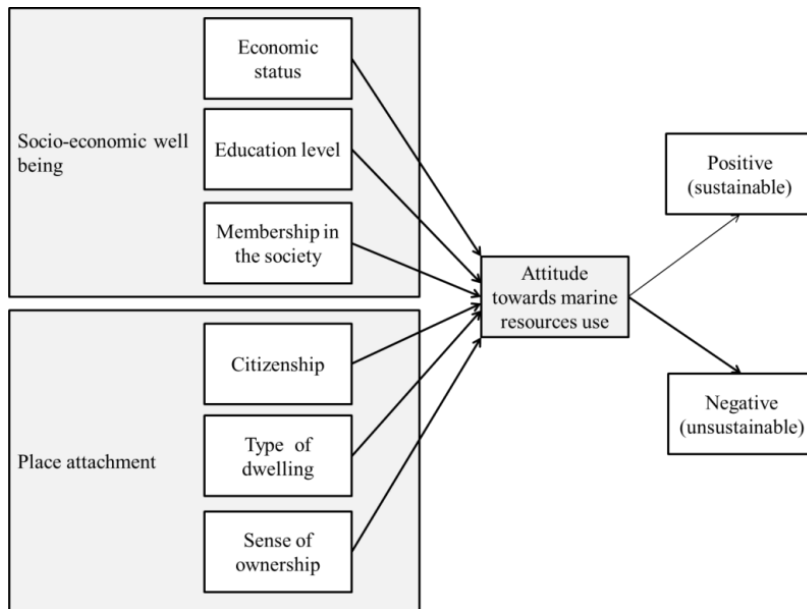
20% - 25% of it should be sampled. Hence, to ensure stability in data analysis, a maximum percentage of 25% will be taken.

As of the 2006 census, the entire population of TSMP was 2,500 with 17% Malaysian citizenship, 43% holding ‘others’ documents and 40% were undocumented. The approximate ratio between categories was 1:2:2 and if we are to take about 25% from each group, Malaysian citizen would be represented by 18 households, non-Malaysian by 45 households and undocumented by 43 households. Based in a recent study in 2014 (Yusah & Wood) that stated that an average number (mode) of a household member is six. Hence the total sample size should be 105 households (2500\*0.25/6).

**Data Collection - Survey Approach**

A house-to-house questionnaire survey will be conducted and the face-to-face interview sessions will be applied. Heads of villages (or JKKK in the absence of a Head of village) of both of the two islands will be visited to inform about the research conducted. Initially, each targeted household will be briefed by the enumerator about the study, their possible contribution to the study and each respondent will be assured that all of the respondents and their answers will be kept anonymous.

The head of the household will be selected as the respondent and in this case it is normally the husband that plays role as the family head, or in the absence of husband, a second head will be appointed; usually the wife. Upon verifying their willingness to participate in the survey, the enumerator will start the interview session, outlined by a set of questions. Each questionnaire will be marked with an ID code for future reference. Data collected verbally using Malay, Sama Dilaut, Bajau and Suluk languages (depending on the preference of the respondent) will be recorded and subsequently translated into English for analysis.



**Figure 2:** Proposed hypothetical framework model to show causation between tested attributes

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# **ENHANCING THE ADAPTIVE CAPACITY OF THE INDIGENOUS PEOPLES BY PROMOTING SUSTAINABLE AND COMMUNITY-BASED RESIN TAPPING OF ALMACIGA (*AGATHISPHILIPPINENSIS*WARB.) IN SELECTED CERTIFICATE OF ANCESTRALDOMAIN TITLE (CADT) AREAS IN PALAWAN AND SIERRA MADRE, PHILIPPINES**

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## **Abstract**

Almaciga (*Agathis philippinensis* Warb.), mostly in natural forests of ancestral domains in Palawan and Sierra Madre, yields high quality resin known as Manila copal, used as raw material for varnish, paint driers, and other industrial substance. Manila copal is considered an important dollar earner among the country's non-timber forest products. From 2000 to 2011, an average of 390,400 kilograms of Manila Copal valued at US\$504,900 was exported to different countries. Resin collection is an important source of income for indigenous peoples (IPs). However, most of them practice unsustainable tapping methods leading to resin yield decline and worst, death of trees. Furthermore, with climate change as a global concern, recurrence of natural calamities will have impacts on forests ecosystems, particularly on vulnerable and threatened species like almaciga. Because of this, trainings were conducted to capacitate the IPs and partners on government agencies on sustainable methods of tapping resins and provide basic knowledge on climate change related issues. Trainings were conducted in Brookes Point and Aborlanin Palawan and in Dinapigue, Isabela, and San Luis, Aurora in Sierra Madre. Covered in each training are three major topics: 1) classroom lecture on almaciga; 2) information, education and communication on climate change; and 3) actual demonstration on proper method of tapping almaciga resin. A total of 144 participants attended. The series of training has successfully educated and capacitated the IPs who participated actively in discussions and practicum. Through the project, the IPs as well as the partners from the government agencies now understood the scientific process of resin production in trees and realized the importance of applying the FPRDI tapping technology to sustain the benefits they derive from the resins they collect. A strong desire to safeguard the untapped trees growing in the area was successfully imparted to them.

Keywords: *almaciga resins, tapping, indigenous peoples, climate change*

## **INTRODUCTION**

Almaciga (*Agathis philippinensis* Warb.) is a very large tree reaching 600 meters in height and 300 centimeters in diameters. It grows naturally and abundantly in different regions of the Philippines, especially along mountain sides, on well-drained slopes or at altitude of 200 to 2,000 meters. Naturally growing almaciga trees are abundantly found in the natural forests of some ancestral domains in Palawan and Sierra Madre in Aurora

Almaciga yields high quality resin commonly known as Manila Copal in the international market. It is one of the early export products of the Philippines. The resin is used as raw material for

varnish as it has good storing quality, and the varnish film is very lustrous, elastic, and has good weathering properties. It has been used in oil and spirit varnishes, lacquers, paper size, paint driers, linoleum, oilcloth, waterproofing compounds, printing inks, adhesives, floor polish and floor wax. Almaciga wood is glossy, fine textured and one of the most expensive woods in the country. With the widespread logging of almaciga in the 1980's to 1990's, the species was listed as potentially threatened and vulnerable species (Category B) under the 1980 International Union for the Conservation of Nature (IUCN). This prompted the government to prohibit the felling of the trees.

But the harvesting tapping of almaciga resin remain and up to now it is considered an important dollar earner among the country's non-timber forest products. For a period of 10 years (2000-2009) an average of 202,400 kilograms of Manila Copal valued at US\$ 188,900 were exported to France, Germany, Japan, Spain, China and Switzerland.

Exported Manila Copal comes from the remaining natural stands of almaciga trees are mostly found in the CADT areas. The natural forests of Palawan in particular are known to be the source of high quality almaciga resin. More so, harvesting of almaciga resin is an important source of income for the indigenous peoples in the country.

The indigenous peoples basically subsist through swidden cultivation, hunting, gathering and the trade of locally manufactured products. Collection of almaciga resin and other forest products are important source of cash to them. However, most of them are practicing the unsustainable methods of resin tapping which leads to the decline of resin yield and even worst, death of almaciga trees. If unsustainable tapping methods will prevail, the almaciga trees are very much in danger of extinction affecting the livelihood of most indigenous peoples that depend on it.

Furthermore, with climate change as a global concern, it is expected that the recurrence of natural calamities such as typhoons, forest fires and among others will have impacts on the biodiversity of forest ecosystem, particularly the vulnerable and threatened species such as almaciga.

Thus, it is imperative that the indigenous peoples engaged in almaciga resin tapping be informed, educated and encouraged to adopt the proper and sustainable methods of tapping almaciga resin and provide them the basic knowledge on climate change and adaptation

## 1.2 Objectives

Through the implementation of this project, it is expected that there will be an improvement on resin harvesting methods applied by the IP beneficiaries in the project sites. The almaciga trees in the site will also be protected thus leading to the increase in species population.

Specifically, the project aims to achieve the following objectives:

1. To educate the project beneficiaries on climate change, its impacts to forest ecosystems and forest-based groups, as well as on climate change adaptation strategies;
2. To conduct techno-transfer and training on the proper methods of tapping almaciga resin for the indigenous peoples in some selected CADT areas;

3. To conduct initial tapping of some identified almaciga trees for demonstration purposes and quality assessment of resin obtained in the project sites; and
4. To conduct impact assessment on the adoption of FPRDI almaciga resin tapping technology in the project sites.

### **Project Sites**

The project was implemented in two sites, namely, in the mountainous Certificate of Ancestral Domain Title (CADT) areas of Palawan and Sierra Madre. Pre-selection of these sites were based on the presence of natural stands of almaciga trees and of indigenous peoples (IPs) previously or currently engaged into almaciga resin tapping.

### **Participants and Partner Cooperators**

All in all, there were five (5) sets of training conducted in different sites. Three sets of training were conducted in Palawan and two sets in Sierra Madre.

## **RESULTS AND DISCUSSION**

### **Impact Assessment of Resin Tapping Technology and IEC on Climate Change**

Data were obtained from 2 groups of participants who attended the seminar-training on resin tapping techniques and IEC on climate change. The seminar-training was conceived to enhance the present system of collecting harvesting resin, which is crude, and non-scientific interview and data collection was conducted using pre-designed questionnaires (Appendix C).

The resin gatherer-respondents from Brooke's Point are members of the Samahang Palawan Katutubo sa Mainit (SPKM) with involvement on tapping, collection, transporting and some up to marketing of almaciga resin. Another group of participants from Aborlan, Palawan are members of a Community-Based Forest Management-Peoples Organization (CBFMO-PO), the Sagpangan Tribal Multi-Purpose Cooperative (STMPC).

### **Impacts of the Resin tapping technology**

Based on the survey the training on resin tapping technology potentially enhanced the adaptive capacity of indigenous communities to changing environment that resulted to the following impacts.

#### **Economic Impact**

1. Increased productivity and impact. The participants' knowledge on the resin tapping was enhanced. This resulted to increase unproductivity and income in harvest from 16% to 33% per month using the scientific way of tapping. This translates to an additional income of 400 to 825 Philippine Peso assuming the price of resin is P25.00/kilo. In Aborlan, one adoptor has slightly increased his income by 16%.
2. Improved product quality other participants have collected the same volume of harvest before and after the tapping but the resin harvested is of good quality as compared to their traditional way of resin tapping.
3. Access to market and establishment of better price with the improvement in product quality, they have improved their access to market and establish better price for the products.

## **Social Aspect**

1. Improved technical and social competence of some gatherer-participants. According to the respondents they were able to transfer/diffused the technical skills gained from the training to other resin gatherers to other adjacent barangays which they also adopted.
2. Institutional Linkages the training serve as an avenue for the two organizations to strengthen their linkages with various agencies providing marketing and technical support like NGO's and GO's like NATRIPAL, DENR and FPRDI.
3. Trust and confidence on extension agent. The adoption of the resin tapping technology particularly on the proper width and length of tapping shows their trust and confidence to the subject matter specialist in particular and to the agency in general.
4. Community empowerment. The adoption of technology encourages the people to handle economic and social change for the local benefit through the use of their own people and their own natural resources.

## **Environmental Impact**

Protection and Conservation of the almaciga resin

Although there was no significant increase in income among participants but the most notable impact of the trainings on resin tapping is that the participants became aware and conscious of the importance of producing almaciga trees through proper tapping as frequent rechipping was regulated.

## **Impact of IEC on Climate Change**

Based on the interviews with resin tappers-respondents and one key informant, the trainings enabled them to increase their level of awareness and understanding of climate change its causes and impact effects to their livelihood. They become conscious on the importance of protecting the almaciga trees to sustain their livelihood.

All the key informants disclosed that their knowledge gained from the training was further enhanced. The almaciga trees which is one of the life support system of indigenous people are highly vulnerable to this climate change effects, hence must be protected through scientific way of tapping.

## **SUMMARY AND CONCLUSIONS**

The series of training conducted both in Palawan and Sierra Madre has successfully imparted its purpose of educating and capacitating the Indigenous Peoples on the proper method of tapping almaciga resins. Through the project, the IP beneficiaries now understood the scientific process of resin production in a tree and have realized the importance of applying the FPRDI tapping technology in order to sustain the benefits they derived from the resins they collect. The IPs were also educated on the basic science of climate change. They fully recognize the important role of trees in addressing the different impacts of climate change, thus, also understood their vital roles in protecting and conserving the forests and the resources they derive from it.

In addition, as we implement the project, some traditional forest-related knowledge, practices and beliefs on resin tapping were also observed, such as tapping the side reached by direct sunlight, location of the first main branch and the side where more leaves are seen. To the IPs

they may not have scientific basis but in a way capable of protecting the natural resource base of the environment.

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# **A MULTIFACETED EXAMINATION OF MORAL COMPETENCE AND MORAL REASONING IN AGRICULTURAL ETHICS: MEDIATION AND MODERATION ANALYSIS OF PERCEIVED REWARD**

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## **Abstract**

This paper deals with the dual-role of perceived reward to better understand the causal-comparative effects between moral competence and ethical reasoning of agriculture ethics. Competing structural equation modelling procedures are tested to measure perceived reward in three configuration models as (a) mediating, (b) moderating, and (c) mediating-moderating role to provide essential distinctions between hypotheses models. Evidence was established for all hypothesized model. The findings proven that perceived reward is partially mediated-moderated the relationship between moral competence and ethical reasoning and it provides an extensive integration to ethical decision making model to enrich the understanding of the multifaceted parcel of human motivation and attitudes that related to philosophical-psychological ethics study. This is important as the simple mediation or a moderation model is immature for causal-comparative analysis. Thus, mediating-moderating analysis offers the maturity of the study and the sophistication of the field of inquiry.

*Keywords: Moral competence, Ethical reasoning, Perceived reward, Mediation, Moderation*

## **INTRODUCTION**

The linkage concerning human-based and ecological-based values have been undermined due to the complexity in the agricultural ethics context. Although Zimdahl (2000) noted that reasoning about the existence of moral confidence in agricultural integrity, but not much research has been done about ethics and perceived reward in deciding on agricultural integrity from the descriptive and prescriptive context. The role of perceived reward in the interpreting interaction between cause and effect has gained attention in agriculture ethics in recent studies due its character of an act in contrary to its prospective adverse consequences in ethical reasoning. While perceived reward is much explained the psychological process to predict ethical reasoning (Chrispeels & Mandoli, 2003; James, 2005; Thompson, 2012), but Tilman, Cassman, Matson, Naylor, and Polasky (2002) reasoned that reward structures are a substantial imperative investment to yield the strength of agriculture ethics and integrity. However, the instrument through which agribusiness entrepreneur views the perceived reward effects of their moral competence and ethical reasoning are still indistinct. Moreover, there is still an absence of clarity of the role of perceived reward, whether is a mediator or moderator. Thus, these approaches to perceived reward in ethical decision studies have fragmented and gap in the research remains.

Similarly, Fairchild and MacKinnon (2009) suggested that further investigation on both moderation and moderation models are ideal for complex examination. Furthermore, the interpretations of the influence-intervention from elucidating true causal relations among study variables will be drawn and comprehended (MacKinnon, Lockwood, Hoffman, West, & Sheets,

2002). It also provides extensive assumptions of the relations among variables (Holland, 1988) as an enhancement of information for broad integration of substantive in research. To date, dearth of study has utilized structural equation modelling to examine the multifaceted relations of the influence-intervention between moral competence, perceived reward and ethical reasoning. This is important as an independent mediating or moderating model is premature to fine-tuning and understanding the sophistication of the study (Khalid, Wan Omar, & Loke, 2014). Taking after this line of contention, the aim of this study is to examine the competing models of mediating, moderating and mediating moderating relationship of perceived reward on moral competence and ethical reasoning among agribusiness-based entrepreneur in Malaysia. To offer key refinements, three contending configurationally models will be analysed.

### **THREE CONFIGURATIONAL MODELS OF MORAL COMPETENCE, PERCEIVED REWARD, AND ETHICAL REASONING**

Kline (2010) has proposed unconventional approach of competing models for testing structural equation modelling. Competing models are proposed by Anderson and Gerbing (1998) to estimate the main theoretical model of interest to the competing nested model. In this study, Model 1 is the primary hypothetical model of interest and exhibited perceived reward as a mediated model of the relationship between moral competence and ethical reasoning. Model 2 is nested within the model to investigate the moderation character of perceived reward. Lastly, Model 3 proposed the multifaceted integration of influence-intervention between moral competence, perceived reward and ethical reasoning.

#### **Model 1**

Model 1 proposes that perceive reward has a mediating effect in the relationship between moral competence and ethical reasoning. The model of interest is derived from Diebel's (2008) argument that highlighted the issue of reward perceived in order to ensure the agricultural ethical reasoning based on moral confidence factors to develop a philosophical ethics perspective of agricultural economics. Previous studies have theoretically (Chrispeels & Mandoli, 2003; King, 2003; Thompson, 2012) and empirically (James, 2005; James Jr. & Hendrickson, 2008; Hidayati, 2011) provided evidence that economic pressure such as perceived reward is an important element to influence the toleration of ethical reasoning. According to Hausman and McPherson (1993), and Pearce and Turner (1990), redirection of ethical reasoning in making agriculture ethics decision is driven by the moral competence in determining the end result. In spite of the fact that the previous findings have proven the distinctive relationship between moral competence, perceived reward, and ethical reasoning, however no empirical study has evaluated the mediating impact of perceived reward on moral competence and ethical reasoning (Tilman et al., 2002) in the same nested model. In this manner, Model 1 proposes to test the hypothesis that perceived reward influence the relationship between moral competence and ethical reasoning in the agriculture ethics decision.

#### **Model 2**

Model 2 suggests a competing hypothesis that perceived reward moderates the relationship between moral competence and ethical reasoning. This model is based on the theoretical model developed by Dundon (2003) who acknowledge the perceived reward role to modify agribusinesses' moral competence to further appreciate the role of strength of reward perceived

that in turn affects their ethical reasoning. Thus, the sophistication of the agricultural ethics can be compared and measured through contrast-intervention effects that subsequently have an impact of ethical rationality in making choices (Glavas & Kelly, 2014). Furthermore, Choi (2008) and Thompson (2012) noted that apart to the perception of ethical commitment in agricultural sustainability, the degree to which they evaluate the fairness in terms of reward equity influences ethical decisions, in particular pertaining to outcomes that are imperative for the survival of the firm. Therefore, there are justifiable grounds for including perceived reward as a control variable in the ethical decision making model (Tilman et al., 2002), rather considering desirable characteristics of reward as an uncontrollable variable that might potentially hamper the building of complex models. Thus, Model 2 proposed to test the hypothesis that moral competence is moderated by perceived reward for ethical reasoning.

### **Model 3**

Even though there is none ethical decision making study has employ and has empirical evidence for mediation-moderation analysis in measuring the influence-intervention effects of perceived reward, but theoretically this impact has been discussed by Diebel (2008). The needs to clarify the different ways wherein the conceptual variable of perceived reward may enlighten for dissimilarities in peoples' moral choices and reasoning have validated the role of mediation-moderation to symbolize as a generative mechanism to which the moral competence is able to influence the ethical reasoning in social psychological studies (Baron & Kenny, 1986; Fairchild & MacKinnon, 2009; Preacher, Rucker, & Hayes, 2007). Thus, Model 3 is adopting the concept proposed by Baron and Kenny (1986), Fairchild and MacKinnon (2009) and Preacher et al. (2007) to witness elaborations of the impact of mediator-moderator altogether rather in distinction to elucidate the cause and effect relationships. Subsequently, the gap in misunderstood the differing implications in contrasting the mediator-moderator functions that delineate the implications theory and research can be probed (Fairchild & MacKinnon, 2009; Preacher et al., 2007). In addition, the nature of causal mechanism and irreconcilable theoretical positions can be integrated seemingly (Baron & Kenny, 1986). Hence, Model 3 hypothesis that the relationship between moral competence and ethical reasoning is mediated-moderated by perceived reward.

## **METHODS**

### **Sample**

Survey data for the present study were collected as part of a larger study to synthesis the ethical decision making in multi-sectoral business context in Malaysia. Initially, participants were solicited randomly and participation in the study was voluntary from 758 anonymous agribusiness-based entrepreneurs represented entity from a variety of sub-sector, including agricultural, forestry and fishery according to Malaysia Standard Classification of Occupation (MASCO) 2008. 61 percent did not participate or failed to provide sufficient data, resulting in an organizational level response rate of 39 percent ( $n = 295$ ). The majority of respondents are male (54%), mean age was 35.5 with the majority of participants holding certificate as the highest educational level. With regard to working experience, average tenure was 8.4 years and agriculture (57%), fishery (28%), and forestry (15%).

## Measures

Unless otherwise stated, a six-point response format (1 = *strongly disagree*; 6 = *strongly agree*) was used for all measures. A 16-items scale developed by Khalid (2012) is used to capture the employee's ethical reasoning at organization-wide level. Khalid's (2012) construct has a reliability coefficient of 0.86. In this study the reliability coefficient for moral cognition is 0.78 while the construct reliability and average variance extracted (AVE) are 0.96 and 0.61 respectively. Moral competence was measured using moral obligation, moral utility, and moral character from a scale developed by Forsyth (1980), and Shanahan and Hyman (2003) and these items have been delineated several occasions. Recently these constructs were filtered Khalid et al. (2012) to come out with comprehensive scale and have shown adequate reliabilities of 0.81, 0.82, and 0.90 for moral obligation, moral utility, and moral character. The reliability coefficient alpha for moral obligation, moral utility, and moral character in this study are 0.74, 0.74 and 0.77 with constructing reliability of 0.86, 0.86 and 0.88 while AVEs suffice the threshold of 0.5. A sub-construct of 4-items generated from Eisenberger, Huntington, Hutchison, and Sowa's (1986) perceived organizational support scale is used to measure perceived reward. The consistent reliability was found to be across studies between 0.75 and 0.92 across studies. The convergent validity is found to be sufficient and indicate high convergent validity with AVE more than 0.05, construct reliability of 0.91, and reliability coefficient value of 0.78.

## Analytical procedures

SPSS-AMOS 18 (Arbuckle, 2006) was employed to test the structural equation modelling procedures for the hypothesized model. We employed measurement model to execute CFA of all variables at first and followed by applying structural model analysis to evaluate the relationships among the constructs. The central point in analysing structural models is the extent to which the hypothesized model fits the sample data (Byrne, 2010) using at least four fit indices (Kline, 2010). Among the recommended goodness-of-fit measures are chi-square statistics ( $\chi^2$ ), relative  $\chi^2$  ( $\chi^2/df$ ), Goodness-of-fit indices (GFI), Tucker-Lewis index (TLI), Comparative Fit index (CFI), and Root Mean Square Error of Approximation (RMSEA) (Byrne, 2010; Hair, Black, Babin, & Anderson, 2010; Kline, 2010). Byrne (2010), Brown and Cudeck (1993), and Hu and Bentler (1999) have suggested that RMSEA value at or below 0.08 indicate a good fit between the model estimated. Conversely,  $\chi^2/df$  is suffice for data fit if the value if less than 5.0 (Bentler, 1990; Marsh, Hau, & Wen, 2004), and threshold of 0.9s was recommended for other indices (Byrne, 2010; Hair et al., 2010; Kline, 2010).

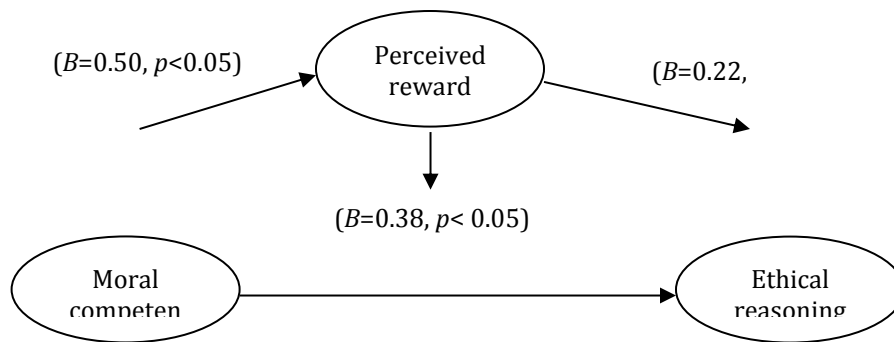
## RESULTS

The bivariate correlations indicated that all studied variables are positively and significantly correlated at  $p < 0.05$  to each other with value between 0.21 and 0.76; and no evidenced of multicollinearity in correlation between studying constructs. The results of the fit indices generated from structural equation models have found that the Model 1 appears to provide the best fits for the data and has shown perceived reward to be partially and significantly mediated the relationship between moral competence and ethical reasoning. Model 1 (partially mediated) has yielded a suffice model fit of  $\chi^2 = 38.440$ ,  $\chi^2/df = 1.20$ , GFI = 0.974, TLI = 0.991, CFI = 0.993, and RMSEA = 0.026. A multi-group structural equation model analysis was conducted for testing moderator and mediation-moderation effects for both Model 2 and Model 3. Model 2 predicted a moderation role of perceived reward in the relationship between moral competence and ethical reasoning. Model 2a (low perceived reward unconstrained model) with  $\chi^2 = 2.291$ , df

= 8, GFI = 0.995, TLI = 1.000, CFI = 1.000, and RMSEA = 0.000. Model 2b (low perceived reward constrained model) with  $\chi^2 = 14.274$ ,  $df = 9$ , GFI = 0.970, TLI = 0.966, CFI = 0.980, and RMSEA = 0.062. Model 2c (high perceived reward unconstrained model) with  $\chi^2 = 9.988$ ,  $df = 8$ , GFI = 0.978, TLI = 0.985, CFI = 0.992, and RMSEA = 0.042. Model 2d (high perceived reward constrained model) with  $\chi^2 = 21.917$ ,  $df = 9$ , GFI = 0.951, TLI = 0.914, CFI = 0.948, and RMSEA = 0.072. Thus, perceived reward is evidenced to be significantly and partially moderated the relationship between moral competence and ethical reasoning because the  $\chi^2$  difference between constrained and unconstrained models for both are greater than 3.84 respectively ( $\Delta\chi^2 = 11.983$ ,  $\Delta df = 1$ ;  $\Delta\chi^2 = 11.929$ ,  $\Delta df = 1$ ). Model 3 has predicted the mediation-moderating role of perceived reward between moral competence and ethical reasoning. Model 3a (low perceived reward unconstrained model) with  $\chi^2 = 25.377$ ,  $df = 32$ , GFI = 0.968, TLI = 1.000, CFI = 1.000, and RMSEA = 0.000. Model 3b (low perceived reward constrained model) with  $\chi^2 = 39.131$ ,  $df = 33$ , GFI = 0.953, TLI = 0.985, CFI = 0.989, and RMSEA = 0.035. Model 3c (high perceived reward unconstrained model) with  $\chi^2 = 37.848$ ,  $df = 32$ , GFI = 0.950, TLI = 0.974, CFI = 0.981, and RMSEA = 0.036. Model 3d (high perceived reward constrained model) with  $\chi^2 = 50.306$ ,  $df = 33$ , GFI = 0.934, TLI = 0.925, CFI = 0.945, and RMSEA = 0.061. The  $\chi^2$  difference between constrained and unconstrained models for both are greater than 3.84 correspondingly ( $\Delta\chi^2 = 13.754$ ,  $\Delta df = 1$ ;  $\Delta\chi^2 = 12.458$ ,  $\Delta df = 1$ ). Integrating the path diagram, moral competence  $\rightarrow$  ethical reasoning ( $B = 0.38$ ,  $p < 0.05$ ), moral competence  $\rightarrow$  perceived reward ( $B = 0.50$ ,  $p < 0.05$ ), and perceived reward  $\rightarrow$  ( $B = 0.22$ ,  $p < 0.05$ ). Thus, it can be concluded that perceived reward is partially mediated-moderated the relationship between moral competence and ethical reasoning with explained variance change of 0.49.

## DISCUSSION

This study has proven that the mediating-moderating analysis of perceived reward is crucial to further understand the complexity of the causal-comparative role in establishing causative relationship between moral competence and ethical reasoning. Although the influence-intervention effect of perceived reward has been discussed theoretically (Diebel, 2008), but empirically this study has provided a substantial cause and effect interaction interpretation of perceived reward in agriculture ethics (Fairchild & MacKinnon, 2009; MacKinnon et al., 2002; Tilman et al., 2002). The result has suggested that the moral competence of agribusiness entrepreneur is simultaneously influenced and intervene by the value of the perceived reward that subsequently met the level of their ethical and value-based expectations in reasoning. It provides an extensive integration (Holland, 1988) to ethical decision making model in enriching the understanding the multifaceted parcel of human motivation and attitudes that related to philosophical-psychological ethics study. This is important as the simple mediation or a moderation model is immature for causal-comparative analysis. Thus, mediating-moderating analysis offers the maturity of the study and the sophistication of the field of inquiry (Khalid et al., 2014).



**Figure 1: Final Structural Model**

### LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The current study has several limitations that restrict the interpretation and generalization of our findings. First, the data for this study were collected at a specific time frame. Thus, causality conclusion is partial. Second, future studies should aim at using homogenous parameter because it shares similar characteristics (Leitao & Faustino, 2009) that are governed by specific policies and regulatory bodies that regulate different sets of standards to be upheld (Longenecker, Moore, Petty, Palich, & McKinney, 2006). This paper is hoping to be valuable to better understand the multifaceted causality effect at the philosophical-psychological foundation of agriculture ethics in future research.

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# **CATTLE MARKETING SOCIAL NETWORK AMONG THE RURAL NATIVE COMMUNITY, SARAWAK, MALAYSIA: AN ABDUCTIVE RESEARCH STRATEGY**

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## **Abstract**

The number of beef cattle farmers in Malaysia is increasing from year to year particularly in the rural areas of Sarawak. However, rural cattle farmers are not free from facing problems especially in finding new market and maintaining the existing market to sustain their status as main cattle producers. Therefore, the primary objective of this research is to examine the types of social network used by these farmers in finding market. This research employed abductive research strategy where the types of social network are constructed by the cattle farmers themselves based on their own experience and knowledge after being involved in cattle farming for 10 years. Data were collected using in-depth interviews and non-participant observation. Most of the interviews carried out took between two to three hours; however, some of the interviews took quite a long time. Sample size in this research was determined based on data saturation. Therefore, a total of nine people were chosen as informants in the study using purposive sampling and snowball sampling. Validity and reliability of the research data were determined using member check approach. All the interviews was transcribed and formatted to be entered into the Nvivo database and will be used to create categories and to index the data. Findings of the study showed that seven types of social network were used by the cattle farmers in the rural areas in marketing their livestock, namely through networks of family ties, friends, friends of friends, advertisements, radio, type of language and wholesalers. The seven types of social network are viewed to have helped them in maintaining their status quo as successful cattle farmers.

Key words: *Cattle farmers, marketing, social network, abductive research*

## **INTRODUCTION**

At a glance, the rate of Sarawak's economic growth is very high after achieving independence with the average rate of annual growth recorded at 7.9 percent since the 1960s (Abdul Rashid, 1990; Novel, et al. 2011; Ridu, 1994). Between 1970 until 1975, the percentage of its annual economic growth had risen to 7.9 percent and 11.4 percent between 1970 and 1972 (Grijpstra, 1976). However, in 2006 there was a slight decline recorded with the annual economic growth rate of Sarawak reported at 17.5 percent compared to 18.4 percent which was recorded for 2005 (Sarawak, 2007). For the year 2008, the rate of annual economic growth for Sarawak was expected to increase again to 18.5 percent compared to the 17.8 percent recorded for 2007 (Sarawak, 2008). Subsequently, in 2009, Sarawak's rate of economic growth continued to increase to 19.8 percent and in 2010, its percentage had increased to 20.1 percent (Sarawak, 2010).

In terms of per capita GDP (Gross Domestic Product), the amount recorded for 2006 was a total of RM26,912 while for 2007, the per capita GDP (current price) recorded was a total of RM29,175. Subsequently, for 2008, the per capita GDP (current price) for Sarawak was expected to increase to RM31, 836 (Malaysia, 2008). In 2010, Sarawak had the third largest state economy in Malaysia after Selangor and Johor with a total nominal GDP of RM 50,804M (USD\$ 16,542M). Sarawak is also the second largest state in terms of GDP per capita after Penang with RM 33,307.00 (USD\$ 10,845.00) in 2010. In term of revenue, it was reported to increase to RM2.859 billion in 2005 compared to RM2.583 billion for 2004. For the year 2010, Sarawak's government revenue was reported to will have increased to RM5.854 billion compared to RM4.854 billion recorded for 2006 (Sarawak, 2010). Sarawak's economy in general, relies too much on the primary sector production such as mining, logging and main agricultural produce such as rubber, palm oil and black pepper as well as livestock rearing such as cattle and pigs. For example, in 1995, Sarawak's export fraction contribution was 44 percent from petroleum and petroleum products, 22 percent from logging, 4 percent from agricultural produce and 29 percent from other produce (Sarawak, 1995). Meanwhile, in 2010, the petroleum and gas sector continued to be the major contributor to state revenue that was estimated to reach RM935 million or 35 percent of the total overall revenue of the Sarawak state (Sarawak 2010).

The forestry sector is also an important contributor to the state's economy with a contribution totalling RM699 million or 27 percent of the overall total of Sarawak's revenue (Sarawak, 2010). Investment revenue from accumulated dividend yield from equities held by the state in companies was expected to contribute a total of RM4335 million or 13 percent (Sarawak, 2010). Industry does not play a major role in Sarawak because of the low population rate and limited market except for timber for export. Although gas and petroleum form more than 60 percent of the state's foreign revenue power, only 5 percent of the product's segment is distributed to the state's finance and this situation indirectly has made the logging sector and major agricultural product sector such as oil palm the main contributor to the economic source of Sarawak (Sarawak, 2010). Departing from this point, Sarawak's economy in the future is seen more risky, fragile and in an unstable position because its main economic activities rely heavily on non-renewable economic sources (Novel, et al. 2013).

This situation is even gloomier when there is deficiency of economic source diversity. Even though the size of Sarawak state is large, its population density is found to be the least compared to other states in Malaysia with a total population rate recorded in 2005 estimated at 2.31 percent only, of which 70 percent consists of Bumiputera ethnics and 30 percent Chinese ethnics (Madeline, 2004). Sarawak has the most number of diverse indigenous groups in Malaysia, namely 23 ethnic groups and 10 ethnic sub-groups (Madeline, 2004). A total of 30 percent of the Bumiputera ethnic groups comprise of the Ibans, 19 percent Malays, 8 percent Bidayus, 6 percent Melanaus and 7 percent comprising of other ethnic groups (Madeline, 2004; Dimbab, 2006). Nearly a majority of these Bumiputera ethnic groups work in the primary sector (43.4 percent) including activities such as hunting, collecting forest products, fish breeding and farming (Sarawak, 2007). Out of this percentage, 32.8 percent of the population are involved in agricultural activities (Sarawak, 2007) and the remaining works in the secondary and tertiary sectors (Sarawak, 2007). The percentage working in the tertiary sector is bigger because of the increased interest in the tourism industry and tourism related industry in Sarawak (Novel, et al. 2013). A total of 25 percent of Sarawak's population are urban based. Meanwhile, the remaining

75 percent are scattered in the rural areas and the pattern of the settlement distribution is generally closely linked to the type or form of employment or industry they are engaged in (Novel, et al. 2013; Madeline, 2004). Nearly a majority of the population that lives in the rural area comprise of Bumiputera ethnic groups (Sarawak, 2007).

In terms of the population distribution, most of the Bumiputera ethnic groups especially the Bidayuhs are involved in the main agricultural sector such as rubber, palm oil and paddy. At the same time, cattle farming has been given attention by the Bidayuh community especially for the palm oil smallholders as a result of the assistance given through Small Farmers Assistance Scheme (Skim Bantuan Penternak Kecil) and Scheme for the Development of the People's Well-being (Skim Pembangunan Kesejahteraan Rakyat) contained in the Ninth Malaysia Plan, 2006-2010 (Sarawak, 2006). From the year 2008-2010, more than 20 rural Bidayuhs were selected to be involved in beef cattle farming. However, this assistance did not involve assistance in the marketing of the cattle farming produce (Shukor, 2003; Fatimah, 2002). This situation led to great importance of social network in marketing of livestock for the cattle farmers, particularly in the condition of uncertain economic situation, increased competition, rising costs of livestock, livestock not well known, and the existence of uncertainty in the price of beef in the market (Shukor, 2003). Therefore, the main focus of this research was to examine the types of social network employed in the marketing of their cattle produce. The types of social network used subsequently will help them to remain involved in the sector of beef cattle farming.

## **RESEARCH METHODOLOGY**

Serian district is located under the jurisdiction of Samarahan Division and is administered by a Resident after Samarahan was officially made a Division on 1st January 1987 (Sarawak, 2004). Each district is administered by a District Officer while the Sub-district is administered by an Administrative Officer (Sarawak, 2009; Sarawak, 2010). The district of Serian is actually one of the four districts in Samarahan Division, Sarawak (Sarawak, 2007; Sarawak 2008; Sarawak 2010). In terms of the early history of Serian District's establishment, the district was formed in 1901 and was known as Sadong District. In February of 1955, it was known as Serian (Upper Sadong) after Simunjan (Lower Sadong) was separated and both were respectively upgraded to become a full district. Serian District covers an area of about 2,106 kilometre square and is located about 64 kilometres south of Kuching City or an hour's ride from Kuching City; it has a sub-district, namely the Sub-District of Tebedu which is the main International Border Crossing for Malaysia/Indonesia (in Sarawak) (Sarawak, 2004). This sub-district of Tebedu is located 43 kilometres from Serian City. In general, Serian District is bordered with Kuching Division in the north, Daerah Simunjan in the east and West Kalimantan, Indonesia in the south. Serian District has one main city and seven small towns which are the business centres for the people of this district (Sarawak, 2007). The main city is known as Serian City and it is one of the cities in Sarawak that was chosen in the *Program Bandar Sejahtera* since 2001 (Novel, et al. 2011).

This study subsequently employed nine steps and principles in the effort to produce the characteristics of social reality and to develop categories and themes that would be able to form the basis of understanding or explanation of the problems to be analysed or examined (Blaikie, 2007). The steps and principles are as follows: 1) entering the social world and having the sensitivity toward several key themes as guide but the themes should act "non-directively"; 2) identifying the themes and categories used in the discussion on the topics to be investigated

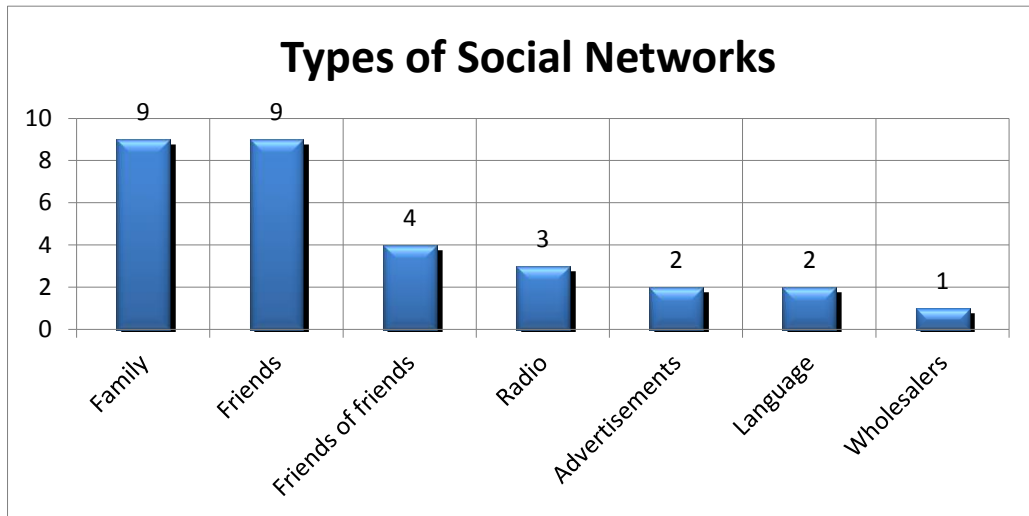
especially for themes and categories that are often repeated and frequently emerge in the conversations; 3) explaining the meaning of the themes and categories. These activities were continuous throughout the field study; 4) refining and narrowing the problem; 5) becoming part of the member of the Bidayuh community's social world by continually participating in their life and activities; 6) recording all comments and behaviour related to the main themes or categories; 7) themes or categories that have been identified to exist in the Bidayuh people about social network were tested again with other Bidayuhs; 8) finding relevant literature to gain ideas on how the themes and categories of the Bidayuh people about social network were used in their daily life.

Activities on searching and reading of related literature were continuous until the themes or categories about social network of the Bidayuh community have been proven or strengthened; and finally 9) the themes or categories developed by the researcher should be presented again to the Bidayuh people for the purpose of member check to maintain the authenticity and truth of the scientific constructs as well as to increase the degree of validity and reliability of the concepts and categories. The primary data were obtained from individuals and groups in natural social environment and also in semi-natural social environment. Natural social environment refers to the micro-social phenomena level of analysis (Blaikie, 2007; Burgess, 1984), in which in this level, information about the respondents was obtained by the researcher through the respondent's own experience of their daily life. In this study, data were collected using in-depth interviews for a period of four months. The in-depth interviews in this study involved conversation between two parties, namely between the researcher and respondents with one specific purpose which was to understand the types of social network used. Interviews between the researcher and the informants focused on the types of social network and the importance of social network in marketing of livestock products. Most of the interviews carried out took between two to three hours; however, some of the interviews took quite a long time. The research data was collected using non-probability sampling method which was purposive sampling and snowball sampling. A total of 9 rural cattle farmers who are very successful were interviewed in-depth. This study's sample size was achieved through continuous support of measurement or criteria on theoretical saturation. According to Glaser and Strauss (1967) and Lincoln and Guba (1985), theoretical saturation occurs or happens when there are no more new themes or categories that emerge and there are no more relevant data that could be discussed or act on the categories that exist. All the interviews was transcribed and formatted to be entered into the Nvivo database and will be used to create categories and to index the data. Nvivo is software that has been specially created or designed to help in storing and managing the whole analysis of the research's qualitative data. As the data were in the form of transcripts, hence the method employed was more geared to the formation of categories, making indexes or coding of documents, sorting data to identify patterns, explaining patterns and developing themes.

## **RESULTS AND DISCUSSION**

The researcher's discussion with the Bidayuh people who rear cattle in the rural areas began by asking the question "How do you find customers, what are the types of social network used to market the livestock?" The followings are the social network described by the respondents as the network that has a huge influence in the marketing of their livestock products. All seven types of network consist of network of family ties, friends, and friends of friends, radio, advertisements,

language and wholesalers. From the seven types of social network, only three main types of social network were used often by the informants in marketing their agricultural products which are network of family, friends and friends of friends (please refer to Figure 1). The use of the three types of social network is consistent with the views expressed by Gu et al. (2008) and Dunning et al. (2007) who stated that social network of individual nature such as close family members, friends and friendship are the popular choices used by rural farmers in marketing their agricultural and livestock products. This is because the use of these social networks is viewed as easier, simpler and does not require high costs.



**Figure 1:** Types of social network according to main ranking

Similar statement has been expressed by scholars such as Brown (1996) and Chou et al. (2006) who stated that the social network in rural areas is characteristically more individual and at the micro-level where their network is more to the feeling of belonging or kindred spirit such as family relationship, friendship, kinship, relatives, neighbours and friends. This situation happens because of their attitude that emphasizes aspects such as honesty, spirit of solidarity (*esprit de corps*), transparency and understanding in carrying out marketing of their livestock products (Shukor, 2003; Hwang et al. 2009; Chou et al. 2006). They very rarely use religious associations, clubs or organizations in looking for market for their livestock products because of the high costs, lack of knowledge, difficulty in trusting new media, the huge amount of time required and the need for high commitment and understanding between both parties (Fatimah, 2002; Shukor, 2003; Fang and Norman, 2006).

**Family social network:** Family social network in this study involved three types of family members, namely wife, children and close family members. These three types of family members will then look for their own customers. Therefore, it is not surprising when the majority of the informants in this study mentioned that without their wife, children and close family members, marketing of their cattle would not have been smooth, and that indeed it would be difficult to find customers. This is evident when on average informants such as I1, I2, I3, I4, I5, I6, I7, I8 and I9 mentioned that their immediate family and close relatives were the ones who helped them a great deal in marketing their livestock products. For instance, I1 in his statement

mentioned that the informant's own younger brother is the person who really helped in marketing the livestock particularly in finding customers outside of Serian district.

The following is his statement about the matter: "In marketing the cattle livestock, family members helped a lot. They helped me to promote my cattle everywhere. For example, my younger brother who lives in Merau Village went to Bau which is a district outside of Serian district. He is the one who promoted my cattle to the people there. Thus, when there is a feast, usually they will make reservation through my brother". For I2, he said that his children are the ones who help him in selling his cattle: "I would not deny it that in selling my cattle, my children are the ones who help a lot. They will promote the cattle at their workplace especially to the ethnic Malays. Their promotion is usually three months before the Muslims celebrate their Eid-ul-Fitr and Eid-ul-Adha". This is in contrast to I8 where his relatives, namely his own cousin who really helps him in selling his cattle products. This matter, according to him, is why his customers are mainly from among his cousin's workmates: "customers of my cattle are mostly the workmates of my own cousin who works at the Betong Division Police Station. This is because my cousin is the one who promotes my cattle. My cousin is the one who helps me a great deal in promoting my cattle". For I9, his children are the ones who greatly promote his livestock: "I am thankful that my children help me a great deal in selling my cattle products. The majority of my children work as teachers. They will promote the cattle to their work colleagues especially when it is nearing to Eid-ul-Adha and also for wedding feasts". In contrast, I4 and I7 mentioned that in marketing their cattle products, their in-laws or their wives' family are the ones who help them greatly in marketing their cattle. According to Informant 4, in marketing his cattle, his brother in-law helps a lot: "the family of my wife helps me greatly in selling my cattle. My brother in-law works as a teacher in SK Seremban. It is my brother in-law who promotes my cattle". The same statement was given by Informant 7 where his wife's siblings are the ones who help to promote his cattle: "my wife's family helps me a great deal in selling the cattle. My wife's siblings all work and they work in different places. They will promote my cattle to their work colleagues".

**Friends:** Majority of the informants in this study chose their friends as their main social network in finding customers. This is mentioned by all nine informants in this study. According to them, their friends greatly helped them in finding customers outside of Serian District. Their friends will help to spread the information about the location of the cattle, the type of cattle breed sold and the price of cattle sold to the public. These friends will then be given token payment for the help provided based on the number of cattle that could be sold through this network. The followings are some of the statements from selected informants on this matter:

"Apart from that, friends also help to sell my cattle. They will make known my name to whoever that needs cattle especially during the festive period". (I9)

"My cattle are rarely promoted. This is because my friends help me greatly in selling the cattle". (I2)

"Usually, during festive season, many people come to buy cattle. According to my customers, they know that I sell cattle through my friends". (I7)

"I will not deny it that my friends help me a lot in telling the villagers as well as other villagers that I sell cattle. To a certain extent it helped me in selling my cattle products". (I3)

**Friends of Friends:** A total of four informants chose this type of network in marketing their cattle livestock. Subsequently, friends of friends according to the informants of this study refer to

the social interaction or communication that involves informants' friends with their friends. For example, one of the informants, namely I6 in this study mentioned that "friends of friends helped him a great deal in marketing his cattle livestock. This is because typically when they are good friends, he/she will introduce his/her cattle to their friends and their friends will introduce his or her friends to another friend as well. This situation normally happens two months before the festive season. This kind of thing makes me able to survive in cattle rearing until today". A similar tone was expressed by several other informants. Among them are I3, I4 and I9. The followings are a few of the informants' statements about the matter:

"With the large number of farmers and the intense competition, help from friends of friends assists me a great deal to remain competitive in cattle farming in the rural area". (I3)

"With road condition that is not quite good and the location of the cattle farms that are quite far from town, sometimes help from friends of friends really help in determining the success of a cattle farmer. This is what happened in my 10 years of experience of cattle rearing". (I4)

"I am really thankful to the friends of my friends because they have introduced my cattle to the public. I am successful in the cattle farming sector because of the help and assistance of friends of my good friends". (I9)

**Social network in the form of radio:** Only a small number of informants mentioned that they use the radio in marketing their cattle. Usually the radio station that is the focus is the local radio stations, namely local radio stations using Sarawak Malay, Bidayuh and Iban language. This is acknowledged by three informants, namely I7, I8 and I9. The followings are several statements of the three informants on the matter:

"I often use the radio as a medium to market my cattle. I choose to promote my cattle business through radio announcements through YFM under Radio Televisyen Malaysia (RTM) Kuching". (I7)

"I have a relative who works as a radio deejay. I took the opportunity to ask for my relative's help to promote my cattle business". (I8)

"Bidayuh and Iban radio station helped me greatly in promoting my cattle to the customers out there". (I9)

**Social network in the form of advertisements:** Only two informants used advertisements as their social network. On average, informants rarely used this type of social network because the time and energy spent is quite a lot and it is tiring. This is because the type of advertisement used is characteristically traditional that is by pasting advertisements about the cattle at bus stations, village intersections, churches and public halls. The followings are the statements of the two informants:

"I use the traditional method in promoting my livestock. I will paste advertisements in churches, mosques, village intersections and places where there are a lot of people. To me, advertisements too, to a certain extent could help me in marketing my cattle products. Nevertheless, this method is a bit tiring and the outcome is difficult to predict since a lot of my advertisements have been removed by people". (I2)

"To promote the cattle, I also paste advertisements in *surau*, stalls, and in other village areas. Even though it is quite exhausting and I run the risk of the advertisements being torn or removed, I still have to do it. If not, it is difficult to find customers". (I5)



**Type of Language:** Only two informants used this type of network in marketing their livestock. For them, language that is easily understood and has a lot of speakers facilitates them in marketing their livestock products. The two informants mentioned that they speak in Bidayuh, Iban and Sarawak Malay language to market their livestock. Their fluency in mastering the two languages helps them greatly in convincing their customers to buy their cattle products especially for customers of Malay and Dayak ethnicity. The feeling of belonging and clanship as well as state-ship exists when using the languages and this facilitates the business dealings between the two parties. For example, one informant, namely I4 felt that conversing in the same dialect will make them feel friendlier and easier to communicate. Subsequently I7 in his statement mentioned that “I like to speak in Iban, Bidayuh and Sarawak Malay language in marketing my livestock. These languages for me are the language of business. This is because since birth, I have conversed in Cantonese with my family and most of my friends. I feel friendly and there exists this sense of belonging during conversation. The use of these three languages helps in making it easier for me to find customers and subsequently facilitates in the marketing of the livestock products outside of Serian District”.

**Wholesalers:** Only one informant in this study use wholesalers or middlemen as their type of social network. The use of wholesalers or middlemen had to be employed as the competition from other farmers was quite intense. Nevertheless, the use of wholesalers in marketing livestock products is limited and only employed when it is the harvesting or paddy planting season. The following is the statement of I6 on the matter:

“typically, I use middlemen when it is the paddy planting or harvesting season. This is because during that time, the time available is short and my physical condition that is quite exhausted because a lot of focus is given to the aspects of paddy planting and harvesting process. The wholesalers that I choose are the ones that can buy my livestock in quite large quantities, at least three or more”.

## **CONCLUSIONS**

In this study, family and friend social network are the primary type of social network employed by the cattle farmers. This situation clearly shows that ‘sense of belonging’ still remains as the main aspect in finding market. This corresponds to the comment expressed by scholars such as Aristotle who described man as ‘social animals’ who place emphasis on interpersonal relationship and cordial relationship (Fang and Norman, 2006; Frey and Stutzer, 2002). For them, having colleagues, close friends, family and relatives will contribute to the market. Accordingly, it is something that is not surprising when the two types of family and friend network are characteristically individual and of a small scale where the individual fully utilizes the available strength and influence in their social environment in looking for market either in the surrounding areas of Serian District or outside of Serian District. The use of social network that is of small scale and characteristically individual has resulted in the cattle market of the farmers in this study being quite limited and dependent on the extent to which the two types of network are cooperating and functioning competently, honestly and efficiently to achieve the goal. Cooperation here means a process in which two or more individuals who work together toward crossing a common goal as a result of the sharing of information, knowledge and learning. This intersection of the same common goal will subsequently create a consensus to cooperate with each other either in the business dealings or marketing.

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# **TOURISTS' PERCEPTION TOWARDS PHYSICAL ENVIRONMENTAL ATTRIBUTES OF TOURISM IMPACTS IN MABUL ISLAND, SABAH**

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## **Abstract**

The environmental impacts of tourism studies have been extensively studied on resident's attitudes and perspectives at different setting especially on the natural environment. The study of perceptual environmental impacts by tourists is equally important in examining the quality of the environment as the experience gained during their stay and activities. Mabul Island, which located at the southern edge of Semporna District is one of the popular destinations for tourists and specifically the divers. Currently, the tourism development on the island has shown a rapid change in terms of environmental impacts. This paper attempts to examine tourism impacts towards environmental attributes on the island from the perspective of tourists. The findings were drawn from the questionnaire survey conducted among domestic and international tourists who visited Mabul Island during April 2014. The result revealed 5 main negative environmental attributes, namely damage of coral reef, the list of green spaces, rubbish water and noise pollution. The significant attributes have shown the main categories of environmental impacts of tourism in small islands are infrastructure and visual.

Keyword: *Environmental impacts, Tourist perception, Environmental attributes, Small island*

## **INTRODUCTION**

The nature based destinations has shown a niche market for segmented tourists due to the values of the rich biodiversity, flora and fauna. Small and isolated islands with their treasure had gained popularity as touristic places especially in tropical countries. According to Hillery, et.al. (2001), the more attractive a site, it will be degraded due to heavy visitations, which in turn diminish the quality of experience. Butler's lifecycle model which describes the growth, stagnation and decline phases of a tourist destination can be understood as a hypothetical cycle. According to Eugeni, et.al (2005), Butler's model is not the existence of empirical evidence to support the shape of the curve, but rather the implicit warning to those responsible for tourism planning and development: "Tourist attractions are not infinite and timeless but should be viewed and treated as finite and possibly non-renewable resources" (Butler, 1980, p. 11). Tourism development is largely dependent on the natural environment. Moreover, tourism development is often a two-edged sword. It can be benefit (e.g., job creation, image enhancement, promote economic growth), meanwhile, it could also have negative impacts on the biophysical environment (e.g., soil pollution, water pollution, air pollution, ecosystem degradation) and social/cultural environment (e.g., loss of the traditional culture, increase in crime) (Li, et.al, 2014). Thus, the development of tourist destinations was normally accompanied by considerable environmental deterioration. In recent years, environmental issues associated with rapid tourism are becoming critical concerns. The environmental impact caused by tourism development has been

highlighted in the literature review (Buckley, 2011; Burak, et.al, 2004; Kim, et.al, 2006; Raschke, 2005; Reeves, 2002). Perceptions of the environmental impacts of tourism studies have been extensively studied on resident's attitudes and perspectives at different setting especially on the natural environment. There have been a number of case studies of tourism impacts, marine ecotourism and island tourism from the perspective of residents; for example Juanita (1986), John (1992), Kathleen, et.al (2005), Andereck (2000,2005), Gu and Wong (2006).

The perceptual studies on environment impacts amongst tourists are equally important in examining the quality of the environment as the experience gained during their stay and activities. As tourist practices become more widespread, there tend to be marked changes in the environment (Husbands and Harrison, 1996). Therefore, this paper attempts to examine tourism impacts towards physical environmental attributes on the island from the perspective of tourists.

## **THE IMPACTS OF TOURISM AND THE ENVIRONMENT**

There are a close relationship between tourism and environment. Tourism is dependent upon a healthy or pristine environment (Sadler, 1998). This has led to the argument that tourism should ally itself strongly and naturally with sustainable development and ecotourism principles which leading to protection and maintenance of the environment (Hunter and Green 1995; Hughes 1996; Mowforth and Munt 1998). In the context of tourism, attitudes towards the environment have changed greatly over time (Butler, 2000). According to Richard (2000), the basic impacting processes, namely fire, pollution, consumption and trampling along with habitat modification through development, such as water modification, vegetation removal and landform modification are common forms of human activity in the natural environment. Other than that, there are six typology of built environmental impacts of tourism developed by Hunter and Green 1995; urban forms, infrastructure, visual impacts, restoration, erosion and pollution. In addition, many private operators are unaware of environmental impacts resulting from tourism activities and take a short-term view that prioritizes profit maximization (Richard, 2000) and this contributes to degradation in environmental quality.

### **Small Island Tourism and Environment Impacts**

Sustainability is a major issue in island tourism. According to Jithendran, et.al (2003), improvements in the quality of life of the host community, provision of a higher quality of visitor experience, and maintaining the quality of environment in island destinations pose a major challenge to island tourism destinations, especially for the smaller islands with their inherent limitation. Excessive admittance tourists to an island with unmonitored activities could also bring possible damage to natural environment. Soil erosion, imbalance to the habitats of flora and fauna and piling up of rubbish are some of effect that occurs (Murudagas & Badaruddin, 2013). In addition, tourist activities and services, such as scuba diving, which are offered on the islands, are harmful to their coral reefs (Davis and Tisdell, 1996; Haddock, et.al, 2012; Hansen et al., 2009; Hawkins and Roberts, 1993; Pandolfi et al., 2011; Pillai, 2010; Webb and Kench, 2010).

### **The Study Area - Mabul Island, Sabah**

Semporna is a town and district in the southeast corner of the Malaysian State of Sabah and is home to Malaysia's largest dive tourism industry. One of the famous diving spot in Semporna is Sipadan Island, which the best known of all Malaysia's dive sites and it is considered to be one

of the top dive spots in the world (Svrucula, 2004). Mabul Island started gaining popularity after the nomination Sipadan as marine park which restriction control the number of tourists for protection of ecosystem. The island is 26-hectare on a reef at the southern edge of Semporna District (Figure 1). Mabul has 2,500 residents relying on fisheries and more than 15 resorts and dive lodges on this area of land (Aw et al, 2006). This island consists of three (3) distinct ethnic groups namely the Bajau Laut, the Bajau Darat or Bajau Semporna and Sulu. These communities also speak in different languages and have different customary ceremonies and customs. In 1980s, the island developed as a centre for eco-tourism but later left unattended. But, today this island has transformed into a well-known touristic destination (Figure 2).



**Figure 1:** The Location of Mabul Island, Sabah  
Development on Mabul Island  
*Source: Google Image*



**Figure 2:** The Image of  
*Source: Google Image*

According to Choo, et.al (2012), the tourism development on Mabul Island is uncontrollable and the number of tourist operators on the Island has doubled since 2006. Their studies have shown awareness on environment among key stakeholders especially the tour operators; the concept of Limits of Acceptable Change for Mabul Island was introduced in 2008 workshop. The series of activities since 1997 in Mabul Island (Table 1) on management and monitoring the cleanliness and environment issues but has shown the environmental degradation.

**Table 1:** Key activities on Mabul Island, Semporna, relating to management and monitoring

<b>Time line</b>	<b>Key events</b>
1997	The initiation of Mabul Marine Day (MMD) by Sipadan Water Village which focused on coral transplanting to recover the reef that had been bombed
2004	Sipadan Island was closed to tourism. Tourism pressure shifted to Mabul Island. Increase of local population in Mabul Island due to job opportunities and more profit for small grocery shops in the island.
2006	The Limits of Acceptable Change study was conducted by Aw et al. (2006). The condition in Mabul Island was confirmed as over-populated.
2008	“Mabul Island: Acceptable Change (LAC) workshop” organized by WWF and partners to a range of stakeholders.
2009	MMD extended to Mabul Marine Week (MMW), with the change in objective to “Cleanliness of Mabul, Our Responsibility”. MMW committee had officially become the sub-committee for the Semporna Tourism Action Council (STAC).
2010	Study on Environmental changes in Mabul Island by Universiti Malaysia Sabah continued
April 2011	Series of collaborative environmental monitoring activities conducted with the stakeholders
Nov 2011	The result of the environmental monitoring shared with stakeholders
Dec 2011	The agreement from tour operators to form a management body to prioritize working on a waste management system.

Source : Choo, Kenneth and Monique (2012)

## **METHODOLOGY**

This study adopted a quantitative approach and survey questionnaires were administered to the respondents. Data were drawn from the tourist who stayed at the resort in Mabul Island in April 2014. A sample size of 200 tourists and simple random sampling method was adopted in the survey. The questionnaires were prepared in two languages Bahasa Melayu and English. The questionnaire was divided into five sections. The first part of the questionnaire was the respondent’s profile. The second to fifth sections are the statements about the physical environmental impacts from tourism development of the islands. From 200 questionnaires distributed, only 175 questionnaires are usable. This article presents the descriptive statistics analysis in interpreting respondents’ demographic and personal information, as well to identify tourists’ perceptions of the environmental attributes that effect from tourism in Mabul Island, Sabah. In measuring the findings of this study, the interpretation of mean score for environmental attributes that effect tourism in Mabul Island adapted from Sherri (2003).

## **FINDING OF STUDY**

### **Profile of Respondents**

The respondents’ demographic profile has shown the majority of the respondents (62.3%) are international compared to Malaysian (37.7%). Tourists from China marked the highest number of respondent. Female respondents (58.3%) outnumbered male, the sample presented peak proportion of respondents in the age group of 26 – 35 years. The majority of respondents were Chinese (45.1%) followed by Malay (30.3%). Majority of the respondents (57.9%) had a higher

level of education and work in the private sector (42.9%). Students had also participated in this survey about 12.9%. Common purpose of visit is vacation. The majority of respondents (82.8%) are first timer.

### Visitors' perception of the Tourism Impacts

Table 2, shows the finding from tourists' perception towards the environmental attributes of tourism activities on Mabul Island, Sabah. Data obtained indicated that tourism activities have negative impacts on the physical environmental attributes on the island. The mean score of the overall environmental attributes shows that more than 3.18 and it indicates that the tourism activities have an impact on the environmental sustainability on the island. Damage of coral reef is the highest with the mean score of 3.83 and standard deviation of 1.029. It revealed that most of the respondent agree with the statement of uncontrolled snorkeling activities could damage the coral reef. From the result also have shown that the loss of green spaces is the second highest, followed by pollution caused by litter, rubbish or trash, water pollution, beach erosion and noise pollution. The significant attributes have shown the main categories of environmental impacts of tourism in Small Island are infrastructure and visual. The result also supports the main categories from Hunter and Greens (1995), whereby the potential consequence namely water pollution and noise pollution contribute to the pollution impact. Furthermore, the loss of green space contributes to visual impact of the built environment.

**Table 2:** Perception of Tourism Impacts towards Environmental Attributes

Items	Mean	S.D	Rank
Damage of coral reef	3.83	1.029	1
The loss of green spaces	3.81	1.088	2
Rubbish/trash pollution	3.79	1.142	3
Water pollution	3.71	1.136	4
Beach erosion	3.64	1.139	5
Noise pollution	3.18	1.151	6

### CONCLUSIONS

This article acknowledged the analysis of tourist perceptions can produce information; as useful as residents' perception in monitoring for environmental quality. Even though, previous studies on perception of the environmental impacts have often concluded that tourists are not very perceptive on the visited natural areas, or what they notice are primarily the direct impacts of other tourists (Hillery, et.al, 2001). This study also takes forward the typology of the built environmental impacts of tourism as developed by Hunter and Green, that the potential impacts are relative importance of different aspect of built environment. The users' perception of environmental problems can be a better basis for planning and management; so that management approach can be successful, if the dialogue between managers and stakeholders, supporting and sharing decisions, is encouraged (Mappem, 2000; Costanza, 2001; Tress and Tress, 2003). If the management is to include public input as guidance in managing the tourism impacts, they have to consider the users perspective as affecting resource and use impact.



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# MULTI-CRITERIA DECISION ANALYSIS FOR RESPONSIBLE MANAGEMENT OF MARINE PROTECTED AREA IN SEMPORNA SABAH

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## ABSTRACT

Marine Protected Area (MPA) has always been seen as a tool to save marine ecosystems that are in danger of being over exploited. Management of MPA has always been centered to ecological protection but human elements are increasingly being considered in the challenges of managing a MPA. Without the necessary structures in place, many MPA have become merely paper parks. Semporna Sabah has the most valuable MPA in the east coast of Sabah. The MPA in Semporna were gazetted for the very same reason. However, with the existence of community living within the marine park, management of the MPA requires approaches that are not conventional. The problems faced are multi facet and requires the marine park management to look at multiple criteria in their decision making process. The aim of this study is to present some of the findings gathered from various stakeholders on criterions that are essential in the decision making process to manage the marine park responsibly. A Delphi approach was used to gather the data using a three-step approach. A total of 93 decision-making criterions were identified. The shortcomings of MPA management could be addressed by analyzing the important management criteria using a decision hierarchy.

Keywords: *Delphi, MPA, Stakeholder, Decision Making*

## INTRODUCTION

Papers should be prepared using Microsoft Environmental challenges are complex, ambiguous, multi-scale and affect multiple actors and agencies. Hence it requires decision-making that is visible, flexible and able to look at diversity of knowledge from the angles of all stakeholders(Harrison & Qureshi, 2000). IUCN (Dudley, 2008) defines Marine Protected Area as:

*“A protected area is a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”*

The definition looks at three major points. The first identifies that a clear delineation of the area being protected that must be managed. The second looks at how the MPA should be managed which is classically through a legal body. The third stresses on maintaining the ecosystem that includes the community living within it. Often, the emphasis of most MPA is to protect the ecosystem while leaving out the issue of community involvement as a secondary goal in

management of the park. Often communities are either forced or compensated to move out of the MPA to be moved outside the marine park. There are also very limited literature on how the establishment of MPA affects the livelihood of communities living within the park or whether communities were involved during the planning and implementation stage of the MPA (Voyer, Gladstone, & Goodall, 2012).

The number of MPA is gradually increasing over the years. The recent published estimate is 1.17 percent of the world ocean resides in an MPA (Toropova, Meliane, Laffoley, Matthews, & Spalding, 2010). The area of protection has increased by 150 percent since 2003. This estimate represents 5880 MPA's in this planet covering 4.2 million km<sup>2</sup> of the ocean surface (Hoyt, 2012). However, this figure falls way behind terrestrial parks although the ratio of sea coverage is larger than land. In Malaysia, there are over 50 MPAs with the earliest established in 1974 in Sabah a state in east Malaysia. Sabah has a long coastline about 1440 km where the west side overlooks the South China Sea whilst the east overlooks the Celebes Sea and Sulu Sea.

There has been a great drive to protect the coastal area of eastern Sabah as many destructive activities such as fish bombing were carried out in these waters. Human populations are high in this area and create intense pressure to the ecosystem. According to (Sabah Parks, 2010), in 2010 there were 405 violations of park enactment regulations and 378 accidents within the park. Tunku Abdul Rahman Park that has the highest tourist arrival among the marine parks in Sabah recorded the highest number of accidents. Out of that 6 accidents took place in Semporna and one resulted in fatality (Sabah Parks, 2010). The park that took almost two decades to be gazette as an MPA was Tun Sakaran Marine Park (TSMP). Many non-governmental organizations such as WWF Malaysia and Marine Conservation Society (MCS) have recommended to the Sabah state government since the early 80's to protect this area (Garrod & Wilson, 2003).

However, community claims on land ownership became a huge hurdle for the state government to solve. Historically, communities in other marine parks under the management of Sabah Parks were compensated to relocate out of the park. Furthermore, human interference and visitor pressure will further degrade the environment in the marine park. This is already evident in TSMP as Table 1 shows the number of tourist has been growing steadily the last 7 years. Unlike Sipadan Island Park that limits tourist visitation to 120 people on a daily basis as Table 2 shows a stagnant arrival in Sipadan the last 7 years, there is no such mechanism present for TSMP. Studies have shown that overcrowding in other marine parks in Malaysia have resulted in damage to the coral reefs (Ahmad & Hanley, 2009; Yeo, 2004). Hence, with much setback in hand, it is timely for Sabah Parks to prioritize areas that urgently need to be looked into when managing the park in a responsible approach.

**Table 1: Tourist Arrival in Tun Sakaran Marine Park**

Year	Local Tourist	Foreign Tourist	Total
2007	12	51	63
2008	3700	909	4609
2009	3737	663	4400
2010	7910	2039	9949
2011	22891	6505	29396
2012	45942	13338	59280
2013	42959	19824	62783

*(Source: Sabah Parks, 2014)*

**Table 2: Tourist Arrival in Sipadan Island Marine Park**

Year	Local Tourist	Foreign Tourist	Total
2007	39288	4094	43382
2008	39172	4453	43625
2009	38015	5538	43553
2010	37784	5691	43475
2011	37861	5810	43671
2012	38467	5431	43898
2013	38942	4715	43657

*(Source: Sabah Parks, 2014)*

In this study, challenges that are faced in managing the marine park in a responsible approach where the livelihood of the community is maintained while the marine ecosystem is protected is explored. Garrod and Wilson (2003) identified two problems in managing marine parks in Malaysia. One is the lack of awareness at virtually every level and the second is the lack of integrated management among stakeholders. The aim of this study is to assist the park managers to manage the park by looking at criteria that are critical for decision-making that will eventually assist Sabah Parks into managing the park responsibly. In the next section, an overview of multi-criteria decision making is introduced.

## **METHODOLOGY**

An approach known as Responsible Management Multi-criteria Evaluation Framework was adopted in this study (Garmendia et al., 2010). This framework involves the following steps:

1. Identification of stakeholders by means of individual interview, snow balling, institutional analysis and recommendation from scholastic literature.
2. Problem identification using information gathered from sources as stated above.
3. Developing alternatives – management options and the characterization of evaluation criteria. The identification of evaluation criteria is through dialogues with relevant

stakeholders. Documents on management of MPA also give some insight on the criteria used for management evaluation.

4. Criteria evaluation. Evaluation is carried out using a decision matrix. The matrix is used to evaluate each criterion performance towards the alternatives by relevant stakeholders.
5. Choice of multi-criteria assessment method. AHP will be used in this study.
6. Analysis and validation of the results. AHP has a consistency evaluation using a consistency index.

At the time this study was conducted, there was limited information on the challenges that the park management was facing in managing the park. An in depth study was conducted before the gazette, that was during the drafting of the management plan. The plan only exists for TSMP whilst Sipadan Island Park does not have a formal management plan although a study on carrying capacity was conducted by (Lestari, 1995) . Therefore, to understand the challenges that the park management is facing, a qualitative approach was used to gather the necessary information. The initial stage was to identify the stakeholders related to the park. It is shown that MPA, as a management tool, becomes effective with the participation of local stakeholders, together with government agencies, in the planning and decision making process (Brown et al., 2001; Himes, 2007; Pajaro, Mulrennan, Alder, & Vincent, 2010; Yang, Li, & Chiang, 2011). Qureshi (2000) further describes stakeholders as groups or individuals affected by or can affect MPA related management decisions. Seven stakeholders were identified as listed in Table 1.

A sequential exploratory mixed method design was adopted in this study. Creswell (2009) identified six often used design that included three sequential and three concurrent design. Of the six, the sequential exploratory design begins with gathering and analysis of qualitative data in the first phase. Information gathered from this phase is used to build the instruments for the second phase of quantitative data gathering and analysis. The modified Delphi approach as described in (Lin & Juan, 2009) was adopted in this study to elicit the criteria from a group of experts. This method of elicitation was selected as the experts were geographically dispersed and community conflict with other stakeholders is quite rampant. Therefore the use of workshop and focus group were avoided in this study. A face-to-face interview was conducted with respondents who were given open-ended questions related to the management of the MPA. The questions were structured using topics on, Community Development/Participation, Permit and park fees, Enforcement, Recreational Tourism, Resource extraction activity (Fishing and Farming) and Conservation.

The survey was conducted for four months with the stakeholders stated in table 3. Fifteen people were interviewed to gain an insight to the problem as well as to identify criterions important to the management of the park responsibly. The stakeholders were also given a summary of the criterions and were asked to verify them. A total of 93 criterions were gathered through these interviews. The criterions extracted from the interviews were presented to the same respondent in the second stage. During this stage respondents can agree, add or remove criterions in the list. This is to make sure that the researchers finding is at sync to what the respondents said during the interview. The interviews were analyzed using a manual coding approach. The final stage of the Delphi process is to get consensus from all the stakeholders. The 93 criterions were grouped into management, environment, economic, social, activity,

enforcement and farming. A total of 48 respondents were presented with the criteria and were asked to state the importance of the criteria using a Likert scale.

Table 3: Stakeholders of Marine Park in Semporna Sabah

Stakeholders	Scope
Local Community	Communities in the park who are citizens of Malaysia
Sabah Parks	Custodian of Marine Parks in Sabah.
Government Agencies	Sabah Wildlife, District Office Semporna, Local Council Semporna
Tour Operators	Agencies in that operate in Semporna and provide services to tourist to TSMP and Sipadan Island Park
NGO	WWF Malaysia, Reef Check
Academics	Local University in Sabah
Tourist	Both local and international tourist

## FINDINGS

Figure 4 shows the decision hierarchy based on the goal of responsible management of the MPA. Below the goal are seven criteria (objectives) that were identified through the Delphi process. However, the sub criteria need to be scaled down from the 93 gathered through interviews, as it would be impossible to evaluate and compare such a large amount of criteria. During the consensus process, the redundant criteria deemed irrelevant by the experts were eliminated bringing down the number of criteria to be evaluated. An exploratory factor analysis was further used to group the criteria into the themes organized in a decision hierarchy presented in figure 2.

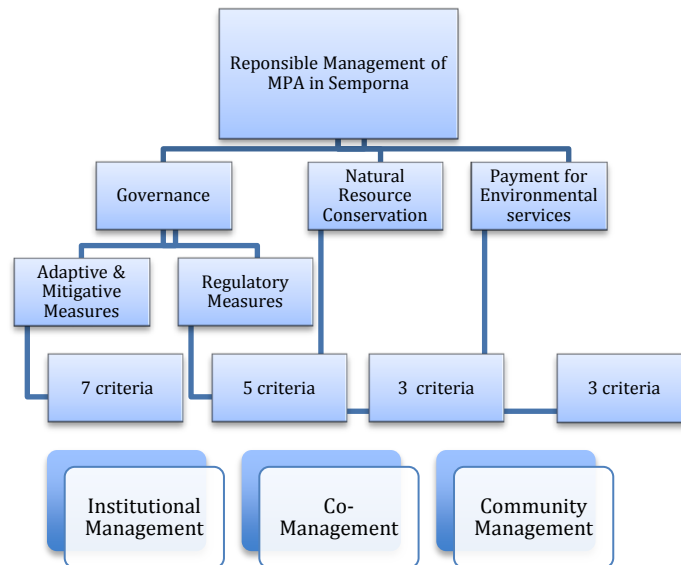


Figure 2: Decision Making Hierarchy for Responsible Management of MPA in Semporna

A total of 18 important criteria were finally extracted where common criterions were merged and redundant criterions were eliminated. These criteria were grouped under governance, natural resource conservation and payment for environmental services. There are three common

management options (alternatives) considered in this model and their attributes are listed in table 4.

Table 4: Management Alternatives

Management Style	Attributes
Institutional	Full control by the agency in-charge. No interference or contribution from community and stakeholders.
Community Based	Full control by the community No-interference or contribution from agency in-charge.
Collaborative Management	Shared control by the agency in-charge and the community. Actively consulting Seeking consensus Negotiating (involving in decision -making) Sharing authority and responsibility in formal way. Transferring authority and responsibility.

## CONCLUSION

The Delphi approach in gathering qualitative data gave an in depth insight to the mechanics of managing the marine park. Despite having experience in managing marine parks since 1974, Sabah Parks is faced with the dynamics of community conflicts and challenging management issues related to marine parks in Semporna. Stakeholders have varied views on how the park must be managed. However, there is a need to choose a responsible approach in managing the park where the livelihood of the community is taken care and at the same time the environment of the marine park is maintained. At a later stage, criterions that were presented earlier be applied into the AHP decision matrix using pairwise comparison gathered from all relevant decision makers. Presently, Sabah Parks has many tasks in hand and need a consensus if not a solution on the area of management that they should concentrate. The results of this finding can further reveal insights on criterions that Sabah Parks should give importance as well as the management approach that is suitable towards managing the park responsibly.

## ACKNOWLEDGEMENTS

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# **DIRECT AND INDIRECT COMMUNITY AFFILIATION AS A TOOL TO MITIGATE MARINE WASTE IN SEMPORNA, SABAH A RURAL TOURISM SETTING**

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## **ABSTRACT**

Semporna is a rural district, which is situated in the east cost of Sabah, Malaysia. Semporna is becoming popular due to its marine tourism activities. This paper presents a discussion of how the communities in Semporna can be distinctively categorised as direct and indirect communities. This distinction can be used further as a mechanism to understand the respondents for effectively mitigating marine waste. The study also reviews the methodological characteristics of community participation's theory and the extension of it. The paper is constructed based on the understanding and criticism of many authors work from previous studies. Finally, this paper provides a theoretical understanding for the readers to look at the community in a different perspective in the context of managing the environment responsibly in a rural tourism destination.

*Keywords: Direct community, Indirect Community, Community Participation Marine waste, Rural Tourism*

## **INTRODUCTION**

Semporna district is located in the east cost of Sabah. The district consists of 49 Island and is mainly a marine tourism destination which attracts tourist form around the world. Semporna is the gateway to many diving spots and snorkeling activities (SIPD, 2006). The tourism industry in Semporna is currently in the rise. Choo, Kassem & Sumampouw (2012) in their study has mentioned that Semporna has the biggest coral focus in Malaysia and is a major dive tourism site. Sipadan is one of the most famous diving spots in Semporna district (Choo et.al, 2012). An article by Bremner (2012) has state that the Barracuda Point, Sipadan Island is ranked as the world's best dive site.

Even though Semporna has become a tourist destination, but the key factor affecting this district is the large amount of garbage which can be found on the streets and floating in the sea (Sudesh, Nair & Sridar (2013). The litter problem in Semporna is a major issue that is difficult to resolve due to the behavior and attitude of the local people (Pee, 2012 P.Comm).

Tourism has the prospective to increase the appreciation of local towards the environment and create attentiveness concerning environmental issues, mainly when it brings people into closer

contact with nature and the environment. This confrontation may intensify awareness of the value of nature and lead to environmentally awareness, behaviour and activities; to reserve the environment (Prabhu et al, 2007)

The communal level needs vigorous stepping up; it is not likely to happen endemically or to promote naturally. Participation empowers wide tenure of commitment of the local people. Involvement can enable ‘social learning’, an exercise in which many stakeholders bring together their diverse knowledge, experiences, visions, principles and dimensions for a process of communication and critical reflection as a means of conjointly appreciative and addressing common complications and possibilities (McDougall, Greatbatch & Yu, 2002).

### **METHODOLOGY AND FINDINGS**

The approaches of empirical community participation studies have been reviewed. According to Freeman (2010) stakeholders must be divided into two clusters principal or direct stakeholders i.e. those stakeholders without whose ongoing involvement in the particular environment and will not be able to continue living without resource and secondary or indirect stakeholders i.e. those stakeholders who inspire or affect, or are inclined of affected by the environment, but are not engaged in transaction with environment and are not needed for its survival. This assessment has formed Table 1 which shows the direct and indirect communities based on studies from various scholars.

**Table 1:** Direct and Indirect Community Categorization

<b>Direct Communities</b>	<b>Author</b>
Local Government	Blain, Levy & Ritchie (2005); Morgan, Pritchard & Pride (2002); Sautter & Leisen (1999); Sheehan, Ritchie & Hudson (2007); Sheehan & Ritchie (2005)
Tour and Business Operators	Blain, Levy & Ritchie (2005); Sautter & Leisen (1999); Sheehan, Ritchie & Hudson (2007); Sheehan & Ritchie (2005)
Residents	Sautter & Leisen (1999) Pavlovich(2003), Sheehan & Ritchie (2005) Til(1984)
Community Groups	Morgan & Pritchard (1999); Sautter & Leisen (1999); Sheehan & Ritchie (2005)
<b>Indirect Communities</b>	<b>Author</b>
Tourists	Sautter & Leisen (1999); Sheehan & Ritchie (2005) Lasker and Guidry (2009) Pavlovich (2003), Til(1984)
NGO	Bramwel & Sharman (1999); Haywood (1988); Keogh(1990)

Kayat (2002) in his study suggested that community participation in tourism is a process to involve and empower the associated stakeholders the privileges in making decision that affects their lives. Bramwel & Sharman (1999) in their study have also explained the needs of NGO’s in

the tourism location to help the community in terms of tourism development programmes and also improving the environment quality.

Community participation describes a variety of voluntary action through which individuals address possibilities as well as responsibilities of direct and indirect communities. The particular prospects pertaining to these kinds of participation include things like joining in the process of self-governance, addressing authoritative decisions in which influence on one's liveliness, and working co-operatively with others on issues associated with common concern (Til,1984).

Based on a study conducted by Lasker and Guidry (2009) explained that in a tourism environment community is divided into direct community are those who are directly involved with the economy, social and environment of the local area such as the local residents, business operators, local government and associations, indirect community in the other hand is divided into NGOs and tourists.

Li (2006) in his study explained aspect of local residents and tourist involving themselves in the environment which will bring improvement to the improvement of the handling of the resources and assets, implementation of stakeholder approach should result in better job opportunities, easier way of obtaining permits for establishing a business (Li, 2006), quality improvement of different kind of infrastructure, increasing safety measures (Burns and Howard, 2003). Currently there is a lack of communication and synergy among different stakeholders.

The direct community in a tourism destination is referred as host and the in direct community as tourist (Pavlovich, 2003). In his study Pavlovich (2003) has explained that the sustainability of an environment is determined by both the direct and indirect community. A study by Sheehan & Ritchie (2005) in the other hand shows that the indirect community can bring income and the understanding on how to use their resources to the direct communities. The study also explains that the importance of environmental awareness can also be thought by the indirect community.

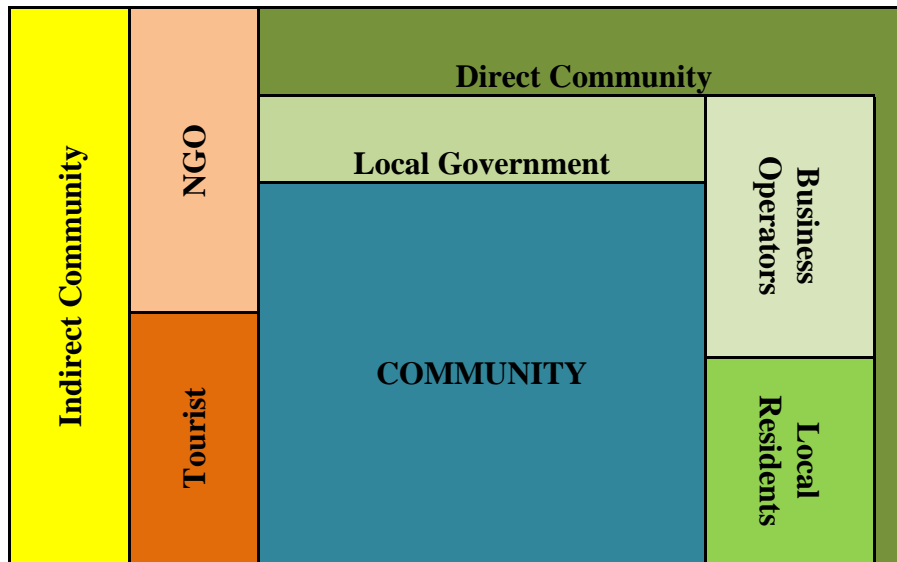
Moscardo, Pearce & Morrison (2000) explains that most divers stay especially European stay longer at a dive destination. Due to the long duration it will create a feel or a sense of belonging towards the local community as they mingle around a play an important role in helping the locals increase their income.

Semporna as the destination which is popular in diving has attracted many tourist from various parts of the world due to its beautiful and natural dive areas. Based on the study conducted by SIPD (2006) they have used the indirect community to help create awareness in schools to help improve the awareness and solve the littering problems in Semporna. The study showed that many tourists took part to help educate the locals and some level of positive response by the locals was seen.

## CONCLUSION

In conclusion the burden of mitigating waste in Semporna, Sabah can only be done if there is involvement by both the party the direct and the indirect communities. Figure 1 is designed to show how the both community can co-exist in a tourism environment.

**Figure 1:** The relationship between direct and indirect Community



The Indirect community can also act as a mechanism to improve the littering problems in Semporna, Sabah by playing a part in daily psychographic pattern of the direct community. As part of the local government, Sabah Parks plays a crucial role as part of the direct community in ensuring that mitigation efforts are in place. This effort is done through community engagements in awareness programs. The mechanism should not act as a one-time procedure. They are most useful when exercised repeatedly and consistently through long term programs

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**WILLINGNESS TO ACCEPT COMPENSATION OF SEAWEED  
CULTIVATORS TO SHIFT FROM MARICULTURE TO ECOTOURISM  
RELATED BUSINESSES FOR CONSERVATION OF MARINE  
RESOURCES IN TUN SAKARAN MARINE PARK: THE PRELIMINARY  
STUDY**

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**ABSTRACT**

Sabah is the sole producer of seaweeds in Malaysia with most of total production is cultivated off Semporna coasts (Sade, Ali, & Mohd., 2006). Tun Sakaran Marine Park (TSMP), located in Semporna Island is unique because there are human settlements inside and seaweed cultivation can be found within Selakan-Sebangkat areas under Sabah Park provision. Somehow, lack of knowledge in practising environmental-friendly farming way and destructive fishing practices like usage of dangerous explosive materials resulting to corals destruction that became the attraction for snorkelling and diving activities. TSMP also is the most visited island by tourists after Sipadan and Mabul Islands. Therefore, this study will investigate the potential of adopting Payments for Ecosystem Services (PES) scheme for marine ecosystem conservation in TSMP by implementing microeconomic concept of willingness to accept (WTA) to the seaweed cultivators. The alternative is by giving them compensation to reduce their production by 25%, 50%, 75% or fully shift from seaweed mariculture to ecotourism related businesses such as tour guides, boatmen and so on. The respondents are the seaweed cultivators in both Selakan and Sebangkat areas in which Choice Experiment (CE) based questionnaire is employed to investigate preference of shifting and compensation value. It is expected that the finding of this paper is able to reflect the suitability of WTA implementation for marine conservation in TSMP.

Keywords : *Natural resources, Payments for Ecosystem Services (PES), Willingness to Accept (WTA), Ecotourism*

**MARICULTURE AND SEAWEED CULTIVATION ACTIVITIES IN TUN SAKARAN MARINE PARK**

Ecosystem provides our society with a wide range of services in which people consumed the nature components and greatly rely on them for the survival and good quality of life (Boyd & Banzhaf, 2006). Marine ecosystem provides multiple services for human being and it is usually utilized for food resources, tourism attractions and so on. Mariculture can be defined as the cultivation of marine organisms in their natural environment such as in the sea in a specially constructed rearing section like cages and long-lines (FAO, 2014). Mariculture industry, a specialized branch of aquaculture is related closely to marine ecosystem and is getting more established in Malaysia.

Seaweed cultivation is the example of mariculture and was introduced in Malaysia particularly in Semporna, Sabah in the 70s (Mohamad et al., 2011). It becomes one of the main economically important nature resources for Malaysia in which Sabah is the sole producer of seaweeds in the country. To date, seaweed farming in Sabah can be easily accessed in coastal areas of Kudat, Lahad Datu, Kunak and Semporna (Sade et al., 2006). While in TSMP, seaweed farming can be found within Selakan-Sebangkat Island areas. DOFS or Department of Fisheries Sabah is the responsible leader in promoting seaweed farming project among the fishermen in Semporna. Other government agencies like Ministry of Rural Development and Entrepreneur through its local district office and Malaysia Fisheries Development Board also lending hand in developing the seaweed industry. Due to DOFS's effort in promoting, seaweed used to come out as the second largest contributor of aquaculture export value in Sabah from 1994 to 1997 (Sade, Ali, & Mohd., 2006). Besides, there are also private local companies that focusing in seaweed cultivation by farming in larger scale.

Eventhough mariculture provides benefit of increasing the food production, but lots of local seaweed cultivators including those in TSMP are less knowledgeable in practicing environmentally-friendly farming way that ensure minimal damage to the environment and reef habitats (Wood, 2006). In TSMP, there are still lots of farmers reported used polythene strings and plastic bottles as floats (Sade, Ali, & Mohd., 2006). In time, these strings and bottles will be detached and floating in the sea thus causing a serious litter problem. Sometimes, the existence of seaweeds also became a serious threat to the coral growth because the strings of algae that suspended over coral will prevent sunlight to reach the coral and inhibit its growth (Komilus et al., 1999).

Due to seaweed cultivation, fishes flooding the farming sites to feed for seaweeds. Other than that, there are some of the fishermen who used dangerous explosive materials to bomb fishes in order to get abundant yield in easiest way hence resulted to destructive of corals. Nevertheless, this never become a problem to the cultivators since they claimed that fishes destruct their farming while seaweeds do not affected to the bombing. Instead if these corals are protected well, they can be the main attraction for snorkelling and diving activities.

### **ECOTOURISM ACTIVITIES IN TUN SAKARAN MARINE PARK**

Malaysia remained as a less-known destination among tourists until early 1970s in which the establishment of Tourism Development Cooperation (TDC) and Ministry of Culture and Tourism helps to encourage tourism activities in the country (Tourism Malaysia, 2002). Since then, government had underlined few approaches to promote ecotourism destinations in the country as well as to enhance sustainability and to boost commercial value of this sector as stated in The Tenth Malaysia Plan 2011-2015 (Sapari, 2013).

According to Ceballos-Lascurain (1996), ecotourism or nature-based tourism best defined as environmentally responsible and enlightening visitation to undisturbed natural areas in order to enjoy as well as appreciate nature and its accompanying features that promotes conservation, has low visitor impact and also benefits the socio-economic of local populations. It becomes very important since it is not just contribute to economic development but also serves as a platform for sustainable land use and biological diversity conservation. Sabah is renowned as one of the



12 mega biodiversity hotspots in the world and home to many conservation areas and parks, tropical rainforest and wildlife, pristine beaches as well as diving sites.

Sabah Parks holds the power of managing all activities that take place in TSMP. Eventhough the status of ecotourism in TSMP is still in early stage but the arrival of the tourists has been increasing over the years (Table 1). TSMP has many distinctive attributes that suitable as tourism attraction (Woods, 2007). The diving is very varied in the park with lots of big walls (undamaged by bombs), and a great deal of incredible macro-life in the Bodgaya Lagoon. There are also vast sandy areas with big gorgonian fans, sea pens and rocky outcrops (Komilus et al., 1999).

**Table 1** Tourist arrivals to Tun Sakaran Marine Park, Semporna from 2009 to 2011

Year	Malaysian	Non-Malaysian	Total
2009	663	3,737	4,400
2010	2,039	7,910	9,949
2011	6,505	22,891	29,396

Source: *Sabah Parks, 2012*

Through the involvement of local communities in ecotourism such as tourist guides, boatmen, operating or working in homestay and so on, they will have stable financial if the establishment of an Advisory Committee and appointment of honorary ranger in monitoring areas (Basintal & Abdul Razak, 2012) is successful. Besides, ecotourism also will promote education and environmental awareness between local communities and other interested parties when it is well managed. Therefore, proper management plan and regulations need to be implemented to enhance ecotourism status in TSMP as well as to ensure the sustainability of marine resources there.

### **PAYMENTS FOR ENVIRONMENTAL SERVICES (PES)**

Somehow, all activities of human kinds can bring either beneficial or harmful impacts to the environment depending on the way it is being managed, hence concepts like Payments for environmental services (PES) is introduced to mitigate the impacts of human activities to the environment. PES is a conservation tool that consists of payments (monetary or in-kind) to natural resources users based on a voluntary contract (Pirard, R. & Bille, R., 2010). In TSMP case, Sabah Park acts as a seller whereas both seaweed cultivators and tourists are the buyers or users.

Microeconomic concept of Willingness to accept (WTA) is very important to implement PES. It defined as the amount an individual can be compensated for a reduction in supply and have his or her utility remain the same (Wossink & M. Swintonc, 2007). The most common conflict that expected to happen when talking about WTA is individuals attempt to extract the maximum obtainable rather than minimum necessary to be compensated.

## STUDY AREA

Tun Sakaran Marine Park or TSMP (Figure 1) that located in the Semporna Island is a Malaysian marine protected area (MPA) and consists of eight different islands: Bodgaya, Boheydulang, Tetagan, Sebangkat, Selakan, Maiga, Sibuan and Mantabuan. It has been gazetted as a MPA in July 2014 and is managed by Sabah Parks (Nair, 2013). TSMP covers an area of 340 square kilometres of sea and coral reef with 10 square kilometres of land areas. It is rich with natural marine life and flora fauna with abundance of endemic organisms can be found here. Sabah Tourism Board classified that both Sebangkat and Selakan islands are the two islands of raised limestone platforms that makes them convenient for seaweed cultivation. Seaweed farming can be found within Selakan-Sebangkat areas in Zone B of Aquaculture Industry Zone (ZIA) Plan of Semporna Region while giant clam ranching can be found in the research centre of Boheydulang Island.

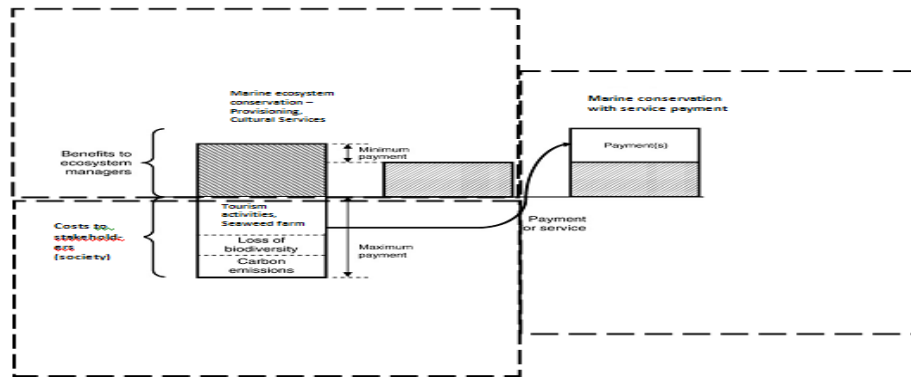


**Figure 1** Map of Tun Sakaran Marine Park

Source: <http://www.molon.de/galleries/Malaysia/Sabah/Islands/>

## METHODOLOGY

PES is not designed to fully retard poverty, rather they offer economic alternatives to foster more efficient and sustainable use of environmental or ecosystem services. PES scheme which enable people with low-income and in the midst of poverty to earn money by conserving ecosystem can be designed. Even if the payment is modest but regularly and reliably delivered, it still can help to promote conservation of natural resources and provide additional employments in the community. To implement PES in TSMP, framework below (Figure 2) that adapted from Pagiola and Patais (2007) will act as the benchmark.



**Figure 2** PES Framework for sustainable development of marine ecosystem in TSMP

In order to prepare a questionnaire, previous studies that using choice experiments (CE) were reviewed. In-depth interviews also need to be conducted with site officers from TSMP (Sabah Parks) and Department of Fisheries in Semporna to draw information about seaweed cultivation in TSMP. Target respondents will be local seaweed cultivators that farming within Selakan and Sebangkat Island. They are of Bajau Laut descendants and speak Bajau language. Besides farming, they also work as fishermen and the highest education level for most of them is primary level school. For CE survey based, respondents will be asked to choose their preferred alternative of compensation that come with different levels of attributes in a choice set. Each alternative will have a figure as a compensation value completed with the characteristics profiles that represent the alternative like who is the manager of the program and to what extent (percentage) they have to reduce the production of seaweeds. Eventhough Status quo (SQ) may not represent current situation, it is still included in the choice set to give respondents an impression that will come out if they opt to do nothing about the situation and if there is no changes take place in the future.

Data collection will be in the form of interviewer administrated survey or face-to-face interview since environmental services can be well defined and explained through it. Besides, researchers also can minimize non-response rate when the interviewers or enumerators always explain the questions to the respondents. Then, data will be analyzed by using SPSS software in which exploratory data analysis consists of frequencies, percentage, mean and standard deviation are employed on the socio-demographic attributes and farming practices.

## CONCLUSION

It is vital to come with suitable compensation value and to identify the perfect factors that influencing both seaweed cultivators' willingness to participate and willingness to shift. The expectation is the finding of this paper is able to reflect the suitability of PES and WTA implementation for marine conservation in TSMP. Directly, we will be able to conserve the marine resources in TSMP and mitigate the effects of human activities on them.

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# THE IMPORTANCE OF VALUING MARINE CONSERVATION AREA

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## ABSTRACT

Marine ecosystem has highest values especially towards quality of life and country economic growth. Basically, the function of marine ecosystem can be classified into three groups: economic (resorts, chalet and hotels), social (recreational activities) and environmental. Development of resorts, recreational activities, offshore and aquaculture activities are few of examples. The poor management, unplanned, and over exploitation can damage the marine ecosystem. This paper focus is to review the importance of valuing marine resources. Besides, this paper aims to review the useful method that can be applied to generate the values of marine resources by using economic valuation method and the validity of a method based on previous studies. Based on the previous studies, economic valuation classified into non-market stated preferences method and market based revealed preferences method. In each group they have provided several methods, i.e. Market price method, productivity method, hedonic pricing method, travel cost method, contingent valuation method, contingent choice method, benefit transfer method. Therefore, the value can be used as a conversion of a quantity, quality and the changes of price (monetary value). At the end of this paper, it can be used as a future references, especially in the scope of valuing of marine conservation area.

Keywords: *Marine Resource* , *Economic valuation method*, *Marine Conservation*, *Tourism*,

## INTRODUCTION

Marine ecosystems are essentially covered with water and also provide diversions of function to all living things. Conservation on Biological Diversity (CBD), oceans cover 70% of the planet's surface area, marine and coastal environments contain a diversity of habitats that support an abundance of marine life. It also can be defined as a connected with the sea area (Oxford Dictionary). Based on the previous studies, it can be used to express marine area is an area that has many functionalities to all life on earth. Marine ecosystems are produced and provide a diversity of function for all living things. Marine ecosystem supply a variety of good and services that provide direct and indirectly contributions to human well being; these include goods traded informal markets such as food and materials as well as non-market good and services such as waste, regulation, climate regulation, coastal protection and opportunities for recreation (Schuhman, 2014). According to CBD says that, life in our seas produces a third of the oxygen that we breathe, offers a valuable source of protein and moderates global climate change. Marine ecosystem also acts as a contributor to increase the economic growth. These issues cause problem of overexploitation through marine resources and marine ecosystem.

## **TYPES OF INTENSIFICATION IMPACT OF HUMAN ACTIVITIES TOWARDS MARINE AREA.**

Types of intensification impact of human activities towards marine area, as presented below:

### **Marine pollution**

Mostly, marine area is used as a road networking by ships. Therefore, waste disposal offend occur in marine area. Consciously, oil spills from ships have covered on the sea surface. Hence, it is effected the marine life and marine ecosystem. Other than that, marine pollution happened because of aquaculture activities that normally were used chemical product as supported to control the quality of aquaculture product. For example, heavy metals than PCB and dioxins

### **Coastal construction and marine mining**

Coastal construction is an activity that embraces the development in marine areas. As realizing, poor management and unplanned development have been given the negative impact to the marine areas. Marine mining is also a factor that causes interference between productivity and quality of marine resources. For examples, drilling activity seabed area to obtain raw materials such as oil and gas. These are all intended to improve the economy and as one of the tourist attractions without considering the effect on the future.

### **Tourism and recreation activities**

Tourism sector can contribute a gross national profit and help the economic growth of the country especially Malaysia. Thus, government has been provided variety of infrastructure and facilities to attract tourists to visit Malaysia especially. Without realizing it, these activities have been given the negative impact, particularly towards marine ecosystem. Usually the development of resorts, hotels and chalet are contributes to a factor of marine degradation. There are many activities that can be done along the coastal and island in Malaysia such as SCUBA diving, swimming, snorkeling, motorized water sport, and any other. Undoubtedly, recreation activities also will give negative impact to the marine area because of the activities provided to tourists.

## **WHAT IS MARINE CONSERVATION AREA**

The establishment of conservation area is one of the greatest efforts to preserve natural resources particularly in marine ecosystem. Marine Park, wildlife reserves, wildlife sanctuaries, national parks, natural heritage sites, species recovery programmed and all protected areas is commonly used as a tool to conserve natural resources. International Union for Conservation Nature (IUCN) had introduced the Protected Areas Categories System as a tool to maintain and conserve the natural resources. The categories are recognized by international bodies such as the United Nations and by many national governments as the global standard for defining and recording protected areas and as such are increasingly being incorporated into government legislation (IUCN, 2014). World Conservation Strategy (WCS) used Protected Area Categories System as a guideline to provided policy and legislation for conservation of natural resources. WCS is intended to help advance the achievement of sustainable development through the conservation of living resources (WCS, 1980). The system have different classes of protected area, the categories are presented below:

- Category Ia : Strict Nature Reserve; managed for science
- Category Ib : Wilderness area; managed for wilderness protection

- Category II : National Park; managed for ecosystem and recreational
- Category III : Natural Monument; managed for specific natural features
- Category IV : Habitat/species management area; managed for conservation
- Category V : Protected Landscape/Seascape; managed for conservation and recreation
- Category VI : Managed Resources Protected Area; managed for sustainable

Generally, Malaysia also has been applied the IUCN method for sustainability of conservation. Other than that, IUCN method is used as well as guidance to develop policies and legislations for natural resources conservation i.e. 1. Legislation (National Forestry Act 1984; Fisheries Act 1985, National Parks Act 1980; Environmental Quality Act 1974; Sabah and Sarawak Acts/Ordinances) 2. Policies (National Environment Policy 2002; National Biodiversity Policy 1998; National Forestry Policy 1978; National Agriculture Policy 1992; National Policy on Domestic Animal Diversity).

Marine protected area (MPA) is interrelated with the term of conservation. MPA is functionally to ensure the sustainability of environmental and biodiversity. Besides that, the establishment of MPA is to conserve, protect and manage marine biodiversity and would recommend. It is also intended to reduce and prevent the occurrence of problems in marine area such as ecosystem degradation, tsunami and sea water pollution. MPA includes management of marine resources and interconnected of ecosystems.

Agardy et al.(2003), several international, national, and local level initiatives and mechanisms serve to advance MPAs as vehicles for promoting the long-term conservation and sustainable use of marine resources and biodiversity. Method and management of the marine protected area is in accordance with guideline and management planning which was introduced by the IUCN. De Silva et. al (1986) Marine protected area was began in the early 20th century. In 1985 a total of 430 marine areas have been gazette as a protected area. In 1995 there were more than 1306 coastal areas were declared as MPA area.

According to Kelleher et al. (1995), by the 1990s nearly every each of the coastal areas was declared as the MPA area. However, MPA area management system not systematically has led some areas MPA does not reach set. On 1983, former Malaysian Prime Minister Tun Dr. Mahathir Mohammad has ordered the establishment of the marine park of Malaysia. The Ministry of agriculture is responsible for managing marine parks of Malaysia at that time. Up to the year 2014, a total of 42 Islands in Malaysia have been gazette as the MPA. Hawkins (2003), MPA is important to ensure marine ecosystem will be preserved at the maximum level. It is because, the function of ecosystem is the capacity of natural processes and component to provide goods and services that satisfying human needs.

In terms of biology and ecology, MPA is crucial as well as used to protect the environmental of ocean and coastal area. For example mangrove tree planting program able to protect the coastlines from wave which will cause coastal erosion and wind. Besides that, it can help to avoid the occurrence tsunami and wind. The MPA is also important as much as a habitat protection because the protection of habitat is influence between maintaining and the sustainable of marine life. Nevertheless, the functionality towards MPA will be given benefits in terms of

biology and ecology, economy and education. Thus, the retention for marine life will give adverse effect in terms of importance to the economy.

### **THE IMPORTANCE OF VALUING MARINE CONSERVATION AREA**

Nowadays, the evolutions of technology and industrial have been affecting the demand of natural resources. These factors were induced to the increasing number of exploitation towards natural resources. The development and uncontrolled usage of resources could be the extinction and degradation of biodiversity. Generally, Malaysia has variety of biodiversity resources. It is proved by Mazlan et al. (2005), Malaysia have 650,000 ha of mangrove forest comprising 104 species and ranked second after Indonesia with 4.25 million ha. The mangroves in most parts of Malaysian coastal waters have suffered heavily from human impacts which include illegal cutting, conversion to other uses (such as mariculture and other forms of coastal development) and possible land based industrial pollution.

Ecotourism in marine area have been provided variety of recreational activities i.e diving, snorkeling, boating, fishing, motorized water sport, visiting coastal cultural, coastal camping, underwater photography and nature walks. Indirectly, it will give negative impact to marine resource such as coastal damage, pollution and physical waste. Carrying capacity as well as one of the factor that affects the damage of marine resources. The high level of usage may result in conflicts between users, social and biological carrying capacity, limits of acceptable change and potential environmental degradation (Jamal, 2013).

Economic valuations are used as a trend to evaluate the values of biodiversity resources. In economic valuation, several techniques can be applied in the decision making process. Naido (2008), economic valuation of tropical nature can play an important role in the conservation of biodiversity in developing countries. Hence, economic valuation is one of possible way to measure the value of natural resources particulaly marine resources based on the individual preference. Christie (2007), economic evaluation techniques have been developed to measure the value (consumers' surplus) derived from recreational use of environmental resources such as forests. Nuva (2009), economic valuation can help economists, government, and society to predict the impact of economic decision and activities into environment and resources, and also to identify and estimate the monetary value of all economic benefits that a society derives from environmental resources.

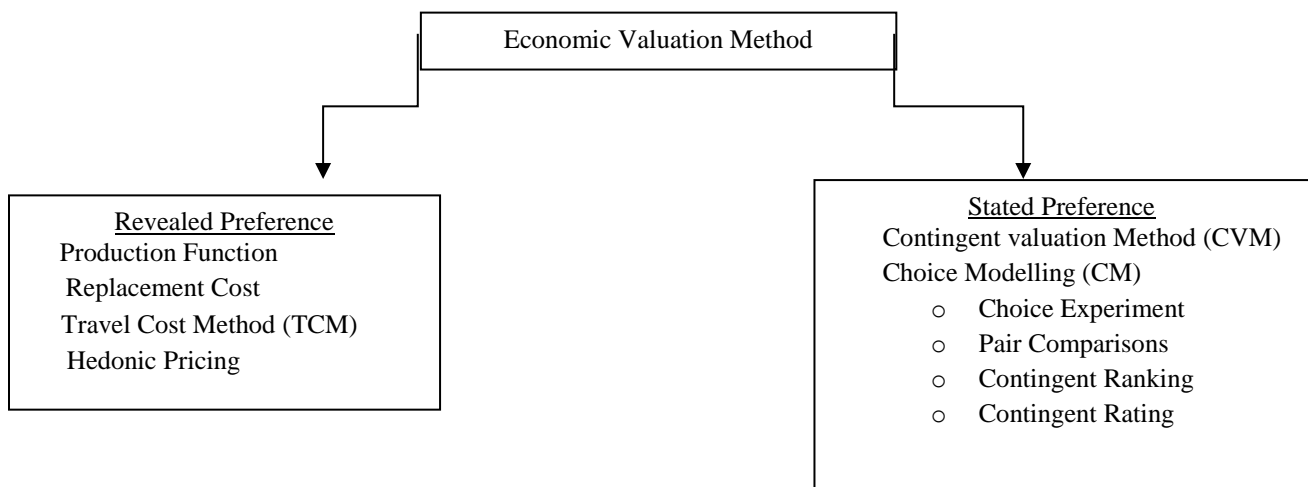
The action of using economic valuation in area of marine conservation is help to provide information of conservation policies, such as payment levels for payments for environmental services (PES) policies, or entrance fees for protected areas (Chase et al. 1998). Besides that, the studies of economic valuation can be used in a general sense to demonstrate that the conservation of nature can be resulting in tangible economic benefits to people (Mazlan et al., 2005). Mainly, the assessment of economic valuation for natural resources particularly marine resources is enhancing the well-being of individuals. The assessment of economic valuation will be determine through the individuals judge a resources by giving their willingness to pay and willingness to accept in certain circumstances.



## PAST STUDIES OF ECONOMIC VALUATION METHOD IN MARINE CONSERVATION AREA

Economic valuation is one of technique that can be used to measure the value. Syamsul (2010), acknowledge the definition of economic valuation in economic perspective is monetary valuation of environment can be performed in many ways, by either using market price information or eliciting consumer preferences or by applying a wide range no-market valuation method. Bene (2004), reported that, economic valuation is the people who value the environment, and accordingly the estimated value resides with the individuals themselves rather than in the object of their assessment. The economic valuation can be applied to cultural goods and services; to do so we have to distinguish between cultural commodities existing as private goods (Throsby, 2001).

By using economic valuation method is a possible way to determine the values of natural resources. Throsby (2001), economic valuation can be applied to cultural goods and services; to do so we have to distinguish between cultural commodities existing as private goods. To estimate the monetary value of environment resources, can broadly classified into two main value elicitation groups; firstly, non-market stated preferences method and secondly, market based revealed preferences method (Rusli, 2006). Figure 1 shows, the classification of economic valuation method that will be applied to evaluate the values of natural resources particularly for marine ecosystem:



**Figure 1 :** Classification of economic valuation method

**Table 1:** Past Studies of Economic Valuation in Marine Conservation Area

<b>Authors</b>	<b>Objectives</b>
Mohd Rusli et. al (2009)	Determine the willingness to pay (WTP) of the visitors for ecotourism resources in marine parks in Peninsular Malaysia by using Contingent Valuation (CVM).
Seddigheh et al. (2003)	Determine the economic valuation of ecological function values through ecological attributes and biophysical in Perhentian Island Marine Park by using Choice Modelling (CM).
Kaffashi, Mad Nasir, Alias Radam, Khalid, Mohd Rusli and Muhammad Yazid (2011)	To estimate the economic benefits of Shadegan International Wetland (SIW) from the view point of peoples' willingness to pay (WTP). Contingent Valuation (CVM).
Mohd Rusli et. al (2009)	Determine willingness to pay (WTP) for conservation fees in Redang Island by using Contingent Valuation (CVM).
Özge Can & Emre Alp (2012)	Determine the benefits of management alternatives to improve environmental quality in Göcek Bay by using Choice Modelling (CM).
P.C. Boxall a,n et. al (2012)	Determine willingness to pay (WTP) to recover the populations of three marine mammal species found in the St Lawrence Estuary by using Contingent Valuation Method (CVM).
John Asafu-Adjaye, Sorada Tapsuwanb (2008)	Estimating the economic benefits associated with scuba diving in Mu Ko Similan Marine National Park, Thailand. By using Contingent Valuation Method (CVM).
Bee Hong and Sumampouw (2012)	Determine the cost and benefit of supporting sustainable management practice of Semporna Sabah. By using Contingent Valuation Method (CVM).

## **CONCLUSION**

The conclusion of this study would provide sufficient information towards the importance of valuing marine conservation area. Thus, it will help to improve the related future research. Consequently, This study will be provided some of information and contribution especially for the state government to improve the policy and management of their marine conservation area.

Based on this study, it also shows the potential activities that capable to increase the awareness attributes to consumers about the conservation of marine area.

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# **ENVIRONMENTAL LITERACY AND FACTORS AFFECTING PRO-ENVIRONMENTAL BEHAVIOUR AMONG YEAR FIVE STUDENTS IN THE WEST COAST OF SABAH: A PROPOSED STUDY**

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## **ABSTRACT**

In the last thirty years development in Environmental Education (EE) programs within the Malaysian formal education system has resulted in the current EE across the curriculum program, throughout all primary national schools. However, NGOs and educators have highlighted the need to educate young children on environmental issues, as there still seems to be a gap between what has been advocated and the actual practices in schools. Using a sequential nested mixed methods study, this research aims to assess environmental literacy (EL) among Year 5 national school students in the West Coast of Sabah, using a Primary School Environmental Literacy Instrument. The instrument will cover four EL domains: knowledge; dispositions; competencies; and pro-environmental behaviour (PEB). This study will also explore the factors influencing PEB of these students, and suggest a framework to improve or strengthen environmental literacy. Furthermore, the effects of demographic variables of the Year 5 students on their PEB will also be investigated, while the issues and challenges in implementing EE will be explored through qualitative interviews with key personnel at each school. Other than this, on site observation will be carried out to identify physical evidence that supports PEB at school. The findings of this study will help EE providers and curriculum developers better understand the strengths and weaknesses of the current provisions in developing environmentally literate students. Moreover, it will also provide invaluable information on the factors that influence the development of Year 5 students' PEB.

*Keywords: Pro-environmental behaviour, Environmental Education, Environmental Literacy, Primary School Environmental Literacy Instrument*

## **INTRODUCTION**

Most students today possess some knowledge of environmental problems around the world. Through both formal and non-formal educational efforts, many adults and students are aware of global warming, the loss of rainforests, and the need to reduce, reuse and recycle. On going programs in Sabah, such as the conservation of orang utans in Sepilok, Sandakan, have created opportunities for local students to become more aware of efforts to care for the flora and fauna closer to home. Recent bouts of haze and alleviated air pollution index due to open burning in neighbouring countries, have brought about greater realization even among younger students, that environmental problems today are global in nature. Therefore, a global effort from

environmentally literate individuals and groups is needed to solve environmental problems and prevent new ones.

In an effort to create environmentally literate citizens, various forms of environmental education (EE) have been introduced throughout the world. Based on its initial definition by the World Conservation Union (IUCN) in 1970, EE or conservation education aims; to provide learners with the opportunity to gain an awareness or sensitivity to the environment, knowledge and experience of the problems surrounding the environment, to acquire a set of values and positive attitudes, to obtain the skills required to identify and solve environmental problems and, the motivation and ability to participate in nature activities (Jacobson et al., 2006).

The primary goal of EE is environmental literacy (Culen, 2001). Environmental literacy (EL) can be defined as the capacity to perceive and interpret the relative health of environmental systems and take appropriate action to maintain, restore or improve the health of those systems (Disinger, 1992). An environmentally literate person is thus one who has the knowledge and skills required to analyze environmental issues, which would enable the individual to act in an environmentally responsible manner. Hence, the measurement of EL is ones responsible environmental behaviour.

Today, environmental awareness and concern is widespread throughout most industrialized and developing nations (Dunlap, Gallup & Gallup, 1993). Based on this perspective, EE efforts have reaped favourable results and EE providers have been successful in fostering greater awareness and concern for the environment. However, Chawla (1988) has expressed concern that while environmental concern has increased, it has yet to be followed by a corresponding increase in pro-environmental behaviour.

Pro-Environmental Behaviour (PEB) is explained in a simplified manner by Kollmuss and Agyeman (2002) as behaviour that consciously seeks to minimize the negative impact of one's actions on the natural and built work; that include resource and energy consumption minimization, the use of non-toxic substances, and the reduction of waste production. It is becoming increasingly apparent that, although EE has succeeded to create awareness of the environmental problems and the various types of pollution being faced daily throughout the world, most people experience 'action paralysis' in that they hold the belief that they are incapable of making a difference other than small efforts such as recycling their wastes products (Connell et al, 1999).

In order to produce students who are truly pro-environmental, whose behaviour are able to bring about the largest potential benefits for the environment, students need to have a personal sense of competence, as well as a sense of collective competence in their ability to achieve goals (Chawla & Cushing, 2007). EE at our present age in time needs to prepare students for active involvement by helping them develop the skills required to bring about global change.

### **Environmental Education in Formal Education Curriculum**

Due to the need to address environmental literacy, the Belgrade Charter, was developed in 1975 by participants of a UNESCO organized EE workshop, at Belgrade, Yugoslavia. This document is a global framework explaining the goal of EE, which is to develop a world population that is

aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.

Based on the progress and awareness created through the establishment of environmental framework, goals and objectives, various curricula, initiatives and programs were developed and incorporated into formal as well as non-formal educational systems. Malaysia likewise, has introduced various measures to ensure that formal education within the country would bring about citizens who are environment literate. Efforts ranging from the introduction of single subjects on environmental related topic, to the wider approach of EE across curriculum are some of the changes experienced within national schools.

### **Development of Environmental Education in Local Formal Curriculum**

In line with the global development in EE, and in an effort to create a curriculum on environmental education, the Malaysian Ministry of Education first introduced Alam dan Manusia (Man and the Environment) in the primary school curriculum in the year 1982. Man and the Environment was replaced by Science and Local Studies after the primary school curriculum review in 1995, that was after 12 years of implementation.

Recognising the necessity for change, in 1996, the Education Department began actively promoting EE in all primary and secondary schools throughout Malaysia through the introduction of Environmental Education across curriculum. EE was thus, integrated into every subject. Through this curriculum program, it was hoped that students would be presented with a more holistic emphasis in environmental matters (Pudin, 2006). If successful, students would ultimately become more environmentally literate. At the tertiary level; many local universities have begun to offer various environmental science and environment-related courses at degree level (Arba'at et al, 2009).

### **Non-Formal Environmental Education Efforts**

At present, formal education seems to be the main channel through which students gain knowledge and understanding of the natural environment, however, non-formal education efforts can also play a vital role in the development of the pro-environmental individual. Agenda 21, drawn up at the Rio Earth Summit in 1992, states that education, which includes formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential. It further highlights the fact that education is critical for promoting sustainable development and improving the capacity of the people to address environmental and development issues. Moreover, both formal and non-formal education are indispensable to changing peoples' attitudes (UNESCO, 1992). Education is thus perceived as a crucial factor in achieving sustainable development, whereby both formal and non-formal education are needed to bring about change.

In local national schools, where EE activities cannot be fitted into daily classroom lessons, after school club activities are encouraged to supplement. These co-curricular activities are offered to Years 3 to 6 students, once a week. Students are encouraged to join a club or association, a sports related club, and a uniform body at Year 3. In most primary schools, activities for these clubs would be carried out by rotation every Wednesday. Clubs such as Sabah Nature Club,

Scouts, and various others conduct activities after school to provide students with the opportunity to learn in a more informal and enjoyable manner.

Malaysia's National Policy on the environment has outlined education and awareness as its Green Strategies (MOSTE, 2002). Non-formal education is aimed to complement formal education by providing both updated knowledge and skills. Furthermore, non-formal education is seen to be more advantageous than formal environmental education as its flexible programs offer environmental knowledge to varied target audiences via various types of activities and settings.

In Sabah, efforts to bring about further progress in EE resulted in the setting up of Sabah Environmental Network (SEEN) in 2005 (Environment Protection Department, 2008). Through its formation, SEEN has provided a network for all organizations involved in the implementation of EE, to become more aware of the various activities and programs taking place throughout the state, thus allowing stronger co-operation and co-ordination amongst its members (Arba'at et al, 2009). In 2005, the Sustainable School Program (Sekolah Lestari) was launched in Malaysia, with the aim to assist schools to enhance the implementation of current environmental education being carried out. The Education Department also co-organises EE programs such as SERASI, Public Awareness Component of the Bornean Biodiversity and the Ecosystems Conservation (BBEC) Program, Environmental Science Quiz, 3K Competition (*Kebersihan, Keceriaan dan Keselamatan*), environmental workshops and courses (Pudin, 2006).

### Background of Study Site

The state of Sabah which covers an area of over 73,000 square kilometres, consists of five divisions (Figure 1). These five divisions include: Tawau, Sandakan, Kudat, West Coast, and Interior, within which a total of 23 subdivisions known as administrative districts, exist.



**Figure 1:** Five divisions of Sabah

Source: <http://www.sabah.com.my/borneotrade/a8.htm>



Within the five divisions, the West Coast Division, which encompasses a total area of 7,588 square Kilometres, has a population of approximately 32% of the total population of Sabah (Table 1).

Division	Area (Sq. Km)	Distribution (%)	Population (%)
Interior	18298	24.9	14.7
Kudat	4623	6.3	7
Sandakan	28205	38.3	19.4
Tawau	14905	20.0	26
West Coast	7588	10.3	32
Total	73619	99.8	99.1

**Source:** 1991 census, Sabah Yearbook of Statistics, 1998 & Department of Statistics, Malaysia, 2010

The West Coast Division covers a few main towns such as the State capital Kota Kinabalu, Ranau, Kota Belud, Tuaran, Penampang and Papar. For the purpose of this study, the West Coast Division of Sabah was selected due to the fact that its population comprises an estimated 32% of Sabah's total population (Department of Statistics, Malaysia 2010).

The population of this study will be all Year 5 primary school student in the West Coast Division of Sabah. As this area encompasses the State capital, Kota Kinabalu, most schools in this district would have better opportunity and access to EE programs and activities organised for school children. Furthermore, where non-formal EE activities are used to supplement formal curriculum, schools in this area would have greater access to utilise and visit the various EE related activity sites around Kota Kinabalu.

For the purpose of this study, 2 schools from each district will be invited to participate, based on the condition that the school has at least a population of 80 Year 5 students registered in the school. The rationales behind selecting Year 5 students, were firstly, because Year 5 students would have already undergone over four years of the current environmental education across the curriculum program in school. Thus, the effect of the program will be more evident among Year 5 students as compared to lower grade students.

Secondly, Piaget's Cognitive Development Theory (Piaget, 1976) states that children between 10 to 11 years of age, can be assumed to be literate in science. Furthermore, in local schools, co-curricular activities such as Scouts, Sabah Nature Club and other environmental related clubs, which supplement the EE taught in formal curriculum, only begin in Year 3 or 4. Therefore, Year 5 students would have had at least a year of co-curricular activities.

Other than this, the Ministry of Education (ERAS, 2011) stipulates that students involved in major government examinations are not allowed to participate in research which may disrupt their studies. As such, Year 6 students preparing for UPSR Examinations cannot be involved in this study, although they would have had the greatest expose to the current EE curriculum in local schools.

## **Problem Statement**

Despite 30 yrs of EE in formal curriculum, and the various non-formal EE activities both in and out of school, the question still remains as to whether the provision of all these EE programs and activities have succeeded in bringing about environmental literacy among students. This question could be answered through systematic assessments and evaluations carried out among students. In 2001, a survey related to the implications of the EE across the Curriculum Program was carried out in 31 selected schools in Malaysia. The findings indicated that students had a high level of awareness and attitude towards the environment. Furthermore, the survey also revealed that the level of student awareness and attitude was interconnected to the teachers' teaching practices, understanding and commitment (Pudin, 2006). This promising report, highlighting the success of the national curriculum, through the increase in the students' levels of awareness and attitude towards the environment, nevertheless failed to address the more crucial aspect of behaviour change.

Based on "Environmental Citizenship: A Report on Emerging Perspectives in Malaysia" (EC Report) by WWF-Malaysia (2008), 96% of the educators and 89.3% of the teacher trainees indicated the need for Environmental Education (EE), while almost all participants realized the need to educate young children on environmental issues. Furthermore, WWF has commented that although the Ministry of Education (MOE) has advocated EE through several commendable initiatives since 1986, there still seems to be a gap between what has been advocated and the actual practices in schools and other educational institutions (WWF). The existence of this gap was also mentioned by Thiagarajan (2005), who reported that although environmental education has been infused in textbooks in both primary and secondary schools, the holistic approach to environmental education is relatively superficial. Furthermore, it was noted that, environmental education in schools is rather sporadic and often thought to be an extra curricular activity involving occasional visits to forest and marine areas, instead of a Whole School concept.

A truly effective assessment based on the definition of environmental literacy by Disinger (1992), requires the assessment to measure the students' capacity to perceive and interpret the relative health of environmental systems and take appropriate action to maintain, restore, or improve the health of those systems. Research to test the effectiveness of EE programs by assessing their effect on behaviour rather than attitude change is greatly needed (Lucas, 1980). Volk and McBeth (1998) reported that less than 50% of research measure environmentally responsible behaviour or ecological knowledge, while none measured cognitive skills related to environmental literacy or additional determinants of environmentally responsible behaviour.

Some of the environmental issues faced in Sabah, are related to the tourism sector and its related activities. The Sabah State Development Agenda has highlighted tourism as one of the three priorities (Teh & Cabanban, 2007). The state of Sabah recognizes that its tourism sector depends heavily on the natural biodiversity of the state and that it plays a crucial role in its human and economic development. To ensure the sustainability of this industry and the biodiversity, the government of Sabah has been working together with non-profit organizations such as WWF (World Wide Fund for Nature), UNDP (United Nations Development Plan) and Danish Co-operation, (Kim, 2011). However, while tourism is poised for rapid expansion, scholars have highlighted that sustaining this industry may be a problem if major environmental aspects are not looked into (Ali, 2010; Praveena, Siraj, & Aris, 2012).

On the other hand, while tourism could result in the reduction of poverty among the rural poor, various unsustainable practices among them have brought about the destruction of the environment, flora and fauna. Fien (1993) stated that the economic wellbeing and the environmental protection in many developing countries are on two ends of a continuum (Fien, 1993). As such, the development in the country's economy and improvement in the community's livelihood is often conflicting with efforts to protect and conserve the natural environment. This seems to be evident among many rural communities in Sabah.

In spite of various projects carried out to educate the local communities, such as The Semporna Island Darwin Project (SIDP), involvement of The Marine Conservation Society, as well as other various policies, conservation enactments, legislations and efforts to conserve the environment, recent studies have shown that it is still evident that the concerns regarding the protection and conservation of these areas remain a topic amongst scholars (Corpuz, 2008; Jakobsen et al., 2007; Praveena et al., 2012; Teh et al., 2005; Teh & Cabanban, 2007).

### **Research Objectives**

The main research objective is to determine the extent to which the current EE programs in local primary schools in Sabah, meets the aim of the Malaysian Education Ministry, to create environmentally literate students. This is further divided into five research objectives as follows:

RO 1. To identify the major components of environmental literacy for primary school students.

RO 2. To assess the level of environmental literacy of Year 5 students in the West Coast of Sabah, with regards to the components of the following domains: knowledge, dispositions, competencies, and pro-environmental behaviour.

RO 3. To determine the factors affecting pro-environmental behaviour of the Yr 5 students in the West Coast of Sabah through verbal and non-verbal methods.

RO 4. To identify the issues and challenges faced by schools in this region, in implementing EE.

RO 5. To suggest a framework to improve or strengthen pro-environmental behaviour among primary school students.

### **Research Questions:**

RQ1. What are the major components of environmental literacy for primary school students?

RQ2. What is the level of environmental literacy of Year 5 students in the West Coast of Sabah, with regards to the components of the following domains: knowledge, dispositions, competencies, and pro-environmental behaviour?

RQ3. What are the factors affecting pro-environmental behaviour of the Yr 5 students?

RQ4. What are the issues and challenges in implementing environmental education?

RQ5. What framework can be suggested to improved or strengthened pro-environmental behaviour?

### **METHODOLOGY**

In order to carry out this study, firstly, a primary school environmental literacy instrument will be adapted and modified to assess environmental literacy in terms of the components of four environmental literacy (EL) domains: knowledge; dispositions; competencies; and pro-environmental behaviour, among Year 5 students, in national schools in the West Coast of Sabah. This study will also explore the factors that influence the PEB of these students. Using a

sequential nested mixed methods approach, this study will also explore the factors that influence the PEB of these students. Furthermore, the effects of demographic variables of the Year 5 students on their PEB will also be investigated. At the same time, the issues and challenges in implementing EE will be explored through qualitative interviews with key personnel at each school. Other than this, on site observation will be carried out to identify physical evidence that supports PEB at school.

### **SIGNIFICANCE OF THE STUDY**

This study on environmental literacy and factors affecting pro-environmental behaviour among Year 5 students is important for several reasons. Firstly, the natural environment is being exploited more and more to support the increasing world population and its unending demands. In order to enjoy better quality of life and the modern lifestyles of today, nature is being destroyed in the name of development resulting in global environmental problems (Tung, Huang & Kawata, 2002). Due to this, environmental education has been introduced to children, with the ultimate aim of creating an environmentally literate generation that demonstrate pro-environmental behaviour.

Likewise, in Malaysia numerous efforts to develop a nation that is environmentally literate have been on going. Within national primary schools, both formal and informal programs and activities have been carried out since the early 1980s. The current formal curriculum in national primary schools which was introduced in 1996, is the Environmental Education across curriculum. After almost two decades, it is timely that assessments be carried out to evaluate, to what extent the current EE program in Sabah, has met the aims of the Malaysian Education Ministry, in creating environmentally literate students.

Furthermore, in order to improve and enhance the current EE provisions for students, it is vital to understand the issues and challenges faced by schools, in the implementation of EE. On the other hand, this study will provide information on the existing levels of EL of students with regards to the four EL domains. Information on EL levels will help EE providers and curriculum developers better understand both the strengths and weaknesses of the current provisions in developing environmentally literate students. Moreover, this study will also provide invaluable information on the factors that influence the development of Year 5 students' pro-environmental behaviour. Hence, allowing EE providers to anticipate opportunities to better cater for the EL needs of different groups of students.

Existing literature indicates numerous studies that have been carried out throughout the world. However, such research in Malaysia is still limited in comparison. Furthermore, EE and EL research in Malaysia is more focused on secondary and tertiary students. Thus, researchers in EE have not adequately addressed the issues of EL among younger students. Another important point concerning existing literature on research in EE and EL, is that most research focuses on environmental knowledge, concern and attitude of respondents, rather than environmental issue investigation, and pro-environmental behaviour, which is the ultimate goal of EE. Hence, this study will add to the limited research in this area in general, and in Malaysia particularly. It is hoped that this study will also initiate further research in this area, in the near future.

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# A CONCEPTUAL FRAMEWORK OF ASSESSING ECOSYSTEM SERVICES IN WETLAND AREAS

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## ABSTRACT

Ecosystem services are notably seen as an important assessment to the making of decisions regarding the use and management of wetlands and their benefit to society. The understanding of how wetland ecosystem services supply change is the key issue for an effective tools in conservation management. However, there are lack of holistic non-monetary approach on how to assess the relevant and specific ecosystem services on the local scale. This study proposes a conceptual framework of wetland potential ecosystem services and sub-services supply by examining the literature and combining with historical land cover change of the study area. With the ecosystem services as its core, the framework take into account the influence of both forest and human interrelations for assessing the wetland ecosystem services. It is intended that the proposed conceptual framework will provide more complete understanding of the characterized ecosystem function and potential services supply of multiple land cover pertaining to wetland conservation effectiveness.

Keywords: *Wetland Natural Resource, Ecosystem Services Supply, Ecosystem Services Indicator*

## INTRODUCTION

The issue of ecosystem services (ES) in general has become a crucial topic of many scientists and decision makers (Costanza et al., 1997; MA , 2005b; Burkhard et al., 2012; Petter et al., 2013) and ES identification and assessment is increasingly considered as essential for decision and policy making regarding the use and management of ecosystems and their benefits to society. The international meeting of signatory countries of the Convention of Biological Diversity held in Japan in 2010 was organized - inter alia - to review the implementation of the program, to raise the awareness of the value of biodiversity and to integrate both into plans, strategies and accounts (Russi et al., 2013). It recommends a broad assessment of ecosystem services as well as initiatives to value nature by non-monetary and monetary approaches. The current Strategic Plan 2009-2015 of the global Ramsar Convention of “wetlands of International Importance” gives direction in the same way by committing all signatories to implement the “wise use of water and wetlands” (Russi et al., 2013) as an initiative to protect the key water and wetlands ecosystem services and to facilitate decision making for wetlands safeguard.

There are lack of holistic non-monetary approach on how to assess the relevant and specific ecosystem services on the local scale (Burkhard et al., 2012). Therefore, this study proposes a conceptual framework of wetland potential ecosystem services and sub-services supply by examining the literature and combining with historical land cover change of the study area. With the ecosystem services as its core, the framework take into account the influence of both forest

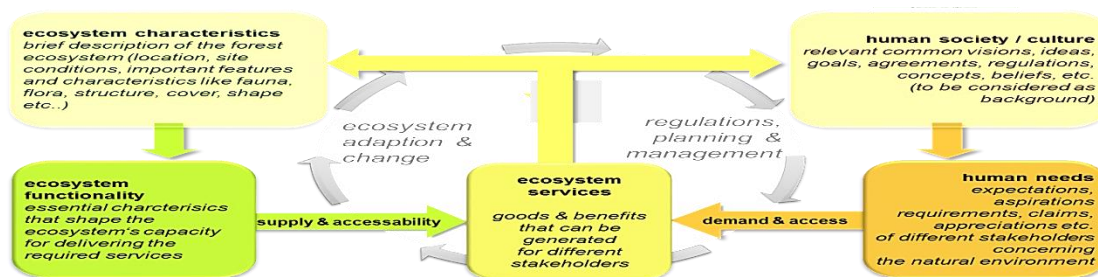
and human interrelations for assessing the wetland ecosystem services. It is intended that the proposed conceptual framework will provide more complete understanding of the characterized ecosystem function and potential services supply of multiple land cover pertaining to wetland conservation effectiveness.

## MATERIALS AND METHODS

### Conceptualising Ecosystem Services Assessment in Wetland

The first step of a classical landscape analysis should start with the specification of the relations between landscape characteristics, their respective functions and potential services (De Groot et al., 2010; Müller et al., 2011), we suggest that ecosystem services assessment should focus on the specific ecosystem services demands at first. Characterizing ecosystem functions and their potential services supply on the landscape scale is supposed to support appropriate governance, decision-making and management for sustainable use of the natural environment (Müller et al., 2011). However, it does not tell about beneficiaries. By contrast, ecosystem services demand and accessibility assessment needs to name the actors and potential beneficiaries, which might be government agencies, NGOs, investors, or different groups of local people. The identification of local stakeholders and their interests will help to identify the relevant services, get aware about conflicts of interest and provide political transparency in decision-making and power sharing.

Bürger-Arndt (2012) has developed a schematic view to illustrate the above mentioned interrelations between ecosystems conditions, their functionality and services supply on the one hand and human societies with their socio-cultural backgrounds, concepts, knowledge and respective expectations, needs, estimations and awareness of people concerning their natural environment on the other, in order to help understand, conceptualize, structure and operationalize ecosystem services assessments and change (Figure 1). This schema has been specified for several Forest Ecosystem Services (FES). It has turned out to be quite helpful to describe case study conditions and identify research questions as well as the appropriate indicators for supply, demand and benefit assessment.



**Figure 1:** Relevant Human-Forest-Interrelations for Assessing Forest Ecosystem Services (Source: Bürger-Arndt 2012).

### Study Area

As an example, the relevant aspects for assessing ecosystem services of an extensive wetland area, particularly a fully protected peat swamp forest in the District of Beaufort / SW Sabah / East Malaysia (Figure 2) are given as follows; In this area, fire outbreak have brutally degraded



the wetland especially peat swamp forest. The entire Klias peat swamp deposit is evaluated to be at least 7400 ha, out of which only 3600 ha are protected within the Klias Forest Reserve. Much of the adjacent area have been lost and become small patches within the forest boundary due to fire during the El-Niño events in 1983, 1991, 1998 and 2003. Having been affected by El Nino events that increased in the case study area, a series of human induced forest fires degraded the entire area severely, transforming all kinds of forests into barren land, followed by grassland and shrub land. It also affected the peat swamp forest where extensive fire during El Nino destroyed more than 60% of the former area in 1998 and 2003 (Kamlun et al., 2010). The drastic land cover change, in turn, generated tremendous demands by the adjacent local communities to convert the land into agricultural use, particularly palm oil plantations. This additional pressure even hits the protected peat swamp forest (Sabah Forestry Department, 2005), where logging as well as any livelihood activities are strictly prohibited. Overall, it is becoming tremendously difficult to preserve this forest ecosystem and safeguard its essential services supply.

### Land Cover Classification

Time series satellite images were acquired from the <http://glovis.usgs.gov> free Landsat images downloader (Path/Row: 118/56). All the data obtained have been processed to standard terrain correction (Level 1T). The earliest satellite image was Landsat Multispectral Scanner (MSS) taken on June 29, 1985. The image was free of cloud and haze from inside the forest reserve and 10% of cloud in the inland area. The Landsat 5 Thematic Mapper (TM) imagery data obtained on November 24, 1998 Landsat 8 OLI\_TIRS taken on April 23, 2013. The land cover change map of Klias Peninsula was developed using pixel-based supervised classification using Maximum likelihood method. Eleven land cover categories were define in this studies which include peat swamp forest, mangrove, forest land, grassland, shrubland, barren land, oil palm plantation, rubber plantaion, water, cloud and shadow. The spectral signature of the known land cover categories were developed using digitized training sites. Then by using Erdas imagine 8.5 software specific algorithms assigning all the pixels in the image data set into defined land cover class (Jensen, 2004).



**Figure 2:** Map of Beaufort in South Western Sabah, East Malaysia  
Source: *google map.com*

### Ecosystem Services and Subservices Category

Concerning the land cover mapping, we followed the approach of Burkhard et al. (2012, 2010 & 2009) who developed a concept of non-monetary evaluation of a broad range of potential ecosystem services supply. The approach uses different land cover / land use types as complex

indicators. It provides a qualitative matrix assessment of ecological integrity and ES supply, combining the land cover types with ES categories and subtypes according to their respective capacities. The Likert scale matrix values (0-5) used for this purpose are based on experience and experts judgment and shall be approved gradually by extensive literature and case studies, respective research and monitoring or available statistics. By using this, the identified and mapped land cover types can be transferred directly into located qualitative ecosystem services supply.

Their alterations can also be illustrated, based on land cover / land use changes. The approach has the potential to overcome the crucial lack of knowledge and comprehensive sets of necessary data for ecosystem services mapping which has to be faced, particularly on the local scale and in developing countries (Sumarga and Hein, 2014). Unfortunately, such kind of matrix is not available for our case study area yet. Hence, we created our own table, combining the identified land cover types, namely peat swamp forest, forest land, mangrove, shrubland, grassland, barren land, oil palm plantation, rubber plantation and water with the proposed ecosystem services classifications and sub-services categories (Costanza et al., 1997; Daily, 1999; MA, 2005a; De Groot et al., 2010; Burkhard et al., 2012 and Petter et al., 2013).

## **RESULTS**

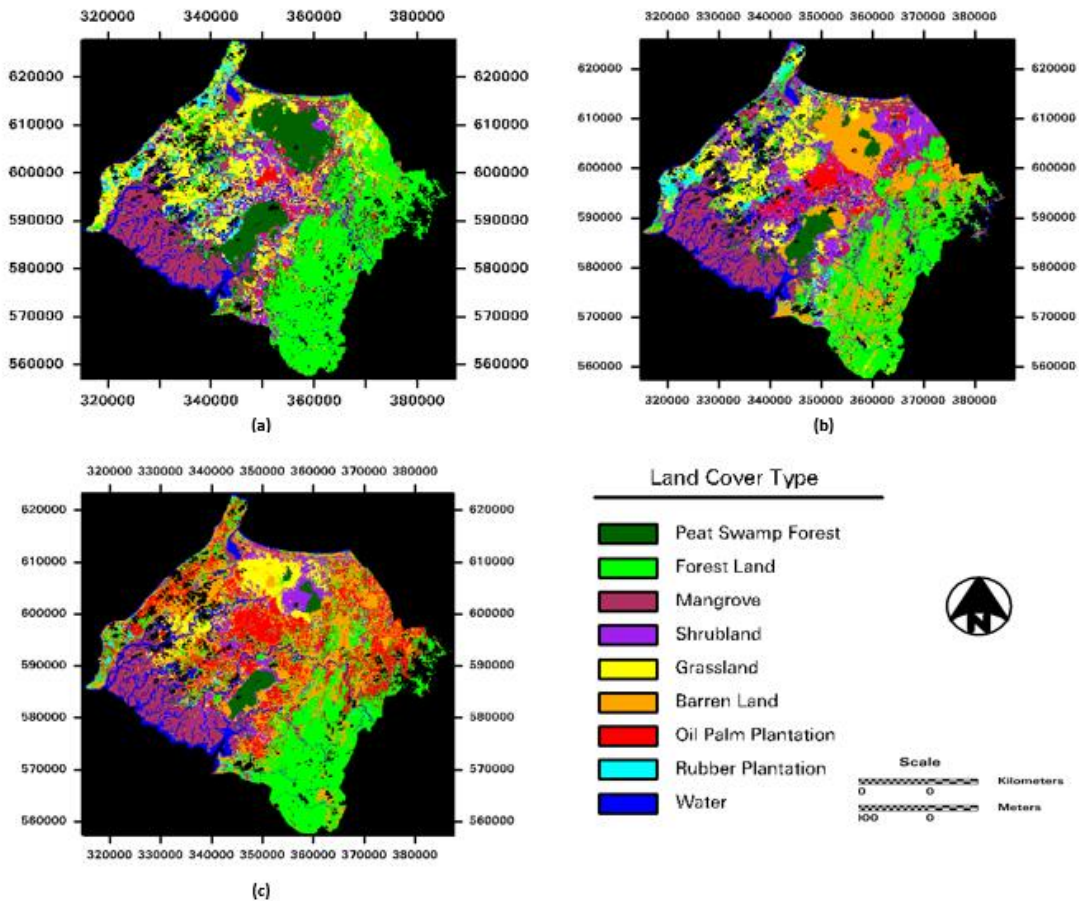
### **Land Use/ Land Cover Change**

Throughout 28 years, there have been significant changes in the entire land cover of Beaufort area. The land cover types that manifest the most rigorous transformation which includes peat swamp forest, barren land and grassland. The land cover classification depicted the most significant changes that occurred from the period of 1985-2013 for peat swamp forest (Figure 3). It was illustrated that the peat swamp forest had severely decreased by more than 20000 ha to about 9000 ha in 1998. This indicates that, more than 50% or half of the peat swamp forest was destroyed. Due to the extensive El-Niño fires in 1998, the surface of grassland has increased almost four times: from 1985 to 2013. The land cover image of 2013 shows that grassland covered almost 50% of Binsuluk Forest Reserve which located on the northern part of the scene. Bareland has tripled from 9412 ha in 1985 to 44198 ha in 2013.

From the land cover changes map, a holistic overview of multiple land cover type were extracted to further define the potential ecosystem services and sub-services supply in the study area. This again emphasized on the non-monetary ecosystem services mapping approach introduce by Burkhard et al. (2012, 2010 & 2009).

However, an appropriate ecosystem service indicator should also be quantifiable spatially and temporally explicit and scalable (Burkhard et al., 2012). To get closer to achieve this goal, we used the same matrix to explore the state of scientific knowledge and identify appropriate indicators for land cover type capacities as mentioned or measured in publications. We proposed a corresponding matrix approach for the assessment of ecosystem services demand (see also Grunewald and Bastian, 2013, Abb. 4.2). It also combines land cover / land use types with ecosystem subservices but fills in matrix values that represent the local ecosystem services demands according to their relevance. This kind of assessment has to rely on the above-mentioned stakeholder participation in order to specify and quantify the respective local conditions.

The comparison of both matrices - local supply and demand of ecosystem services, finally allows to generate the overall qualitative balance, from highly unsatisfied demand (-5); to well-balanced supply/demand (0); and unused supply (+5); (see also Grunewald and Bastian, 2013, Abb. 4.3). Since all valuations are based on land use / land cover maps, the assessment results can also be illustrated and thus localized in maps (see also Grunewald and Bastian, 2013, Abb. 4.4).



**Figure 4:** Land use change in the Beaufort District (Sabah). (a) 1985; (b) 1998; (c) 2013  
 (Note: Barren land does include built up areas or “grey infrastructure” which could not be separated due to limited data resolution)

### Ecosystem Services Matrix Assessment

The various definitions and typologies were combined from various pioneer of ecosystem services expert (Costanza et al., 1997; Daily, 1999; MA, 2005a; De Groot et al., 2010; Burkhard et al., 2012 and Petter et al., 2013), before we select which services might be offered by the above-mentioned land cover types under the tropical conditions in the Beaufort District (Table 1). This matrix will be used for the Likert scale (capacity scales to be filled in: 0 = no relevant capacity; 1 = low relevant capacity; 2 = relevant capacity; 3 = medium relevant capacity; 4 = high relevant capacity; and 5 = very high relevant capacity) based on the expert’s judgment of each land cover capacity to offer the respective ecosystem subservice in the study area (Burkhard

et al.,2012). It will finally help translate the land cover map into a map of potential ecosystem services supply, using GIS Software.

**Table 1: Assessment matrix template description for judging ecosystem services supply of different land cover types in the former wetland area**

<b>Categories/ Sub-Categories</b>	<b>Description/ Rationales/ Functions</b>	<b>Potential Indicators/ State indicator (how much of the services is present) – Supply</b>
<i>Supporting Services</i>		
Metabolic efficiency	Referring to the amount of energy necessary to maintain a specific biomass, also serving as a stress indicator for the system.	Respiration/biomass (metabolic quotient)
Energy Capture (Radiation)	The capability of ecosystems to enhance the input of usable energy.	Net primary production; Leaf area index LAI
Reduction of nutrient loss	Referring to the irreversible output of elements from the system, the nutrient budget and matter flows	Leaching of nutrients, e.g. N, P
Storage capacity (SOM)	Is referring to the nutrient, energy and water budgets of the system and the capacity of the system to store them when available and to release them when needed.	Solved organic matter; N, C org in the soil; N, C in biomass
Soil formation and regeneration	Role of natural processes in soil formation and regeneration. Soil formation is the facilitation of soil formation processes.	E.g. bio-turbation
Water cycling/ Biotic waterflows	Referring to the water cycling affected by plant processes in the system	Transpiration/total evapotranspiration
Biodiversity	The provision of suitable habitats for different species, for functional groups of species and for processes is essential for the functioning of ecosystems	Abiotic habitat components' diversity indices; Heterogeneity indices, e.g. humus contents in the soil; Number/area of habitats
Genepool protection (to maintain ecological balance/ evolutionary process)	Maintenance of a given ecological balance and evolutionary processes	Natural biodiversity (esp. Endemic species); Habitat integrity (irt min. critical size)

<i>Provisioning Services</i>		
Crops	Presence of cultivation of edible plants or used for livelihood activities from plants. Materials that can be consumed for energy and nutrition.	Total or average stock in kg/ha ; Plants/ha; kJ/ha
Livestock	Presence and Keeping of Edible Animals. Materials that can be consumed for energy and nutrition.	Total or average stock in kg/ha; Animals/ha; kJ/ha
Capture fisheries	Presence and Catch of commercially interesting fish species, which are accessible for fishermen. Materials that can be consumed for energy and nutrition.	Total or average stock in kg/ha, Fishes available for catch/ha; kJ/ha
Aquaculture products	Presence of animals kept in terrestrial or marine aquaculture. Materials that can be consumed for energy and nutrition.	Total or average stock in kg/ha; Number of animals/ha; kJ/ha
Wild Foods	Presence and Harvest of, e.g. berries, mushrooms, wild animal hunting or fishing. Materials that can be consumed for energy and nutrition.	Total or average stock in kg/ha; Plant biomass/ha; Animals available/ha; kJ/ha
Timber	Biomass that use for other purposes other than food. Presence of trees or plants with potential use for timber.	Total biomass (kg/ha); Wood/ha; kJ/ha
Fuel Wood	Biomass that use for other purposes other than food. Presence of trees or plants with potential use as fuel	Total biomass (kg/ha); Wood or plant biomass/ha; kJ/ha
Energy supply	Biomass that use for other purposes other than food. Presence of trees or plants with potential use as energy source	Total biomass (kg/ha); Wood or plant biomass/ha; kJ/ha
Medicinal resources	Natural materials with potential use to maintain, restore or improve health (Natural patterns can be copied by humans for synthetic products).	Total amount of useful substances that can be extracted, Amount or number of products; kg/ha
Ornamental species	Presence of species or abiotic resources with ornamental use	Total biomass (kg/ha)
Genetic resources	Measurable at species, molecular and sub molecular levels. Presence of species with (potentially) useful genetic material	Total 'gene bank' value (e.g.number of species and sub-species)
Fresh Water Supply	The role of ecosystems in providing water through sediment trapping, infiltration, dissolution, precipitation	Total amount of water; Liters or m <sup>3</sup> /ha

	and diffusion. Presence of freshwater and water resevoirs.	
<b>Regulating Services</b>		
Air quality regulation	The capacity of ecosystems to remove and extract aerosols, chemicals, toxic and other elements from the atmosphere	Leaf area index; Nox-fixation; Air quality amplitudes
Water Regulation	The role of forests in water infiltration and gradual release of water.	Water retention capacity in soils or at the surface; Groundwater recharge rates
Water purification and waste treatment	The extent to which ecosystem are able to transport, store and recycle certain excesses of organic and inorganic wastes through distribution, assimilation, transport and chemical recomposition.	Denitrification (kg N/ha/y); Immobilization in plants and soil; Water quality and quantity
Regulation of hydrological cycle	Role of forests and natural elements dampening extreme events (e.g. protection against flood damage). The soil profile stores water and reduce runoff.	Water storage (buffer) capacity in m3; Number of floods causing damages
Nutrient regulation	The role of ecosystem in the transport, storage and recycling of nutrients. The capacity of ecosystems to carry out (re)cycling of, e.g. N, P or others	N, P or other nutrient turnover rates
Erosion protection / Soil retention	Vegetative cover plays an important role in soil retention and the prevention of landslides. Minimizing soil loss through having adequate vegetation cover, root biomass and soil biota.	Vegetation cover Root-matrix; Loss of soil particles by wind or water; Vegetation cover
Local climate regulation	Influence of ecosystem on local climate through land cover and biologically-mediated processes that regulate atmospheric processes and weather patterns. Changes in land cover can locally affect temperature, wind, radiation and precipitation.	Greenhouse gas-balance (esp. C-sequestration); land cover characteristics; Temperature, albedo, precipitation, wind; Temperature amplitudes; Evapotranspiration
Global climate regulation	Influence of ecosystem on global climate through land cover and biologically-mediated processes. Ecosystems play an important role in climate by either sequestering or emitting greenhouse gases	Greenhouse gas-balance (esp. C-sequestration); land cover characteristics; Source-sink of water vapour, methane, CO2

Pollination	Ecosystem changes affect the distribution, abundance, and effectiveness of pollinators.	Number and amount of plant products; Distribution of plants; Impact and availability of pollinators; impact of pollinating species
Biological control / human disease	Control of pest populations through trophic relations. The interactions within biotic communities that act as restraining forces to control population of potential pests and disease vectors.	Number and impact of pest-control species
Barrier effect of vegetation	Vegetation impedes the movement of airborne substances such as dust and earosols (including agricultural chemicals, industrial and transport emissions), enhances air mixing and mitigates noise	-
Nursery Habitat	Importance of ecosystem to provide breeding, feeding or resting habitat for transient species.	-
<b><i>Cultural Functions</i></b>		
Recreation opportunities	Refers specifically to landscape and visual qualities of the respective case study area (scenery, scenic beauty). The benefit is the sense of beauty people get from looking at the landscape and related recreational benefits. Landscape-features attractive wildlife; Culturally important landscape features or species. Recreational motivation provided by extent and variety of natural features and landscapes.	Number/ area of landscape and wildlife features with stated recreational value; Number of visitors or facilities; Questionnaires on personal preferences; Number/ are of culturally important features or species
Cultural heritage and identity / sense of place		
Aesthetic Value	Aesthetic quality of the landscape, based on e.g. structural diversity, 'greenness', tranquility. The inspiration and motivation, historical and aesthetic values; health enhancement; sense of place; amenity, provided by the extent and variety of natural features and landscapes.	Number/ are of landscape features with stated appreciation
Inspiration for culture, art and design	Landscape features or species with inspirational value to human arts, etc. The inspiration and motivation for traditional owner and other cultural and historical values provided by extent and	Number/ area of landscape features or species with inspirational value

	variety of natural features and landscapes	
Spiritual and religious inspiration	Landscape features or species with spiritual and religious value. Sense of place, amenity provided by the extent and variety of natural features and landscapes.	Presence of landscape features or species with spiritual value
Educational values / Scientific Discovery	Features with special educational and scientific value/ interest. The value of nature and species themselves, beyond economic or human benefits. The inspiration and motivation for scientific and educational opportunity, provided by the extent and variety of natural features and landscapes.	Presence of features with special educational and scientific value/ interest. Number of endangered, protected or rare species or habitats
Serenity	Landscape feature that provide the state of calmness, peacefulness and lack of disturbance	-
Existence value	Prominent of non-use value that does not require the direct use of the resource but comes simply by knowing the resource exists	-

(Source: Costanza et al., 1997; Daily, 1999; MA, 2005a; De Groot et al., 2010; Burkhard et al., 2012 and Petter et al., 2013)

## DISCUSSION AND CONCLUSION

There has been growing attention concerning the measurement of ecosystem services and their alterations as a consequence of land use change (Camacho-Valdez et al. 2014). Due to their vast importance for human wellbeing but increasing devastation, this is also the case concerning wetlands (De Groot et al., 2006). There is a strong need for practicable and affordable ecosystem services mapping approaches to raise awareness and support sustainability in land use planning (Martinez-Hamrns and Balvanera, 2012). However, it faces an immense lack of detailed knowledge and comprehensive data sets for indicator based ecosystem services mapping, particularly in developing countries and at a local scale (Sumarga and Hein, 2014). This makes it difficult to assess the full range of relevant ecosystem services supply and demand, although recent studies also emphasized a strong need to reveal the multiple relationships among different ecosystem services (Carpenter et al., 2009; Paetzold et al, 2010). The MA assessed different services individually while only few approaches dealt with the interactions between more than two services (MA, 2005a). However, focusing on a limited set of ecosystem services may lead to unexpected losses of other ecosystem services (Gordon et al. 2008).

With this approach, we want to support better understanding and present a holistic concept on how to assess the relevant and specific wetland ecosystem services on the local landscape scale while relying on available data and information. Independently, we also have to consider an urgent demand for further scientific research to monitor ecosystem services changes of wetlands and analyze the causes behind (Dai et al, 2011). In this respect, it must be emphasized that the various research teams that have shaped the ecosystem services concept and its terminologies



(like Costanza et al. 1997, Daily 1999, MA , 2005a, De Groot et al. 2010, Burkhard et al. 2012, Petter et al. 2013), did not always fully recognize and consider what knowledge was already available in resembling national planning approaches or scientific disciplines.

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# **NATURAL RESOURCES AND INDIGENOUS PEOPLE'S LIVELIHOOD SUBSISTENCE: A CASE STUDY OF HUMAN COMMUNITIES IN THE HEADWATERS OF ENKARI RIVER, SRI AMAN, SARAWAK, MALAYSIA**

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## **ABSTRACT**

This paper discusses the livelihood and the environment in which the Iban of Rumah Jaong of the headwaters of Engkari river survives on and the challenges faced by its residents. The livelihood of the small Iban community of Ulu engkari have been dependent on the natural resources for subsistence and accesibility. Rivers serve as the source of food, domestic water supply and means of transportation. Forests, on the other hand, serve as source of food, timber and building materials, and to a lesser extent, as a people's hunting ground. To many outsiders, life in the headwaters of Engkari river is easily perceived as difficult and very challenging. However, for the local residents of a community living in the interior and remote part of Sarawak, such as in headwaters of Engkari river, life is considered 'normal' where the practice of mixed farming consisting of shifting cultivation of hill rice and with small plots of rubber and/or pepper garden seems sufficient to sustain the people's livelihood, at least for now.

Key words: *Livelihood strategies, natural resources, Iban, Indigenous*

## **INTRODUCTION**

This paper presents some early observations and initial findings of a study on the uses of natural resources and the livelihood strategies of the Iban community of Rh Jaong, Ulu Engkari, Sri Aman, Sarawak. The purpose of the study is to identify the uses of the natural resources by the community in the headwaters of Engkari River as well as how they manage the resources in the context of sustainable livelihood and environment. The operational definition of natural resources in the context of this current study encompasses land, water (or river) and forest resources.

Engkari River is one of the 2 tributaries of Batang Lupar, the largest river in Sarawak. The other main tributary is known as the Batang Ai. Along Engkari River there are a number of Iban settlements or longhouses. Some of the people who used to live in the lower part of Engkari river had moved or resettled in areas below the Batang Ai dam, particularly those whose settlements were located in the main lake (inundated area). There are still a number of settlements located in the upper regions of both Engkari and Batang Ai river system, beyond the inundated part of the river (or man-made lake).

## **THE BACKGROUND OF THE IBAN IN LUBOK PANTU, ULU ENKARI – THE STUDY AREA**

The longhouse, Rh Jaong, Lubok, Pantu, of Ulu Engkari is situated about 24 km from Lubok Antu. There are 15 families (*bilek*) with 85 active residents. It is the second furthest Iban settlement on the Engkari River. There are a total 17 Iban longhouses in Ulu Engkari. The journey to Rh. Jaong in Ulu Engkari took 4 to 5 hours by outboard-motorized longboat from the

Jetty (Pangkalan) at Batang Ai dam. This journey included 1 hour crossing the waters of Batang Ai dam and another 3 to 4 hours upstream along a fast flowing and sometimes shallow river. Going upstream from Pangkalan Batang Ai to this Iban settlement on the Engkari River is indeed a great challenge as well as an adventure. It needs an experienced boatman to be able to navigate the river as some parts of which are shallow and very narrow. During dry season, we were informed, the water level can be extremely low and journey by boat to and from the longhouse could take 3 to 4 times longer, where rocks and small rapids are a constant hindrance.

## **RESEARCH METHODOLOGY**

This study attempts to investigate and understand the utilization of natural resources and its importance to the Iban at Rh. Jaong, Ulu Engkari in the Sri Aman Division of Sarawak. The respondents were consisted of adult population, both males and females, who were present and living in the longhouse during the visit to the longhouse and its surrounding areas. The main method of data collection was by focus group discussion and in-depth interview involving household heads as well as other elders in the longhouse, with the primary aim of trying to understand how the community uses the natural resources as part of the livelihood subsistence. The focused of the discussions were on the importance, utilization and conservation of three main natural resources, i.e. land, river (water) and forest.

## **FINDINGS**

The following section presents some of the major findings of the study, focusing on the three main categories of natural resources, namely water (river), forest and land resources.

### **River and Water Resources**

The Iban populations in the headwaters of Engkari River are dependent on the natural resources for their livelihood. They depend on land for shifting cultivation of hill rice as food crop as well as for planting cash crops, which are mainly rubber and pepper. They are also highly dependent on the forests and the rivers. Rivers are their source of water and food, besides being the means of transportation – there is no road leading to the longhouses in the upper Engkari, except for a new logging road used for extracting timber for the nearby forests.

### **River Transportation**

The main mode of transportation in the upper Engkari River is by a small and usually motorized longboat. The trip from the longhouse to Pangkalan Batang Ai (communal landing-place at the Batang Ai dam), mainly for provisions, could take between 4 to 6 hours depending on the water level. With prolonged draught, as told by one of the longhouse residents, some parts of the river were extremely difficult to navigate even using a small boat due to very low water level. Thus, the longhouse residents would face a lot of difficulties getting to the nearby town of Lubok Antu and they would less likely to travel by boat unless they have completely run out of food supplies and other necessities.

Longer travelling time by outboard-engine longboat would mean more petrol consumption, thus increasing the cost of transportation which is a burden for most longhouse folks. A round trip from the longhouse to Pangkalan Batang Ai could easily cost them RM400. Boats are not only used to go to the town or to travel to other longhouses, but are also used to go to the farms. Almost every family would have at least a boat, which are usually equipped with an outboard

engine. Therefore, boat is a necessity for the Iban community living in the upper Engkari River, as much as a car is needed in the cities.

### **River as Source of Food**

Rivers are crucial not only as a means for transportation but they also serve as source of food for the rural community. The Ibans living along the Engkari River depends on the river for freshwater fish and sometimes shrimps or prawns. Also commonly found are *tekoyong* (freshwater snails found in the riverbed) which are normally eaten, even considered delicacies, by the natives of Sarawak. Fortunately the river water is still very clean possibly due to the “absence” of logging activities in the upper section of the river system. However, over and indiscriminate fishing activities could result in the depletion (and probably extinction) of fish population in the river as evidenced from many rivers in Sarawak, including the Batang Ai and Ulu Engkari.

In recognition of the danger of over fishing (which resulted in decreasing fish populations) and the dependence of the Iban community on rivers for food, the State Government, through its agency, The Sarawak Forestry Department had launched a conservation strategy known as the Tagang System (Sistem Tagang). According to the Director of the Sarawak Forestry Corporation, Mr Ali Yusuf, “Tagang System” is actually a system of sustainable management of fisheries resources and is in line with the objectives of the Sarawak Forestry Corporation in forest management and biodiversity resources sustainability,” The Tagang System originates from Sabah and is known as the Tagal System (Borneo Post Online, 2012).

The Tagang System works very simple but requires a lot of self-restraint. A village (with its residents) looks after a stretch of water close to their dwelling. The people themselves becomes the controller whereby they do not allow anyone to fish in the highly restricted areas and at the same time prevent pollution to the river. Any harvesting of fish has to be done responsibly where the big fish are allowed to be taken and the smaller fish are to be released back to the water to ensure the survival of the fish for future needs.

In Sabah, where the Tagal System originates, the system is referred to as a Smart-Partnership between the local community and the Sabah State Government. The term “Tagal” is a Kadazandusun term which is used for sustainable and traditional fisheries management (Nasiri, 2010). The aim of the system is to protect, revive and then harvest the fish in a sustainable manner. The traditional concept of tagal with riverine territorial demarcation to exploit riverine resources for a villager living within the vicinity of a river. It is one of the methods they use in advocating for the rights of indigenous peoples is in the management of resources, known as the ‘tagal’ system. According to Wong et. al (2009), Tagal system was originally used in Sabah for forest conservation by local communities before it was adapted for river management and conservation.

Along the Engkari river system, beyond the inundated part of the river, several notices or signs were put along the river bank which indicate the different zones where fishing is totally forbidden (red zones), parts which were allowed with some limited restriction (orange zones), and other areas where fishing is without restriction (green zones). One could observe, especially in the red zone region, some *Ikan Semah*, a popular riverine fish which is now becoming very

rare. Semah (as it is known in Iban), from the *Tor Labeobarbus* species, is indigenous to Borneo's higher reaches of freshwater rivers. In the *Tagang* system of Engkari river, Semah, if well conserved, is not only a source of food/protein for the community but it is also a good source of income for them as the fish is well-known for its demand with a price of up to RM200 per kilogramme when sold in the market. Besides conservation of fish for local needs, the *Tagang* system could become a tourism attraction. Having tourism activities in the area will provide alternative sources of cash income for the longhouse community. A similar system, *Tagal*, in Sabah has been proven to be a successful tourist attraction or product (Jurry, 2011). The system has been found to be beneficial to environmental management, economic and social development of the local community in Ranau, Sabah.

### **River water for Household needs**

Fresh water is not a problem for Rh. Jaong's residents. Besides providing means for transportation, Sungai Engkari itself, especially in the headwaters, are considered very clean and provide source of water for daily needs, such as for bathing and washing as well as for cooking. At the same time, the longhouse is also equipped with gravity-fed water from nearby stream which is channeled to the longhouse. This gravity-fed water is channeled to every household (*bilek*) in the longhouse and available throughout the year except during prolonged draught. So water is not an issue even though it's not treated water. The fact that the river water is fresh and clear can be attributed to the lack of absence of logging or other land development activities in the upper part of the river.

### **Micro-Hydro Power Supply**

Source of power (for lighting) comes two main alternative sources. The first source of power is from a diesel generator, which operates for about 2 to 3 hours a day. However, the cost of running the generator is considered expensive as the price of diesel as well as the cost of bringing the fuel to the longhouse can be very expensive. Alternatively they get their second source of power supply from a micro-HEP located about 200 meters from the longhouse. The micro-HEP will only be operational mainly during rainy season as it depends on the volume of water coming from the source (small stream located on higher ground) to be able to turn the turbine.

### **Forest Resources**

#### *Timber and Firewood*

The community still has plenty of secondary forests although some lands have been cleared for swidden farming (hill rice cultivation) as well as for planting market-oriented cash crops such as rubber and pepper. Forest serves as source of livelihood for the community. For example, the people in Rh. Jaong look for timber in nearby forests to build their houses. Timber from certain tree species are also used for building longboats. On average a boat can last for about 2 years depending on the frequency of usage. So, every 2 -3 years they have to build a new boat to replace the old and dilapidated ones. Some trees are cut down for firewood (for cooking) as an alternative to or in addition to using gas (in recent years). Most families (if not all) in the longhouse are cooking using gas which they bought from Lubok Antu.

#### *Wild Vegetables and Meat*

Besides as source of timber, the people of Rh. Jaong are also dependent on the forests for indigenous foods such as vegetables and wild meat. The nearby forests provide avenues for the local people to hunt wild animals and collect wild vegetables which are mostly for their own consumption. It is interesting to note that the local people only resort to hunting when there is a need for food rather than for commercial or for sale purposes. This practice helps to conserve the animal's populations in the nearby forest. The animals they caught or killed include mouse deer, wild boar (babi/jani babas), barking deer (kijang), and bearcat (*Arctictis binturong*) (enturun in Iban or binturong in Malay). Sometimes other small animals are also caught including porcupine (*Hystrix brachyura*) or landak (in Iban) and pangolin (tenggiling in Iban). Some of these animals are understood to be listed under protection by the Sarawak Forestry Department because of the decline in the animals populations and prevent the extinction of such animals throughout Sarawak.

Among the jungle and indigenous vegetables commonly collected from the forest include bamboo shoots (tubu in Iban), wild ferns (paku ikan and paku miding in Iban), *daun sabong*, a species of rattan (*Plectocomiopsis geminiflora*) shoots (upa lalis in Iban, Malay), and many others. Fortunately (or unfortunately), these jungle produce are normally not for sale, albeit plenty, but rather for the family's own consumption. The main reason is partly because of the difficulty to send the forest products to nearest market, i.e. Lubok Antu town, due to the distance, lack of accesibility, and high cost of bringing/transporting those products. The cost of transportation (fuel and labour) outweighs the economic benefits derived had the products been brought to the market. In other areas of Sarawak, according to Horowitz (1998), improved transportation has allowed rural populations greater access to markets for sale of forest products.

### **Land Resources in Ulu Engkari**

Freeman (1970) described the cultivation of rice as the center of Iban culture (Winzeler, 2010). Similarly, the main economic activity of the people in the upper Engkari's Iban longhouse community is farming. The practices of hill padi/rice cultivation in Lubok Pantu, Ulu Engkari are very similar to those other Bornean shifting cultivation systems (Freeman, 1955; Padoch, 1982; Chin 1985; Dove, 1985; Mertz and Christensen, 1997). In addition to planting hill rice through shifting cultivation, most families also planted pepper and rubber as their main cash crops. The preference for the cultivation of hill rice rather than wet rice is very obvious. Padoch (1982) once described the area of Ulu Engkari as "highly dissected topographically, includes virtually no flat land, and is drained by many clear, rushing streams" (p.5).

From the interview with the longhouse chief, Tuai Rh Jaong, it is evident that the longhouse community who lived in the longhouse at Lubok Pantu is very much dependent on the land resources for their livelihood. They plant and produce their own rice, although the quantity of harvest varies between the years. In the event that the families experience poor harvest of rice for a particular season they have to buy rice from Lubok Antu, the nearest rural town to where they live. They are able to do that if they have savings from the sales of rubber and /or pepper. In addition, although they grow some vegetables, most of the times they resort to collecting wild vegetables which they collect from the nearby jungles.

Farms are normally found on hill sides along river banks and mostly near to the longhouse mainly because of easy access to river transportation. These farms could be seen on hill slopes as we go up the river.

It is envisaged that hill rice (*padi bukit*) farming and cash cropping (rubber and pepper cultivation) is likely to remain the mainstay of the economy for people in the upper Engkari

River, particularly for Rh Jaong. Thus, land will remain an essential resource that will sustain the livelihood of this rural population.

## **CONCLUSION**

Much of Sarawak's population still remains rural. People who live in the rural areas do not get to enjoy the kind of life and facilities that the urban people are having. For a person who comes from the urban areas, the livelihood that the people faced in the rural areas is difficult to imagine and comprehend. In some areas there is still no road. The only feasible mode of transportation in the upstream of Sarawak river system is mainly through waterways, travelling by boat or longboat. The situation in Ulu Engkari is no different. The people who live there had experienced the 'difficulty' for past many years and perhaps many more years to come.

The population in headwaters of Engkari River, as seen at Rh Jaong longhouse, is still very much dependent on the natural resources for their livelihood – river, forests and the land. The dependence on these natural resources is crucial for their livelihood and survival, probably for many more years to come. As such, it is imperative that the resources are managed sustainably, with or without assistance from outside, especially the relevant government agencies. The local Iban community in Lubok Pantu is aware of the danger of overexploitation of the resources and the need to manage those resources. Some of the current farming and non-farming practices are based on their indigenous knowledge as well as knowledge disseminated by government agencies.

## **ACKNOWLEDGEMENT**

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# **A DEVELOPMENT OF CONCEPTUAL FRAMEWORK FOR SUSTAINABLE MANGROVE FOREST PROGRAMS PARTICIPATIONS IN MALAYSIA**

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## **Abstract**

Mangrove is a valuable plant. Its benefits cover from our daily use as a timber and charcoal, as well as in balancing the ecosystem since mangrove provides a breeding ground for flora and fauna. Southeast Asian region has been known as the world largest area for a mangrove forest. However, more than 20% the mangrove area s have s been degraded in the past two decades. Thus, the sustainability of the mangrove forest needs to be studied including such as programs on sustainable mangrove forest uses. Recent literature on sustainable mangrove forest programs show that there are several elements such as awareness, knowledge, attitude, and social influence that contribute to public intention to participate. These elements can be related with the development of a conceptual framework for the study. A framework is crucial in a study as it is used an outline for the research; it will assist in directing the flow of a study and in helping to achieve the objective. The theory of planned behavior (TPB) is widely used in research to explain and predict human behavior based on attitude, subjective norms, perceived behavior control and behavioral intention. TPB is being used as a based model of this study with other elements being adapted from previous studies. Previous studies show that awareness, attitude, socio-demographic factor, perceived behavior control, and subjective norm are elements that will impact public intention to participate in sustainable mangrove forest programs. These elements will be used in developing the conceptual framework of this study in order to understand and define why they are relevant to be used. Hence, the main objective of this paper is to develop a conceptual framework that can be used to measure public intention to participate in the sustainable mangrove forest programs in Malaysia.

*Keywords: Natural resource, Management, Environment, Mangrove, Conceptual framework*

## **INTRODUCTION**

According to Lewis and Stanley (2009), mangroves can be broadly defined as woody vegetation types occurring in marine and brackish environments. FOA (2007) reported that, mangrove trees are a common sight on mudflats, tropical and subtropical river banks, and coastlines in many parts of the world. They stand with their roots in salt water and they are regularly subject to the influence of tides. Mangrove become the boundary of two environments. Mangroves have evolved a variety of survival and reproductive strategies to deal with their muddy, shifting, saline environment (Lewis, 1992; Ewel et al., 1998; Dev Roy., 2014). More than forty percent of the estimated eighteen million hectares of mangrove forest in the world occur in Asia (ISME 2008).

FOA 2007 stated that the largest areas of mangrove in Southeast Asia are found in Indonesia, where almost 60% from total in Southeast Asia. Malaysia are second largest with 11.7%, followed by Myanmar that have 8.8%. Currently, mangrove forest around the world decline from 19.8 million hectares in 1980 to 15.9 million hectares in 1990. These losses represent about 2% per year from 1980 to 1990 and 1% per year from 1990 to 2000 (Wilkie and Fortuna, 2003).

In Malaysia, mangrove forest can be found mainly in Sabah where 57% from total mangrove forest in Malaysia and Sarawak have 26% spreading all over the state. Peninsular Malaysia only have 17% of mangrove forest mainly in the west coast area from Kedah, Perak, and Selangor till to the south area, Johor. Study from STIDC PERKASA (2009) show in 2009 around 25 thousand hectares of mangrove left compare to 446 thousand hectares recorded in 1997. Most of the mangrove being cleared for development activities, logging, housing, and also for plantation (Ong, 1998).

### **Functions of Mangrove**

There are three main ecologic services provide by mangrove; shoreline protection, support the food web, and carbon sequestration (FOA, 2007). Mangroves can buffer the impacts of waves, storm surges, and tsunamis on coastal by dissipating incoming wave energy with help from the roots of mangrove that bind and stabilize in the substrate (Barbier et al., 2008; Cochard et al., 2008). Mangrove also act as a filter for water runoff, in the same time stabilize the coastline from natural erosion (Claude, 2002; Massaut, 1999).

In supporting food web, mangroves play an important role to many fish, shrimp, and mollusk species since the environment provide shelter also rich with organic matter as food for the fish and all (Davies, 1993; Mastaller, 1997). Mangrove also home to lot of migratory birds, reptiles, crustacean, and mammals (Elisons, 2008).

Mangrove forest have double the living biomass of tropical forest around 152 tons biomass per hectare (Spalding, 2013). According to Fujimoto (2004), mangroves are able to impound from 0.22-1.24 metric tons of carbon per hectare per year and the upper layers of mangrove sediments have a high carbon content around 10%. This means, mangrove can help to slow down carbon emissions and mitigating the climate changes.

### **Sustainable Mangrove Forest Programs in Malaysia**

Sustainable programs for mangrove forest are important since mangrove not only benefit in ecological services but also provide timber, increase fisheries sector, and for eco-tourism. Sustainable mangrove forest programs in Malaysia started early on 1902 at Matang, Perak. Matang Mangrove Forest is one of the successful sustainable management that been carried out for more that century now (Gan, 1993). Over the years, only lost 250 hectares for the necessary development and there was a net gain of 1,498 hectares in mangrove forest there (Abdullah, 2013). The 40,000 hectares Matang Forest Reserve is primarily a production forest, but is also important from the point of biodiversity.

Kuala Selangor Nature Park in Selangor River is one of the programs that been made for sustainable programs. This park being home for more 140 bird species, various wildlife and also fireflies. The program here successfully increase mangrove area and become tourist attraction

(Malaysia Wetland, 2001). The Convention on Wetlands of International Importance or also known as RAMSAR Convention (2003) have classified Pulau Kukup State Park, Sungai Pulai Forest Reserve, and Tanjung Piai State Park as RAMSAR site. These area that have been identified are important for flood control, physical protection, and shoreline stabilization. These specific place also become habitat to many threatened and vulnerable wetland-dependent species as these area abundant with commercially valuable species (IUCN Red Book, 2000).

Sabah and Sarawak have their own wetland preserve programs for sustain and conserve mangrove forest including replanting and gazette as reserve forest. Klias Wetland and Cowie Bay in Sabah both being gazetted as Mangrove Forest Reserve become protecting area for river wildlife and birds, including proboscis monkeys, long-tailed macaques, silver leaf monkeys and a wide variety of birds (DWNP, 1987). Putatan, Kunak, Lahad Datu, Semporna, and Tawau are areas that been involved in restoration program of mangrove forest by Sabah Forestry Department. This programs have contributed tremendously to the rehabilitation and conservation of these areas (Sabah Forestry Department, 2010).

In Sarawak, three most important parts of the Rajang delta are the Matu-Daro and Sibu Swamp Forests, Pulau Bruit and the Rajang Mangrove Forest where the central delta area is a complex mangrove and *Nypa* system. These area been remain as Forest Reserves and Protected Forests. Management of Mangrove Forest by Sarawak Forestry aim to increase mangrove area including it fauna for environmental protection, timber production, and socio-economic development (Chai, 2005).

However, it has been reported that public participation in such programs are low. Study by Haron (2005) show that participation level of public is lower since they have little knowledge about importance of participating in sustainable programs. Omran et al., (2009) also found that low participation rate by the household in recycling solid waste because of lack of initiative by government to make recycling is more approachable. Another study by Ahmad et al., (2012, pg.91) stated that “*reasons for not participating towards environmental activities include not bothered (though they understand the importance of it), not being able to change the world or make an impact since you are only an individual, not knowing where the closest recycling centers or other environmental activities are.*” Thus, the main objective of this paper is to develop a conceptual framework that can be used to measure public intention to participate in the sustainable mangrove forest programs in Malaysia.

## **THEORETICAL BACKGROUND**

A theoretical framework is described as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Reichel & Ramey, 1987). The framework is a research tool intended to assist a researcher to develop awareness and understanding of the situation in research as well to ensure researcher did not stray from the original agenda (Guba & Lincoln, 1989).

### **Theory of Reasoned Action & Theory Planned Behavior**

Theory of reasoned Action (TRA) being developed by Fishbien and Ajzen in 1980. According to Greene & Hale (2002), the theory was “*born largely out of frustration with traditional attitude-behavior research, much of which found weak correlations between attitude measures*

*and performance of volitional behaviors*". TRA comprised three main component; Attitude, Subjective norms, these two major factor the will contribute to the third component which is behavioral intention (Miller, 2005). Attitude is suggested to be function of the salient beliefs about the perceived consequences of performing the behavior. The second component, subjective norm consist of the perception others people toward us and how it is influence the decision to behavioral intentions and also motivation to comply (Vallerand et al, 1992).

Theory of Perceived Behavior (TPB) is an extension of TRA and both models are widely used and popular conceptual framework action (Ajzen, 1991). TRA model assumes that a person's behavior can be predicted by intention and that this intention is influenced by personal attitude and personal perceptions of others' views toward the behavior (Eves & Cheng, 2007). The TPB model takes self-efficacy or ability to perform the behavior of interest into the model (Ajzen, 1991).

The TRA and TPB is one of the most widely cited and applied behavior theories. In TRA, intention is positioned as the best to predicting behavior. Intention itself is an outcome from the combination of attitudes towards behavior. The positive or negative evaluation of the behavior and its expected outcomes, and subjective norms, which are the social pressures exerted on an individual resulting from their perceptions of what others think they should do and their inclination to comply with these (Morris et al, 2012). To date only weak correlations have been established between behavior and subjective norms.

In contrary, Armitage and Conner (2001), suggest that this issue is most likely to be methodological and state that subjective norms actually illustrate reasonably strong relationships with behavior. Using the theory to explain and predict likely behavior may be a useful method for identifying particular influences on behavior that could be targeted for change. This statement been support by Hardeman et al. (2002, pg.131) that say, *'even when authors use the TRA or TPB to develop parts of the intervention, they seem to see the theory as more useful in identifying cognitive targets for change than in offering suggestions on how these cognitions might be changed'*.

Clark et al. (2003) find that attitudes, along with increased convenience of recycling does make public involve in recycling more. This show that attitudes does influence behavior directly. The study also found that socio-economic factor; ability to pay and subjective norm such as reliably predict participation in a premium-priced influence the behavior greatly. The concept of perceived behavioral control is most compatible with Bandura's (1982) concept of perceived self-efficacy which is concerned with judgment of how well one can execute required actions to deal with specific situations. Meanwhile, Stern et al. (1999) conclude that motives for environmental behavior are derived from a combination of egoistic (awareness), social-altruistic (subjective norm), and bio-centric (political and ecological) value orientations. Although they find that all three value orientations predict willingness, only awareness of consequences reliably predicts intended willingness to pay taxes for environmental protection.

In developing a framework lot of factor need to be consider to ensure the framework model can be used to achieve an objective and also as a guideline for a study. Type of analysis that will be used can also affect the framework.

## **MATERIALS AND METHODS**

The objective of this study is to develop a conceptual framework that can be used to analyse public intention in participating sustainable mangrove forest programs. Following method will be used.

1. Literature review comprised of peer-reviewed research articles in sustainable mangrove forest programs for international and local journals. The articles and journals focused on technique, framework adaptation, method, and also result that they get.
2. Select the most suitable theory to be used in the study.
3. Develop a conceptual framework based on the literature.

## **RESULTS AND DISCUSSION**

Study by Roy (2013), used TRA as a basic then merging it with Olson model; Theoretical Analysis of Collective Action to measure participation in mangrove-conservation programs with property right. Combining or change the theory can be done as long as the main theory still intact and suit the need of a study.

Sesabo et al. (2006, pg.6), stated that “*Socio-economic research has revealed that rural households’ behavior regarding natural resource management is influenced by demographic and socio-economic factors*”. This statement supported by Pomeroy et al. (1996), Wright and Shindler, (2001). Hence, socio-demographic can be one of the determinant factor that will influence the intention. Previous study such as Dev Roy (2014), Morris et al. (2012), and Clark (2003) indicated that area of living and income level can effect intention and behavior directly. Study by Coulibaly et al. (2014) show that socio demographic attributes influenced respondent participation in forest programs. Some study included knowledge in their framework, but based on study by Zhang (2012) on public participation on environmental programs show that knowledge indirectly influence attitude. Thus, knowledge will be the underlying factor in attitude and awareness.

Subjective norm are refer to external influence for example people in the same environment, family factor, and important figure action in this particular aspect. This factor can impact their behavioral intentions. Study by Armitage (2001) show there is strong relationship between subjective norm and intention, thus maybe one will be more intent to participate in sustainable mangrove programs if their surrounding people more environmental concern or involve in green programs, or this maybe not the case at all.

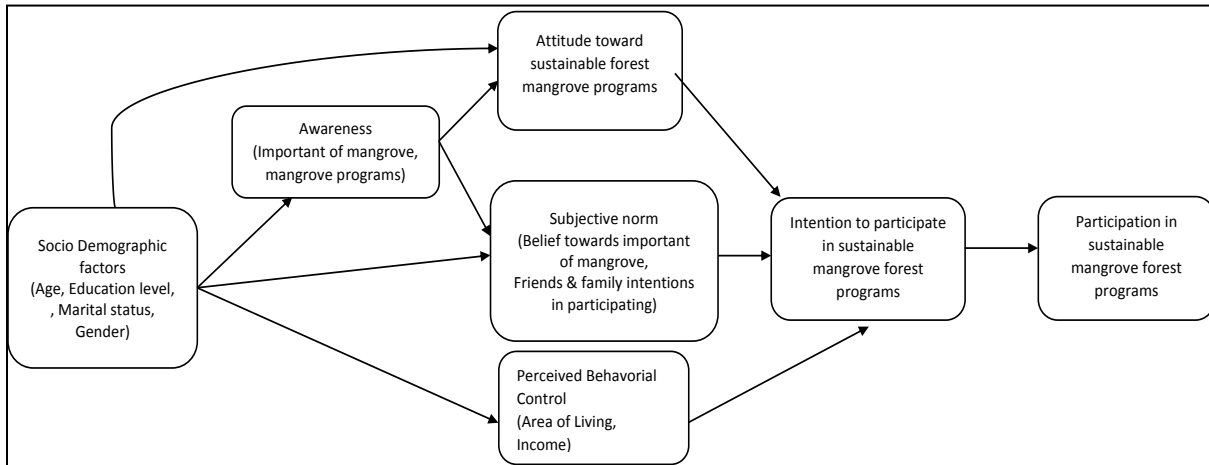
The TPB places the construct of self-efficacy within a more general framework of the relations among attitude, subjective norm, and behavioral intention. Perceived behavioral control is described as people’s behavior or factors which will make the behavior easy or more difficult to perform (Ajzen, 1991). Perceived behavioral control can compromised two components: self-efficacy and controllability. Both of the component are reflect belief about present of internal as well as external factors; awareness (Ajzen, 2002). In this study, the perceived behavioral control is area of living and income.

Traditionally, attitude, subjective norm, and perceived behavioral control are the only variable consider influence intention and behavior. Study also show that there are others influencing factor such as awareness and socio-demographic been used to analyse intention. The process to develop a conceptual framework for the study is a few step process involving first step to recognize a basic theory that compatible with the study. The model then will develop a flow

model framework, which will expand all the probable variables. The second stage is to eliminate some of variables that being develop in first stage model framework according to the objective. Finally, all variables being reconsider again the objective and analysis that will be used after collecting data.

The conceptual framework shows the relationship between attitude, subjective norm, and perceived behavioral control with intention to participate (behavioral intention) and how it will impact behavior in general as shown in Figure 1.

**Figure 1: Conceptual Framework based on TPB Model**



**Note: Adapted from Ajzen (1991), Dinev (2007), and Coulibaly et al., (2014)**

## CONCLUSION

This paper discuss the development of conceptual framework for sustainable mangrove forest programs in Malaysia and the implementation of the framework. The important of mangrove also been discuss and why it is needed to sustain mangrove forest for the future. The factors that were introduced included awareness, socio-demographic factors, education level, and economic. The output from the study is expected to provide framework that can be used to analyse public intention to participate in sustainable mangrove forest programs in Malaysia. Further study use this conceptual framework can provide knowledge to the public on the importance of sustainable mangrove forests and offer policy makers insights in developing intervention policies particularly to ensure the sustainability mangrove forests in Malaysia.

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# **BUJANG VALLEY : THE PRECIOUS JEWEL OF KEDAH NEEDED A FURTHER ATTENTION**

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## **ABSTRACT**

Kedah is supposed to be the oldest state in Malaysia. The long journey of historical route that saw a great monument where there situated a great civilisation site dated back to the early centuries by the name, *Lembah Bujang* or Bujang Valley. Since this site was found by James Low in 1840s, interested researchers kept on the endless exploration to unearth its historical and archeological treasures. Over the years, Bujang Valley had managed to attract countless numbers of visitors, be it locals or foreigners due to its richness in terms of historical facts and archeological findings. This ancient site deserved a more proper and holistic development in order to chart it's course as one of the 'must see' itinerary for tourism programmes in Kedah. Some how or rather, the development of this precious site is still far from satisfactory as what it supposed to be, comparing to our neighbouring countries where they had utilised and promoted their historical monuments for sustainable tourism. Therefore, a quicker and pragmatic approaches should be taken in order to further conserve, develop, promote and sustain this invaluable historical site. By doing so, in the long run it will not only benefit the locals but also the Kedah's state and the country in general. Let us have the old glory of 2000 years ago, once again and let this Bujang Valley be mapped parallel with other ancient tourism attractions not only for the region but also to the world.

Keyword : *historical tourism, archeological tourism, development, promote, sustainable*

## **INTRODUCTION**

Bujang Valley is known to the local as *Lembah Bujang* is situated at the central part of Kedah state and covers an area of originally 224 km<sup>2</sup>. Mount Jerai stands at 1,217 metre shadowing the valley with its scenic view that extends from the mountains in the north to Muda river in the south and the Straits of Malacca is in the west. Kedah state popularly known as the rice-bowl state in Malaysia is considered very precious to have this valley because at this location laid once upon a time a prosperous kingdom since the 4th century AD. With the recent finding of Sungai Batu Complex as being the settlement since the 1st century AD, it further enhanced the existence of the Bujang Valley as an entreport which was under the Sri Vijaya influence until its weakening in the 11th century. Later on, with the emerging of Malacca as an entreport, Bujang Valley has faded with the time. Bujang Valley can be easily be assessed by road; which is 20 kms from Merdeka Beach, 20 kms from Sungei Petani town, 30 kms from Butterworth and 35 kms from Penang; thus making it a very strategic location and just within reach by any visitors. Bujang Valley surely has a huge potential as a great stop over for whatever genre and terms of tourism with its charm and uniqueness.

## **BUJANG VALLEY FROM HISTORICAL PERSPECTIVE**

The old Kedah history can be traced from various sources such as China, India, Arab-Persian, archeological datas and also the old classic literature text, the *Hikayat Merong Mahawangsa*. Kedah was known by several names example like *Kataha*, *Kadaram*, *Kidaram* and *Kidara* from Indian record. From China sources it was known as *Chieh-Cha* and according to Arab record it was known as *Kalah*. According to China record, a mariner by the name of *I-Ching* in the year 671 AD, did mention about *Chieh-Cha* (Kedah) when he was sailing and stopped there on his way from Canton to India to pursue his studies in Buddhism at Nalanda University. The old Kedah referred here as *Chieh-Cha* was Bujang Valley which was under the influence of Sri Vijaya kingdom. Apart from the name *Chieh-Cha* that has been mentioned above the relation between *Kataha* or *Kadaram* or *Kidaram* or *Kidasa* as the old Kedah with the Sri Vijaya was mentioned by many scholars, when they had valued and analysed the information done by Nilakanta Sastri (Nik Hassan,2008 ).

According to the scholars, the centre of administration that had existed long, long ago at Bujang Valley since the 5th century until the 14th century, based on Ronald Bradell (1980), Paul Wheatly (1961) and Nik Hassan and Othman (1990). The Bujang Valley later developed into the centre for the spreading of Hindu-Buddhism and it was also noted as the centre for trade in the region due to its strategic location. It is undeniable that the Malay Peninsular situated at the central point where when the mariners had waited for the change of the monsoon to sail to and from India and the other surrounding destinations in the region. The traders from India, China, Arab and Persian are known to be traders plying the route for their trade. The Malay Peninsular was so famous until various names were given, example like Suvarnabhumi (literally meaning gold) by G. Coedes (1968), Yavadvipa (gold and silver) and Suvarnavipa (golden island) (Hall, 1976) by Indian traders.

In short, the existence of Bujang Valley is more than 2,000 years and it is the oldest in the region. Thus, we should take a pride of the history and not shy away from it.

## **BUJANG VALLEY FROM ARCHEOLOGICAL FINDING**

The establishment of an Archeological Museum of Bujang Valley in 1980 was a blessing to the invaluable heritage that we owned, considering the stance by some authorities who had opposed it eventhough it was done in years later (Abd. Rahman, 2006). The Kedah Royal Highness had shown a great interest and graced the opening ceremony of the museum in that year. The religious authorities had even suggested that once the entire research had been completed the artifacts should be destroyed. We are so lucky to have the far-sightedness's ruler who had ruled out the opposite of what the authority had recommended. His Royal Highness had some way appreciated the importance of this great historical and civilisation site and ordered its conservation because of its great value to history and tourism.

Since 1840s, an expedition was carried out by one colonial officer by the name of Colonel James Low to uncover this ancient site. He had found accidentally a mined structure at Cherok Tok Kun, near the present Seberang Perai. This inscription was named Buddhagupta and it was about a mariner's writing in remembrance of an accomplished journey dated back to the 5th century (Nik Hassan, 2008)

Through this finding, it had attracted many more scholars to explore this valley in order to unearth more information from it. The interest had led to the finding of many more artifacts by; like F.W. Irby and I.H.N. Evans between 1905 until 1926. And later between 1936 – 1937, the archeological excavation was done more systematically by a scholar, named Dr. Quaritch Wales and his wife. It was concluded that Bujang Valley had existed as the centre for spreading of Hindu-Buddhism for the region and also a centre for trade in the Malay archipelago.

Soon after the 2nd World War, the research was still being carried out and many more magnificent findings were found. In the 1950s, the research of the Bujang Valley continued with the involvement of Archeological Society of the then University of Malaya. Then, in 1959 – 62, Dr. Alistair Lamb with the assistance of Loius Contant managed to rebuild the structure of the chandi at Batu Pahat (Nik Hassan, 2008).

In the 1960s, the interest of Bujang Valley's treasures continued by B.A.V. Peacock who further carried out the archeological research. Scholars like Leong Sau Heng and Alistair Lamb had concluded later that, Bujang Valley had ceased to be the entreport in the 14th century, due to the fact that none of remnant of Ming Dynasty ware was found at the site. The latest one, Sungai Mas and Sungai Batu Complex were the newest interest that added to the earlier Bujang Valley civilisation. Since the year 2007, University Science Malaysia (USM) was given the task to explore the Sg. Batu Complex under the supervision of Prof. Mokhtar Saidin intensively. Many interesting finds were found and exposed to the public.

#### **Latest Discoveries surrounding Bujang Valley**

Sungai Mas situated in the Kuala Muda district in Kedah became relevant to Bujang Valley Civilisation after a number of important and interesting archeological finds were found there. Earlier, its significance was less known maybe partly due to the influence of the previous scholars conclusions. Many important finds found at its precinct which covers the area within the Muda River Valley. The discovery of Sungai Mas site in the year 1980 and then followed by preliminary excavation led by Nik Hassan and his team in 1981. The exploration was later pursued by Leong Sau Heng and Kamaruddin Zakaria. The 2nd Intra Asean Archeological Excavation and Conservation was carried out in 1985 comprising of ASEAN countries which took part in the exercise. Again in the year of 1991, many interesting finds again have been found on the site. These includes ceramic sherds from local and trade ceramics (Nik Hassan, 1993). The large amount of China and Middle Eastern types of ceramic sherds were also found belonging to T'ang Dynasty (618 – 906 AD) and Song Dynasty (906 – 1279 AD). The Middle Eastern type of ware is represented by the dark green or blue glazed ceramic sherds ascribe to the 8th to 10th century (Nik Hassan, 1993). Beads also found there apart from many more finds that have been found.

After Sungai Mas excavation, it is very interesting to note that the latest finds of Sungai Batu Complex by a team led by Mokhtar Saidin is very remarkable. Those finds to be dated back to as early as the 1st century. The complex is said to cover an area of 4 km<sup>2</sup> and from the record this area had already been existed since the 5th before century until the 17th AD. It is said to be the oldest in South East Asia (Mokhtar, 2014). It was also found from the research done in the past 5 years that this complex's activities include architecture, iron smelting activities, and also

religious. It is believed that the complex also served to be the root to all civilisations in the South East Asia.

Sungai Batu Complex archeological research has started way back in the year 2007, when the then National Heritage Department had requested the University Science Malaysia (USM) to complete the civilisation data to the Bujang Valley and headed by Mokhtar Saidin. With the interesting finds by the team, it further enhanced the existence of Bujang Valley as an important heritage site that incomparable to others in the region.

## **THE FUTURE OF BUJANG VALLEY AS A TOURISM PRODUCT**

Bujang Valley has its own charm. The surrounding area comprises of Mount Jerai (Kedah peak), water falls, rivers and a paddy field, thus making it very panoramic view in its own class. As suggested by Wan Salleh (in Nik Hassan,2008), Bujang Valley can befits Eco-Tourism site or Archeo-Tourism status due to its finding of many artifacts. One may want to look into it as a great historical ground that treasures the history of the Malay Peninsular. Anyway, Bujang Valley is surely nothing less of what had been mentioned of its qualities. If we were to compare with those popular monuments in South East Asia with the endless stream of visitors, Bujang Valley can stand on its own uniqueness. Take a look at the site in Malaysia, where after they had been bestowed the World Heritage Site status and doing well by attracting more tourists. They could generate more income to the people living in the area, to the state and surely the country as a whole. In this particular case, Malacca and Penang are the good examples. The state government of Malacca for instance, has set up many museums with its richness of heritage from Portuguese, Dutch and British architecture. The same case applies to Penang state, when their tourism is mushrooming, developing and attracting more tourists coming to the state lately due to the status accorded by UNESCO. Thereby, we should take this advantage by promoting the tourism and sustain it since we have this priceless archeological and cultural assets (Nik Hassan,2012). Kedah state is one of the states that has the potential with its huge possession of historical and archeological sites.

Then, Bujang Valley has more to offer after taking into consideration with all those supported elements that had been mentioned earlier. The Kedah state government had recently renewed the interest to submit Bujang Valley to the UNESCO in the end of 2014 for the World Heritage Site listing. By whatever means, the development of Bujang Valley should be placed on top priority in order to chart it as a “must see” attraction whenever the tourist come and visit the state. If international assistance is needed, then it should be sought after, like the case of other great monuments in the region who have done it by engaging foreign expertise to help them in conservation exercise. The Heritage Trail across the various centuries can start off from Sungai Batu Complex through Sungai Mas and later Pengkalan Bujang that surely can make an interesting escapade and meaningful experience to the tourists.

According to Wan Salleh (in Nik Hassan, 2008) again, Bujang Valley also has a potential to be the World Living Museum Heritage since the artifacts that had been unearthed can be displayed for viewing. Thus, the present Bujang Valley Archeological Museum should be expanded and further upgraded with the latest design and an attractive display. The Kedah state, according to

the history was established since the year 1136 AD and the 1st Sultan of Kedah to embrace Islam; Sultan Muzaffar Shah was buried near the vicinity of Bujang Valley too.

Let Bujang Valley maintain its own ecological attraction with the farmers and fisherman plus the serene environment that can surely draw the attention of the tourist. As stated by Mokhtar (2014), the Bujang Valley heritage is not just for the local alone, but it is also for the national, the region and also for the world. He also further suggested that the site should be developed as Archeo-Tourism Park, that in the long run it can surely generate income to the state. The impact of the development can stimulate the socio-economic of the folks at the surrounding areas in Merbuk town, the district of Kuala Muda and also the state of Kedah itself in general.

The tourism fraternity in the state should make an effort to include Bujang Valley as an itinerary in their programmes with more interesting items added to cater to their guests expectations. This could include the local food, cultures and other interesting activities that can have a lasting impression in the minds of their guests. Tour agents for the 'in-bound' sector particularly must make a point to add Bujang Valley as one of the attraction in their programmes when bringing tourist to Kedah state. Tourist guides as a frontliner in the tourism industry and the other parties involved directly, also must be given an in-house training for them to gather complete information about this historical site more precisely. All those initiative must be on the go and no further excuses should be entertained if we want to make the Bujang Valley as an important stop for the tourist to the state of Kedah. Lets put Bujang Valley ancient historical site along with the other tourist maps like say; Borobudur and Prambanan in Indonesia or Angkor Wat in Cambodia.

## **CONCLUSIONS**

Bujang Valley is not only a jewel to Kedah state but it is also to Malaysia and there is no doubt about it. We are so lucky to have this historical site in this land. More initiatives from all parties to conserve this precious landmark, be it from the state government, or the federal government, or all the concerned NGO's and interested parties in historical and archeological tourism, please lend not just a hand but also your heart to help Bujang Valley revitalise and help it stand high along with other great monuments in the region. We, therefore should realise that, we have what the others aspire to have, here. With the Kedah Visit Year is around the corner, which is due in 2016 with the significant tag-line that: "all has started here", so, all of us can help to materialise the mission. Since the Bujang Valley museum was opened in 1980, little had been mentioned to upgrade and promote this precious site intensively. Much more effort is needed for the Bujang Valley Civilisation since it is the national significance and no one should deny this fact.

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# DEVELOPING NATURAL ASSETS DEPRECIATION TECHNIQUE TO ESTIMATE PERHENTIAN ISLAND'S ENVIRONMENTALLY SUSTAINABLE TOURISM YIELD FOR RECREATIONAL ACTIVITIES

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## ABSTRACT

The study is undertaken to estimate environmentally sustainable tourism yield (ESTY) of Perhentian Island, Terengganu, Malaysia. In this context, ESTY is calculated by subtracting the environmental outflow from the estimated inflow (expenses incurred by tourists) of five tourism activities which are accommodations, food & beverages, transportations, recreational and retail. The main idea behind this notion is to arrive at a certain number of yields generated by economics activities from the tourism sector along with monetization of unnecessary pressures these activities had on the environment. Employing the Chi-squared Automatic Interaction Detection (CHAID) procedure, 688 visitors' profiles were determined according to their spending behaviour to estimate tourism yield. Since the main focus of this paper is to illustrate the implication of natural assets depreciation on tourism yield, the paper focus only on recreational activities since this category usually derived its income from natural assets. For Perhentian Island, it is the coral reefs. It is estimated that Perhentian Island's ESTY for recreational activities is between RM2,026,057.94 to RM7,970,613.28 after taking account on depreciation value of coral reefs between RM13,871.52 to RM54,571.26.

Keywords: *Depreciation technique, sustainable tourism yield, recreational activity.*

## INTRODUCTION

Tourism sectors have long depended on the natural environment as main attractions. Substantial revenue generated from this sector has led many countries to strategize making tourism as one of the nation's main economics contributor. Unfortunately, these activities may inflict undesired consequences on the natural environment but were not accounted in estimating income due to limited quantification methods in monetary units. Therefore, the main purpose of the study is to develop measurement techniques of converting degradation elements physical units into monetary value. This value is the outflow of resources used during tourism activities. Meanwhile, the inflow is the revenue received through employment of these resources. Thus, the Net Flow of tourism yield (or real tourism income) is by subtracting the outflow from the inflow. To achieve the ultimate goal, the study embarks on the following objectives:

- i. To identify variables (constraints of resources) to be inserted into the equation/model in estimating tourism yield.
- ii. To determine tourists' spending profiles
- iii. To estimate recreation yield by means of spending behaviour assessment.

- iv. To monetize environmental degradations values based on available assessments by reliable agencies

**METHODOLOGY**

Data collections were conducted at the islands at a separate period by observing Off-peak and Peak seasons. Sampling were include 6 days of off-peak and 4 days of peak period at two separate dates; 27<sup>th</sup> – 30<sup>th</sup> May 2013 and 25<sup>th</sup> – 30<sup>th</sup> August 2013. Two researchers and ten field assistants were involved in data collection. Field assistants were hired and trained to assist respondents in answering open ended questions in regards to their expenditure on the island. Questionnaires were distributed along several popular beaches at both islands in Perhentian Island. The questionnaires were prepared in Malay Language and English. Part A consist of background data whereas; Part B in regards to nature of visiting. Part C involved questions on spending according to 5 types of expenditure. Finally, Part D, are concern with satisfaction and perceptions of tourists on tourism activities and facility provided on the island.

**Estimation of tourism yield**

The study utilises market segmented approach to determine tourist profiles. Data were analysed using exhaustive Chi-squared Automatic Interaction Detection (CHAID) procedure to generate a decision tree. This procedure was carried out to generate predictive model for spending behaviour with minimum sample size of 30 were set for child node to overcome normality distribution assumption. Since the index value of above 100% indicates that there are more cases in the target category than the overall percentage in the target category, only nodes with gain index score of more than 100% will be selected as target segment. Following Legohérel and Wong (2006) but with some departures, the following equations were developed to estimate yield for recreational activities.

Equation 1: Spending Range Weightage

$$W_{L,M,U} = \sum_{i=0}^x P_{iVx} \cdot P_{iVy} \cdot P \text{ node } z_{L,M,U}$$

Or

$$N \text{ node } z_y / \sum N_{node 0}$$

(1)

Where;

- $W_{L,M,U}$  : Individual weightage for Low (L), Middle (M) and Upper (U) spending range
- $P_{iVx}$  : Proportion of level  $i$  for selected variable  $x$
- $P_{iVy}$  : Proportion of level  $i$  for selected variable  $y$
- $P \text{ node } z_{L,M,U}$  : Proportion of selected range of L, M and U for selected node  $z$
- $N \text{ node } z_{L,M,U}$  : The sum number of samples for selected range L, M and U of selected node  $z$
- $\sum N_{node 0}$  : Total number of samples for node 0

Since only several nodes selected, the sum of weightage accounted for the whole spending category less than 1, and thus further calculation is needed to distribute the weightage using the following equation.

Equation 2 Adjusted Weightage( $W^a$ ):



$$(W^a) = \frac{W_{L,M,U}}{\sum W_{L,M,U}} \quad (2)$$

Finally, the estimation of tourism yield arrived at range of yield with two extreme cases where the first one is the bottom (floor) estimation whilst at the other end is the top estimation (ceiling) using the following equations.

Equation 3: Bottom limit estimation of Tourism Yield ( $Y_B$ ) per year:

$$(\sum W^a_x \cdot \bar{X}_{tourist\ per\ day} \cdot B_x) N_{days} \quad (3)$$

The estimations follow the above equations with slight modification for entertainment & recreational sectors to account for non-purchasing behaviour. To accompany these calculations, equation 3 is modified into equation 4. Equation 4 ( $Y_B$ ) per year:

$$[(1 - W_{L'} \cdot W^a_L \cdot \bar{X}_{tourist\ per\ day} \cdot B_L) + (W^a_M \cdot \bar{X}_{tourist\ per\ day} \cdot B_M) N_{days} + (W^a_U \cdot \bar{X}_{tourist\ per\ day} \cdot B_U)] N_{days} \quad (4)$$

Equation 5: Top limit estimation Tourism Yield ( $Y_T$ ) per year:

$$(\sum W^a_x \cdot \bar{X}_{tourist\ per\ day} \cdot T_x) N_{days} \quad (5)$$

Where;

- $W^a_x$  : Adjusted weightage for  $x$  range;  $x = L, M, U$
- $B_x$  : Bottom limit for spending  $x$  range;  $x = L, M, U$
- $T_x$  : Top limit for spending  $x$  range;  $x = L, M, U$
- $\bar{X}_{tourist\ per\ day}$  : Average number of tourists per day
- $N_{days}$  : Number of days in a year Perhentian Island is open to public (excluding monsoon season)

### Natural assets depreciation

Natural assets degradation estimation are based upon secondary or any available past research of the same site. For this study, there are two assets determined as main attractions of Perhentian Island. They are beaches and coral reefs.

Degradation for beach is indicated by tourists' perception on beach crowdedness (Williams & Lemckert, 2007) and estimation for physical value uses available research on beach carrying capacity (BCC). Currently, either there are no BCC assessments conducted in Malaysia or perhaps they are not available for public access. Therefore, this study will refer to studies on BCC from different parts of the world such as Brazil (de Sousa, Pereira, da Costa, & Jimenez, 2014; Reimão Silva, Rodrigues de Souza Filho, Fernandes Ferreira, & Gustavo Freitas Papi,

2011), Portugal (da Silva, 2002; Silva & Ferreira, 2013; Zacarias, Williams, & Newton, 2011) and India(Rajan, Varghese, & Pradeepkumar, 2013) . The degradation cost of beach is estimated by multiplying the exceeding number or range of numbers of tourists (based on BCC) with recreational tourism yield. In order to determine exceeding number of visitors, estimation is made on number of tourists on the island at any given time ( $N_{Tt}$ ); as in Equation 6 ,

$$N_{Tt} = \text{number tourists for the month /ToR} \quad (6)$$

Where;

Turnover rate (ToR) = Number of days in a month / ESL

Estimated Length Stayed (ESL) =  $\sum$  number of  $x$  day(s) stayed  $\times$  probability staying  $x$  night

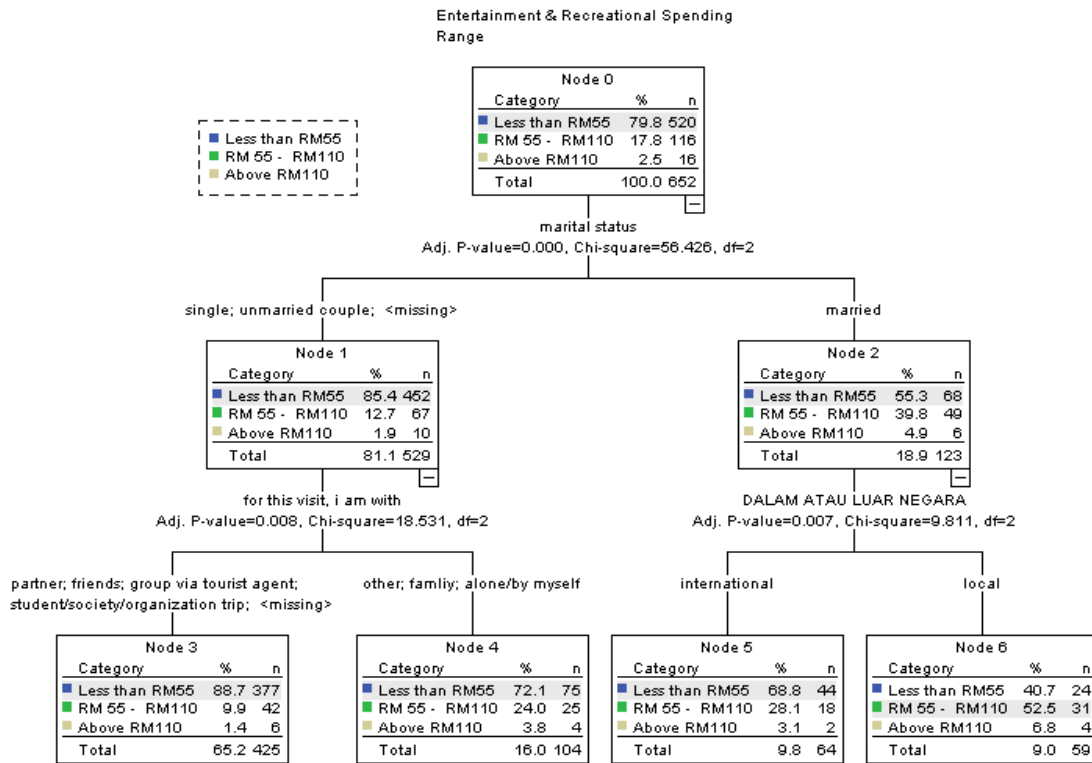
Meanwhile, degradation of coral reef is based on coral reef status report by Reef Check Malaysia (RCM), a non-profit organization.. Coral degradation is calculated by multiplying the percentage of Recently Killed Coral (from RCM report) with recreational yield.

## **FINDINGS**

Samples selected in the study were tourists found at the beaches along Perhentian Kecil and Perhentian Besar. Out of those approached during data collection period, 723 tourists have agreed to participate in the research. However, 35 returned questionnaires were discarded, bringing into 688 questionnaires deemed usable. Respondents comprise of 248 domestic and 440 international tourists.

### **Estimation of tourism yield from recreational activities**

Tourists spending behaviour (spending and non-spending) for recreational sector can be profiled according to nationality and marital status where the characteristics can be determined as 22.8% of single and unmarried couple international tourists whilst married international tourists accounted for 39.1% for this category. For purchasing category, 94.1% of those incurred expenditures for this sector were local tourists. Predicted correct classification for this model is 81.6%. Furthering the analysis, a decision tree was generated to illustrate the tourists' behaviour in regards their spending habits according to three ranges; (i) Less than RM55; (ii) RM55 – RM110 and (iii) Above RM110. The tree is depicted in Figure 1 where the tree splits into two levels.



**Figure 1: Recreational Per day Spending Decision Tree**

The first level shows that spending behaviour is associated with marital status. The divisions of marital status can further be divided according companionship for those who are single and unmarried couple, whilst for married couple it can be split up into nationality. Nodes selected for this model are Node 3 (range less than RM55), Node 6, 5 and 4 (range RM55-110) and Node 6, 4 and 5 (range above RM110). The predicted correct classification is 80.8%.

In order to estimate tourism yield for Perhentian Island, data for tourists' arrival is required. Tourists' arrival varied between months with April to July as peak season. From the result, it can be concluded that, international tourist spend on average 5 nights on the island while domestic visitors stayed around two nights with overall mean of 4.1 nights with standard deviation of 2.5 days. Based on the decision tree, weightage for each spending ranges and tourism yield are calculated using the equation (1) – (5).

**Table 2:** Bottom and Top Limit Tourism Yield (Y) for Entertainment & Recreational

Range	Spending	Weightage	Adjusted Weightage (W <sup>a</sup> )	Bottom Limit (B)	Top Limit (T)
Lower (L) L' (0 Purchase)	BELOW RM55	0.5782 0.184	0.818	RM5	RM54
Middle (M)	RM55 TO RM110	0.1134	0.1604	RM55	RM110
Upper (U)	ABOVE RM 110	0.0153	0.0216	RM111	RM166
<b>Tourism Yield (Y)Per Year</b>				<b>RM2,039,829. 46</b>	<b>RM8,025,184. 54</b>

### Natural asset depreciation

#### *Beach*

The main beaches at Perhentian Island are Long Beach and Coral Beach at Perhentian Kecil and Teluk Dalam and Teluk Pauh at Perhentian Besar. There is no or limited documented research that suggests beaches at Perhentian Island are being overused by tourism activities or overcrowded with tourists. However, from questionnaires distributed to tourists at four main beaches, the results indicate that from the viewpoint of tourists, they are crowded with mean of 3.02 (scale: 1-not crowded at all; 2-moderately crowded; 3-crowded; 4-overcrowded and 5-extremely overcrowded). Out of 710 tourists, 23.4% thought that it was overcrowded and 13.2% viewed as extremely overcrowded. Using equation (6), it was found that between April to August the number of tourists staying on the island at any given time were more than 2000 people with May being the highest (3,242). Even though, there are 4 public beaches, visitors mostly swims or sunbathing at Long Beach (P.Kecil) and Teluk Pauh (P.Besar). Optimum beach area per person for range of comfort established by WTO (1988) is 10m<sup>2</sup> (Rajan et al., 2013), De Ruyck, Soares, & McLachlan(1997) is between 6.3 to 25m<sup>2</sup>, da Silva (2002) is 13.5 to 111.7m<sup>2</sup>and Zacarias (2011), 5 to 10m<sup>2</sup>. Long Beach is estimated to have an area of 25000m<sup>2</sup> and Teluk Pauh is 60300m<sup>2</sup>. It was found that, area available per user at Long Beach is between 16.8 to 905m<sup>2</sup>, whilst, Teluk Pauh is between 34.4 to 1860m<sup>2</sup>. Both beaches available area were above the range of comfort as indicated earlier. Therefore, depreciation estimation for these beaches is not necessary.

#### *Coral reefs*

Based on a report by Reef Check Malaysia (2013), the recently killed coral (RKC) is 0.68% for 2013. Using the percentage of (RKC), the degradation cost of coral is calculated by multiplying the proportion of RKC with recreational annual yield (as shown in Table 2). Therefore, the degradation cost of coral are between RM13, 871.52 (bottom limit) to RM54, 571.25 (top limit) for the year 2013.

### CONCLUSIONS

The main notion of this paper is to put forward approaches to monetize natural assets' degradation which were heavily utilized as a result of revenue creation for the tourism sector. It is important to emphasize that this paper only offers the monetization techniques and not

methods to estimate the degradation itself as it is not within the authors' expertise and thus the area is very much open to discussions. As a result, the authors depended on secondary data to gain this information (degradation non-monetary value). Variables identified to be inserted into the equation to estimate yield are the tourists spending ranges, which are; (i) below RM55; (ii) RM56 -RM110 and (iii) Above RM110. Employing CHAID to determine tourists' profiles according to their spending behaviour, recreational ESTY is estimated. In the study, spending behaviour can be characterised by two types of profiles which are marital status and companionship which act as the predicted variables. Finally, it was found that Perhentian Island's Environmentally Sustainable Yield for recreational activities are between RM2, 026,057.94 to RM7, 970,613.28 after monetizing degradation or depreciation value of coral reefs between RM13, 871.52 to RM54, 571.26.

### **ACKNOWLEDGEMENTS**

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# **LOCAL COMMUNITIES' PERCEPTIONS TOWARDS ECONOMIC IMPACTS FROM ECOTOURISM DEVELOPMENT IN KILIM KARST GEOFOREST PARK, LANGKAWI**

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## **Abstract**

The tourism development in Kilim Karst Geoforest Park (KKGPP) in Langkawi has brought many changes to the local community. These changes regarded as an important benefit to them. A household survey based on sample of 302 respondents in 3 villages around KKGPP and a face to face was conducted in for 2 weeks. A Factor analysis was carried out to identify the respondents' perception of economic impacts from ecotourism development in KKGPP. Finding from data analysis show positive perceptions towards ecotourism development, it has been group into 6 factors which explained for 40% of variance extracted from 56 variables in the data namely: 1. Income Opportunities, 2. Entrepreneurial Opportunities, 3. Community Facilities, 4. Benefits to woman and youth, 5. Qualified boat operators, 6. Cottage industry from ecotourism development. Finally finding from data analysis show that ecotourism development bring more economic benefits towards local community, but if the development were carried out without properly strategy and planning, could influence perception local community vice versa. On the others hands the local authorities are responsible to plays as a vital role to bring a successful tourism development in KKGPP and to maintain the increasing number of tourist that will keep coming to the destination and at the same time local community be able to get benefit from it.

*Keywords: Kilim Karst Geoforest Park (KKGPP), local communities, ecotourism, factor analysis*

## **INTRODUCTION**

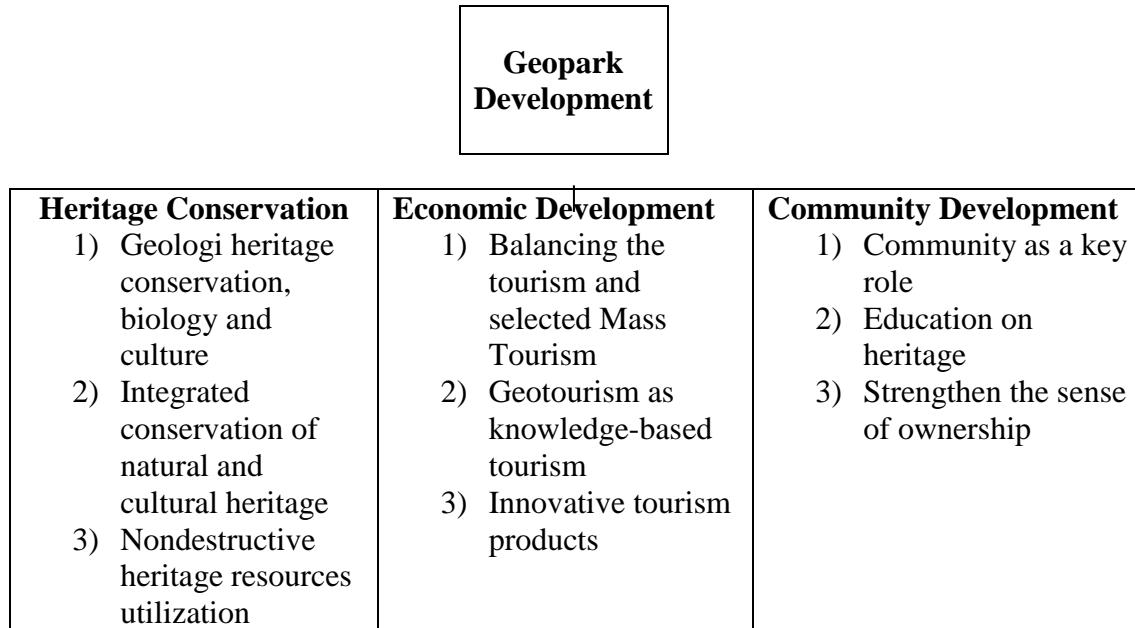
Development in Langkawi into a tourist destination started in the early 1980's. The development not only benefits the local people but it also opens up avenues for tourism activities that transforms Langkawi into a popular tourist destination at the international level. In 1987 when Langkawi was declared as a duty free zone, and with continued investment effort from government and the private sectors, Langkawi has been turned into a popular shopping center, a haven for local and foreign tourist.

The Kilim development project covers an area of 3.84 hectares which is devoted to four major projects; upgrade facilities at Kilim jetty and facilities in the swamps, diversion facilities at the jetty fishing and the Discovery Center. If the transformation is successful, it will not only make Langkawi more advanced, the whole population will benefit from it. In Bernama (2012) the Manager of Planning and development of the Langkawi Development Authority (Lada), Dr. Noor Yazan Zainol said that the Discovery Centre would serve as an archive and reference point on Geoparks in this country, especially in Langkawi."Filling this center will be applied to the

segment geology, flora and fauna, socio-cultural and international," he said. The project will start on February 2012, worth more than RM20 million and is expected to be completed within two years.

In figure 1.1 it is shown that the Geopark development given emphasizes three developments which are heritage conservation, economic development and community development. This plan also included Kilim Karst Geopark

**Figure 1.1:** Geopark Development Framework: a focus on balancing the needs of conservation, economy and well-being of the community Development Division



Sources: *Ibrahim (2011)*

The tourism industry in KKGPP provides employment opportunities to the local residents, and this may affect the perception of residents towards the industry. As Ahmad et al., (1995) and Ahmad and Dora (1996) indicated the perception of the residents was dependent on whether or not the residents had direct involvement in tourism related activities.

The objective of this study is to determine the perception of local communities of Kilim Karst Geopark, Langkawi on the economic impacts of tourism development. The main reason for selecting KKGPP is because it has become one of the most popular tourist destinations among visitors.

## **RESEARCH METHODOLOGY**

### **Collection of Data**

Face to face interview method was used to collect data on the perception of the local communities towards the tourism development in KKGPP. A random sample of 302 residents in 3 villages was chosen for the study. A stratified sampling size of the villages was taken to represent the population of the island. The sample frame was obtained from the office of the

district officer in Langkawi. Data collection was carried out for two weeks and researchers personally interview the respondent to avoid misunderstanding regarding the questionnaire.

The questionnaire was organized into 3 major sections. The demographic questions were placed in the first section. The perceptions of residents on the changes that have taken place in their lives due to the development were asked in the second section. Residents were asked to indicate the attitude statements about economic impacts; the residents were asked to respond on a 4-point Likert scale (1 = strongly agreed to 4 = strongly disagreed) for each statement. 56 statements related to economic consequences were included; the statements implied both positive and negative impacts of the development and lastly the third section required local community's suggestion to improve the facilities in KKGP, this is an open ended question.

A reliability test on the data set used was carried out using the standard Cronbach's Alpha test. The Alpha coefficient of 0.876 was within the reliable range indicating that the scales used were reliable measures of the impact variables.

## **ANALYSIS**

To determine the perceptions of local communities' on economic impacts factor analysis was used. Factor analysis was used to reduce the number of variable to simply analysis by grouping scale items into smaller number, in order to identify whether local community perceptions differed based on demographic variable. He also stated that variables below 0.6 were removed from analysis because (1) such a low level of commonality meant that their inclusion in the factor solutions was unreliable and (2) as a result, these variables had relatively low loadings spread across all factor (Mais, 2010). According to Pallant (2011), from the large set of variables and looked for a way the data may be 'reduced' or summarized using a smaller set of factors or components.

## **RESULTS**

Factor 1: Income Opportunities. Variables in this factor indicate positive aspect of tourism as perceived by the residents. This factor explains 17.5% of the variations in the data. As a developing tourism site KKGP provides more job opportunities to local resident especially to youth and women, as we can see business activity in KKGP were managed by woman and youth of ages between 15 to 30 years old. According to Kathleen (2008) giving jobs opportunities to local residents are the efforts to reduce poverty besides helping them generate more income at the new development sites by creating job opportunities with existing employers, more opportunities are unavailable to many-low income workers previously.

Factor 2: Entrepreneurial Opportunities. This factor explains 6.5% of the variations in the data. This factor suggests that the authority will support the tourism industry to develop skills for the residents and opportunity that are related to tourism activities. Empowerment and involvement of the community will become main factor for tourism development, giving opportunity to learn and make decisions in order to improve their life styles. According to Gusti (2012) the community in which tourism is developed will participate in keeping their culture and nature so that in the end sustainable tourism development will be achieved and maintained. Local residents especially the Fisheries Ecosystem Management Group and local authorities are working



together to manage ecotourism activities in order to ensure a balance between conservation and development in KKGP is achieved.

Factor 3: Community Facilities. This factor accounts for 5.0% of the variance in the data and it contains four variables which are improving social amenities, facilities for religious, access to education and improving public facilities. Easterling (2008) has said that residents living further away from tourism facilities and attractions are likely to have negative perceptions towards tourism than those who live closer to tourism centers.

Factor 4: Benefits to women and youths. This factor includes the benefits to women and youths; it explains 4% of the variations in the data. UNWTO (2012) has shown that local population's economic wellbeing can be enhanced through job creation for woman and youths by taking advantage of the opportunities that exist for women in tourism in the area of entrepreneurship, educational and training, leadership and community.

Factor 5: Qualified boat operators. A Factor 5 explains 3.8% of variance which shows the requirement of qualified boat operators which comply with the regulation and laws of the state. According to chairman of FEMG (Fisheries Ecosystem Management Group) in FEMG community organizations, there are 82 boats from 29 owners of the boats who are registered with proper licenses to operate the boats to bring visitors to various locations in the Kilim Park.

Factor 6: Cottage Industry. Two variables are included in these factors which explain 3% of variance in the data. The government has established the cottage industry as an alternative source of revenues for the populations. Although the communities in KKGP has no specific handicraft to show off, however, the Langkawi Craft Complex has established a center to display and sell all sorts of handicrafts made by the communities in Langkawi.

Variables	Factor Loading					
	F1	F2	F3	F4	F5	F6
Tourism provides job opportunities for the local residents	.791					
Tourism creates business opportunities for the local residents	.740					
The activities in KKGK enables the local community to generates monthly income	.635					
Tourism can ensure the younger generations to continue working in the rural area, especially in the KKGK area.	.622					
Tourism enables KKGK to develop into a focal point area for tourism activities		.709				
In order to increase the tourism industry, government should provide and offering assistances to encourage the involvement of the local communities in venturing into business such as creating a homestay		.619				
Tourism able to enhance the knowledge regarding tourisms among the local residents		.619				
Tourism improves the social facilities for local residents such as the establishment of the community halls and community activities			.828			
Tourism gives aid in increasing of the religious facilities for local communities such as mosques			.779			
Tourism facilitates in improving the educational facilities for local residents such as the development of school, kindergarten and library			.778			
Tourism helps to improve public facilities for locals such as food stall, repair shops (motorcycle and motorboat)			.635			
Tourism industry in KKGK gives benefits only to the women				.838		
Tourism industry in KKGK gives more benefits only to the younger generations				.835		
Tourism industry in KKGK gives benefits only to the vendor				.774		
Tourism help to encourages the boat operators to obtain a license to become a tourist guide					.717	
Tourism give rise to many licensed and trained boats drivers					.702	
Increasing the demand for rural handicraft products						.755
The increasing of the tourism sector creates opportunities for the locals to sell their agricultural crops						.687
Eigen value	9.778	3.634	2.800	2.308	2.158	1.822

% of variance	17.46 1	6.490	5.001	4.122	3.853	3.254
Cumulative % of variance	17.46 1	23.95 1	28.95 2	33.07 4	36.92 7	40.18 1

**Table 1:** Factor Analysis of Perceived Economic Impacts by local communities of KKG

Note: *only loadings greater than 0.5 are reported*

*KMO = 0.817*

*Bartlett's test is significant (Chi Square = 6196.337,  $p < 0.00$ )*

## CONCLUSION

From the finding it can be conclude with the rapid growth of tourism industry more likely created economic benefits to local community such as giving opportunity on employment and increasing income especially for women and younger generations who able to involved directly into tourism entrepreneurship and business. On the other hand in increasing tourism activities and to be able bring the tourist with the legal boat, has encourages boat operators to registered proper license to operate the boats. In additional, the improvement and develop more on facilities also important not only for local residents utilities but also to tourist.

For the view point of residents the local authority such as LADA and others NGO has to plays an important role in making KKGP as an attractive place for tourist. This can be implemented by providing financially to develop more on facilities and giving good promotional to attract the tourist. Although this economic impact brings more benefits to local residents but without properly strategy and planning will give negative impacts someday. With cooperative of local residents such as Fisheries Ecosystem Management Group and local authority will able to balance the development in order to maintain the increasing number of tourist that will keep coming to the destination and at the same time continuously give benefits to local residents.

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# RED LEAF MONKEY AS AN ECOTURISM ATTRACTION IN TAWAU HILL PARK, SABAH

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## ABSTRACT

Tawau Hill Park, Sabah was gazetted in 1979 as a Long Term Ecological Research Site (LTERS) set by Sabah Parks. The park is located at position N 04<sup>0</sup> 23.873', and E 117<sup>0</sup> 53.274' with an area of 27,972 ha. This park has high diversity of flora and fauna that makes an ideal location for research and tourism attraction. This park has been visited by various types of visitors for research, photography, school program, camping, and picnic. There are a variety of wildlifes attract visitors and one of them is Red leaf monkeys (*Presbytis rubicunda*). Tawau Hill Park is the best site to experience observing this endemic langur. Their daily behaviour, home range, feeding habits, sleeping site, resting site can be viewed closely. Red leaf monkeys conservation is important for future sustainable and can be done through visitor awareness.

Keywords: *Red Leaf Monkey, Malaysian Primates, Ecotourism, Langur, Tawau Hill Park*

## INTRODUCTION

Tawau Hills Park was gazetted in 1979 as a Long Term Ecological Research Area (LTERS) set by Sabah Parks at position N 04<sup>0</sup> 23 873 ', and E 1 17<sup>0</sup> 53 274 ' with an area of 27,972 ha (Lakim 2008). This park is the first terrestrial parks in the East Coast and the second after Kinabalu Park, Kundasang, Sabah . With an area of 27,972 ha , it has contributed 10% of the total area of parks in Sabah. Taman Bukit Tawau is an important water catchment area of 1 million residents in Tawau, Semporna and Kunak. The water supply comes from six (6) major rivers, the Sungai Merotai Besar, Sungai Merotai Kecil, Sungai Tawau, Sungai Balung, Sungai Kinabutan and Sungai Mantri. Throughout the year, many domestic and international visitors are visiting Taman Bukit Tawau. Therefore this is an opportunity to implement conservation awareness among visitors regarding Red Leaf Monkey in this area.

## BIOTIC AND ABIOTIC ASPECTS AT TAMAN BUKIT TAWAU

Taman Bukit Tawau consisting hilly topography (Figure 1), especially in the northern region consists Lucia Mountains (1,202 m), Mount Maria (1,083 m), and the highest mountain, Mount Magdalena (1,312 m). Consists of five major river drainage emanating from the gardens of the Sungai Balung, Sungai Tawau, Sungai Merotai, Sungai Kalumpang/Mantri, and Sungai Kinabutan. The nature of tropical climate in this area which is hot and humid with temperatures range from 23-33<sup>0</sup>C with the rain of 180-235 mm per year. Soil erosion of igneous rock became volcanic soil, rich in minerals that are very fertile for agriculture. This allows the trees of extraordinary height and size growing here. This area consists of 2/3 of

primary forest area, while another third was used as logging until 1970 before it was gazetted as a National Park (Ariffin 2011; Lakim 2008).

Inventory made in 1986 at this area recorded flowering trees of 169 species in 12 genera and 52 families (Beaman & Beaman 1995; Latiff et al. 1995). From that amount, 24 species of dipterocarp and 31 species are non-dipterocarp (Kulip 1995). Dipterocarp species are seraya, selangan, seruing, and kapor. Meanwhile non-dipterocarp species are belian, agathis, and Nyatoh. There are herbaceous plant consists of 36 species in 14 genera of wild ginger (Ibrahim 1995); 118 orchid species in 42 genera (Hee 1995) including elephant ear orchid which is endemic to Sabah found here. In addition, there is ferns consists of 83 species in 55 genera and 24 families. These plants contributing as rich sources of food and habitats for wild life animals in the park including red leaf monkey.

Since 1990, the short listing of fauna keep increasing. It consists of 69 species of terrestrial mammals (9 species of primates, sun bear, clouded leopard, tambadau, sambar deer, barking deer, mouse deer and ect.); 240 avifauna species, 54 reptile species, 22 species of lizards, 25 species of snakes, 41 species of amphibians, 20 species of freshwater fish, while 108 species from 66 genera are small fauna (Lakim 2008) . The eight species of primate found here are long-tail macaque, pig-tail macaque, red leaf monkey, Borneo gibbons, orang-utans, tarsiers, slow loris and lotong kikok (Yasuma and Mahedi Andau 2000). Three of the nine primate species are endemic to Borneo; which are the red leaf monkey, lotong kikok, and Bornean gibbon.

### **ECOTOURISM IN TAWAU HILL PARK**

The main objective of Sabah Parks is to protect and preserve the wildlife biologically, geographically, and historically in its natural state for the purpose of sustainable ecotourism, ecology and education for the benefit of present and future generations. Thus, Sabah Parks must be well managed, efficient and effectively through holistic management including human development, and enforcement of parks enactment. The park visitors are categorized into domestic and international visitors. The number of total visitors in 2013 and 2014 are as Table 1. This park is visited by various types of visitors who came for the research, photography, school program, camping and picnic purposes.

**Table 1** : Number of Visitors to Tawau Hills Park for the Year 2013 and 2014

<b>Visitor</b>	<b>2013</b>	<b>2014</b>
Domestic	81,899	72,838
International	949	1,334
Total	82,848	74,172

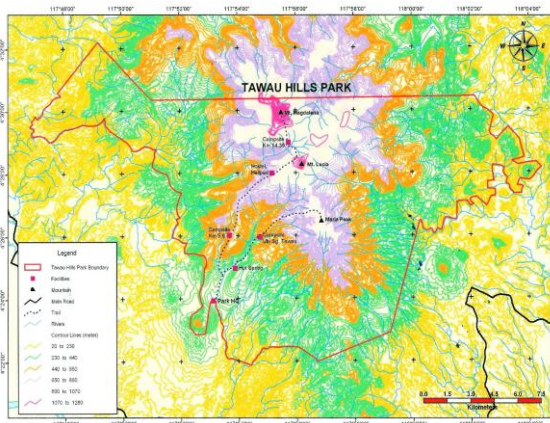
The main natural attractions in this park are the Table waterfall which located near to the entrance of the park, Galas waterfall (2.7 km to the north), and hot spring (3.2 km to the north). Another attraction is the climbing program of Mount Magdalena (1,323 m), the peak of Mount Bombalai, and a natural trail system. The park is also grown by tall trees and unusual size due to the fertile volcanic soil. Another major attraction here is the highest natural tropical rain forest tree in the world with the height of 88.3 m which is one of the Seraya Kuning Siput. The location of this tree is about 1000 m north of the park entrance. In addition, the existence langursin this parks also add an attraction to visitors. Orang utan also exist in this park, which can be found approximately 5 km to the north of the park. Therefore

the focus of this paper is on Red Leaf Monkey as the main natural attraction for ecotourism (Ariffin 2011).

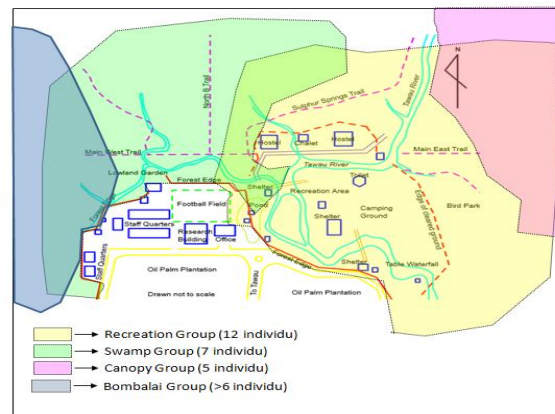
## RED LEAF MONKEY AS AN ECOTOURISM ATTRACTION AT TAWAU HILLS PARK

There are at least four red leaf monkey groups around the administrative center of Tawau Hills Park. The home range of each group is shown in Figure 2 and the population of each group is shown in Table 2. Various daily behavior of red leaf monkey can be observed. Among the daily behaviors that can be observed are resting, eating, moving, grooming, playing, vocalization, aggression, sexual and urination (Figure 3). Visitors guided by parks ranger can observe the daily behavior by following monkey daily trailed within a home range of the monkeys. If the visitors has the luck, they might have the chance to see the aggressive behavior among two groups of monkeys in the overlapped home range respectively. This behavior is to maintain the territory border among groups of monkey. Typically, adult male monkey will fight while females and young monkey are being seen waiting at a distance from the battlefield .

**Figure 1 :** Tawau Hills Park Map



**Figure 2:** Home Range of *P. rubicunda*



**Table 2 :** Population of Red Leaf Monkey by Group

Group	Population	Remark
Recreation	12	till 12/2/2015
Swamp	7	till 12/2/2015
Canopy	5	estimation
Bombalai	>6	estimation

**Figure 3:** Daily Behavior and feeding ecology of *P. rubicunda* at Tawau Hills Park



The Red leaf monkey eat a variety of plant species. Parts of the plants are frequently eaten, especially the young leave, seeds, fruits and flowers. There are more than 100 species of plants being eaten by monkeys within one year. The park trees which are selected by the

monkeys as their food resources are identified and marked with the tagging system. It is advisable to place information signboards at the trees which provide staple foods. We also noticed leaf monkeys are eating soil (Figure 3).

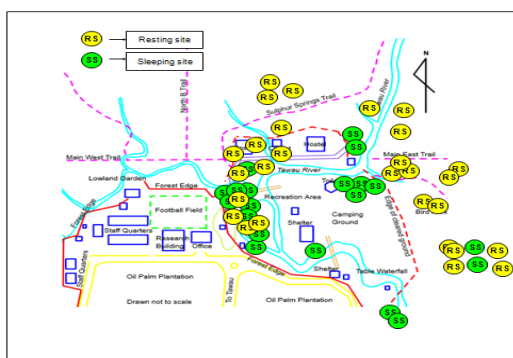
Red Leaf Monkey are selecting sleeping site to sleep at night and noon. Usually the monkeys will choose a sleeping site in the evening at approximately 6:30 pm. They will usually wake up at early morning the next day at the same site. The maragang usually choose a high tree with many branches, but tree with less leaves for sleeping site. As for the purpose of observation, the home range of wild life monkeys are being identified with the method following their movement from the early wake up time until its sleeping time after the selection of the particular sleeping site (Figure 5). The sleeping sites in the park are being marked with metal tag for the continuation of researcher's observation. There are other primate species being noted often at the same region. We found that the red leaf monkey and the other monkeys (long tail macaque, pig tail macaque, red leaf monkey and Borneo gibbon) were noticed at the same tree or region. According Lakim (2012), the ability of living together between primate species are one of the strategies of self protection from predators .

On February 9<sup>th</sup> 2015, we observed that the fig tree (*Ficus* spp) are fruiting at the back garden of staff quarters (Figure 6). There were many wildlife species eating the ripe fruit on the tree. The species that were observed by researchers are long tail macaque, pig tail macaque, red leaf monkey, rhinoceros hornbill, black hornbills and several species of small birds. According to the workers in this park, the figs that fall on the ground are eaten by deer and wild boar. Therefore this tree seems to provide main sources of food to the wildlife there. This particular tree species can be considered as an umbrella species because of its ability to supply feed on a variety of wildlife. Therefore this umbrella species should be preserved in order to conserve many other species.

## CONCLUSION

Red Leaf Monkey is one of the ecotourism attractions in Tawau Hill Park. Visitors who visit this park can be exposed to the awareness and existence of one of the endemic animals in Borneo . Awareness that is created to some of the visitors can contribute to the conservation of this species in the long run. The management can provide a suitable place for researchers, photographer, wildlife lovers, tourists and others for the purpose of observation as well as provide information boards at the particular venue so that the awareness on the importance of umbrella species can be created among visitors.

**Figure 5 :** Sleeping and Resting site



**Figure 6:** Primate and Mammal communities





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# **THE OIL AND GAS HUB, TOURISM DEVELOPMENT AND LAND SUPPLY CONSTRAINTS WITHIN THE OIL AND GAS HUB AND DESARU TOURISM IN PENGERANG JOHOR**

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## **Abstract**

With the establishment of oil and gas hub, the government envisages an economic growth within Pengerang areas in Johor. In addition, Desaru areas which is located adjacent to Pengerang will be positively affected for development. Unfortunately, there are landownership constraints which affect the rate of development in Pengerang areas. This paper examines the effect of landownership constraints within the oil and gas hub and Desaru tourism in Pengerang. Data were gathered using interviews with landowners to examine why there are still huge numbers of under utilise though the Desaru areas is well-known for its tourist attractions and oil and gas hub in Pengerang. Analysis had been undertaken using qualitative techniques on respondents using coding, either direct or indirect quotations. Landowner respondents were taken randomly to represent predetermined zones and data has been examined narratively and presented in the form of charts, histogram and tables. One of the results shows that landowners were unwilling to be involved the redevelopment because of the landownership constraints, and their perceptions that development is the government's responsibilities.

*Keywords: Oil and Gas Hub - landownership constraints - Pengerang*

## **INTRODUCTION & BACKGROUND**

The Economic Transformation Programs (ETP) has been introduced in Malaysia to sustain the economic growth in the country. In this context, the establishment of oil and gas hub in Pengerang, Johor in 2011 with the capital of about RM60 billion was to provide socio-economic growth of the people and to be a global competitive market in the region (Preliminary Report, SEIA Studies UTM/Kejora, 2014). With the economic agenda, the growth areas would be affected by the changes in socio-economic activities therein. The growth area for the oil and gas hub is consisting of about 22,100 acres of land which have been acquired for the construction of 19 logistics of oil and gas refineries (Interim Report, SEIA Studies UTM/Kejora, 2015). About 2,000 families will be transferred to the new settlement areas nearby with payment of adequate compensation to them (Ismail et al. 2014).

Based on increasing potential for oil and gas in China, India and South East Asia, Dialog and Petronas were investing a huge amount of capital in Pengerang which will have a greater impact than Rotterdam in Holland (Jalil, 2012). There will be huge positive and negative socioeconomic impacts from the oil and gas hub in Pengerang. By and large, taxes and royalties paid by firms will benefit and have positive impacts on the macro economy. Oil and gas export is expected to generate about RM600 million to the manufacturing sector in the country and hence enhancing the job creation and elevating the poverty in the country. Moreover, the increase in employment with expected additional of about 45,000 will activate the housing, education, medical, infrastructures, energy, water supply and businesses (Interim

Report SEIA Studies UTM/Kejora, 2015). This will also affect the psychological, cultural values and well-being of the local residents.

With the pressure from the oil and gas hub to acquire and provide land for the anticipated increased number of population within Pengerang areas, the availability of developable land within the vicinity is expected to be higher in demand by developers and industrialists. The expected level of demand is well-supported by the newly constructed Senai-Highway Desaru and the bridge crossing Sungai Johor in Johor Lama (Preliminary Report SEIA Studies UTM/Kejora, 2014). Moreover, the property market in the Desaru-Pengerang areas was well-supported by big projects within the Desaru-Pengerang including golf resort, commercial projects and residential development (Interim Report SEIA Studies UTM/Kejora, 2015). Unfortunately, a large amount of potentially productive land and land waiting to be developed is being constrained for development and hence left idle. This is portrayed by fallow fields, brushy pastures, abandoned farms, and some heavily eroded lands have never been cleared for a better usage likewise lies virtually idle while much of these lands should be developed eventually to reach its highest and best potential. Most of the idle lands in Pengerang is under government future use land, Malay Reservation and religious waqf lands which are small in size and inferior in location.

The challenge facing the future availability of land is in the need to ensure adequate supply to meet demand from population. As a result of their chronic non self-sufficiency, their demand is growing. Amidst forecasts of its supply scarcity which is now becoming a local developers' concern, focusing attention on the land supply constraints is an absolute logical point for examining the cause of its scarcity. Thus, the aim of this study is to determine the landownership constraints that has always been of great interest to policy makers.

### **LANDOWNERSHIP CONSTRAINTS**

The ownership of a land is very important when considering reclamation or development. Many idle lands are owned by absentee landlords or held by land speculators for future development and investment. There are several specific aspects of landownership that may affect land supply which include (1) diverse backgrounds, (2) rationales, (3) levels of wealth and interests, ranging from private enjoyment to profit maximization. However, community-based and some non-for-profit landowners will generally be easier to convince of the need for better usage. Ismail et al. (2010) stated that the landownership constraint comes from the landowners who are reluctant to respond uniformly to market mechanisms, who are keeping the lands because they are looking for a better price in the future or who are keeping the lands due to sentimental value towards the lands.

Updated land registers and databases are crucial to secure property rights and promote land exchange. In some countries, many current owners cannot be found in the land database. Landownership registration that is poorly maintained, missing or incomplete records, absence of or unclear boundaries, unknown owners, and unsettled inheritance claims within families where there is a large number of co-owners per a plot of land, all raise the cost of land withdrawal thus constraining the land to be able to be marketed.

Landownership constraints provide direct impacts on the land and property market in terms of increasing land price which subsequently push the price of developable lands higher in the market (Ismail et al. 2010). Multiple landownership in turn increases the costs of obtaining agreement among the owners and, hence reduces the willingness of individual owners to put effort into development. Although the benefit of the uses of the land is quite valuable,

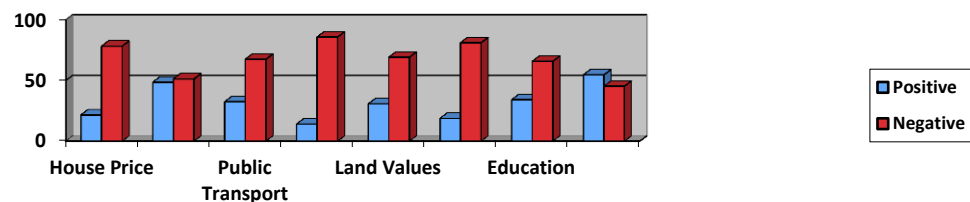
multiple ownership discourages uses since it is more difficult to monitor the inputs and outputs by owners (Ismail *et al.* 2010). The different tenure types and multiple ownership over land, as mentioned above, results in a complex delivery system of urban land into the market.

## THE CASE STUDY – DATA ANALYSIS AND DISCUSSION

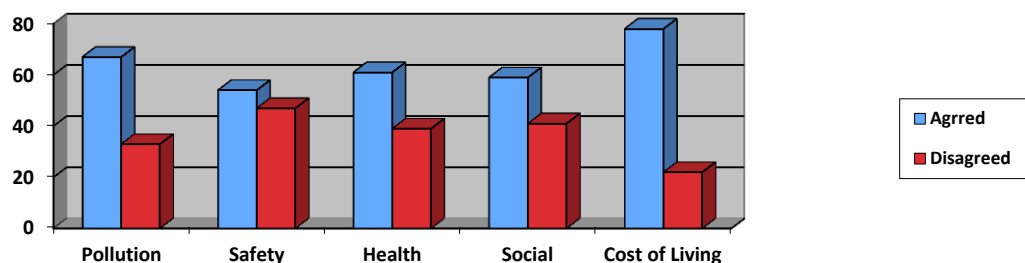
### The Overall Social Impact

From the surveys, it has been shown that there are likely negative (30 per cent) and positive impacts (70 per cent) of the oil and gas hub on the life of the population. The main positive elements are economic growth and development (48.57 per cent), employment opportunity (11.43 per cent) and increase in property values (2.86 per cent) whereas the main negative implications are pollution (14.29 per cent), disturbances (8.57 per cent) and others (5.72 per cent). The positive impacts are on individuals (42.2 per cent), family (56 per cent), neighbourhood (30.7 per cent) and the State of Johor as a whole (44.5 per cent). As comparison the main negative impacts on individuals (57.8 per cent), family (44 per cent), neighbourhood (69.3 per cent) and the State of Johor (55.5 per cent) (Interim Report UTM/Kejora SEIA Studies, 2015).

**Figure 1.0:** Socioeconomic Impacts



**Figure 2.0:** Socioeconomic Impacts



### Landownership Constraints

Based on literature reviewed in Section 2.0 above, there are landownership elements that constrain the availability of land in the study area (**Refer Appendix A**).

The empirical study shows that the majorities of landowners possesses and occupy their lands. Table 1.0 shows more than 70 percent of the landowners have a high potential to develop their underutilized land. Although knowing the fact that their land is valuable and able to

generate profitable income, they were satisfied owning the land for residential usage. Ismail et al. (2010) asserted that landownership constraints provide direct impacts on the land and property market in terms of increasing land price which subsequently push the price of developable lands higher in the market an opportunity and potential to be known by the landowners.

**Table 1.0:** Landownership Constraints

No of Responden	Landownership
C1, C2, C3, C4, C5, C8, C11, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C32, C33, C36, C37, C40.	Owner Occupy/trading
NIL	Wholly Rented
C31	Vacant
C5, C6, C7, C9, C10, C12, C34, C35, C38, C39.	Partly Occupied and rented

Passive land owners are those who decide not to do anything and do not have any intention to develop their land. This attitude and the supporting argument have caused the landowners to be passive, becoming reluctant to respond to any development initiatives. According to Adams et al. (2002) passive landownership is landowners' behavior that causes land supply constraint.

**Table 2.0:** Landownership Constraints

N o	No of Respondents	Attitudes	Final/Current Condition
1	D1, D13, D27, D28, D31, D33, D34, D35, D37.	Not intend to sell/ Not intend to develop	Undeveloped
2	NIL	Intend to sell (Has not been sold)	Undeveloped
3	NIL	Intend to sell (Has not been sold)/ Intend to develop	Undeveloped
4	D5, D6, D7, D8, D10, D11, D12, D14, D15, D20, D24, D26, D36, D39	Not intend to sell/ Intend to develop(Has not proposed proposal)	Undeveloped
5	D2, D3, D4, D9, D16, D17, D18, D19, D21, D22, D23, D25, D29, D30, D32, D38.	Not intend to sell/ Intend to develop (Has obtained approval and/or have developed)	developed
6	NIL	Intend to sell (Has been sold)	Sold

Respondents no 1, 13, 27, 28, 31, 33, 34, 35 and 37 preferred to not intend to sell and also did not intend to develop. This situation can contribute to land supply constraints. Although, for the land owner who did not intend to sell and did intend to develop but the land was still undeveloped it should be considered. This figure clearly shows the case study area still has not developed the land more than that has been developed. 23 of the total respondents indicated the nature of the passive owners of idle land and encouraged the existence of a limited land supply in market.

The landowner's perception about development is shown by the argument that development responsibility is the government task. Land owners of 3, 5, 6, 7, 8, 12, 17, 20, 22, 23, 24, 26 are those who agreed with this argument. Only landowners of 14, 16, 18, 19, 21 did not depend on the governments support.

Landowners depending on the governments support could contribute to land supply constraints. There is a need to promote the awareness to the landlord not to depend too much on the government's assistance alone, but there are many other alternatives of development such as sharing and smart partnership, collaboration or joint-ventures.

## **CONCLUSION**

This study mainly focuses on the landownerhsip constraints and as per discussed in the literature summary and in the empirical evidence, it shows that there are various elements of landownership that constrain the supply of land for development in Pengerang. From what has been analyzed from selected respondents landowners, the elements that constraints land supply has direct and indirect impact on the supply of lands for development.

The government should also reform the landowner and landownership by formulating appropriate sustainable development policies and resource management measures should also be taken into account in order to solve land issues. It is, however, beyond question that the land management policies by state governments have been a contributor to the landownership constraints.

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# **ADVENTURE CULTURAL VILLAGE: CHARTING THE WAY FORWARD TO NATURAL RESOURCE CONSERVATION, SUSTAINABLE TOURISM AND DEVELOPMENT OF SOCIETY.**

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## **ABSTRACT**

Tourism can be considered the largest industry in the world because it comprises of extensive range of economic activities. Other than providing employment opportunities, it provides considerable economic benefits for communities within the area. However, tourism can adversely impact natural resources, environment and ecosystem. If improperly planned and monitored, it can disturb natural landscape. Malaysia is one of the countries recognizing United Nations' call for sustainable tourism in its broader international sustainable development agenda. This was reflected in the Ninth Malaysian Plan (2006-2010). Sabah is a state in Malaysia known for its nature's beauty. This had led a venture, Adventure Cultural Village (ACV) emerge to run varies ecological-friendly recreational programs and activities on a hundred acre naturally beautiful riverside idle land in a rural area near Kota Kinabalu, the capital city of Sabah into source of extra income for its host community. By partnering with the local community, ACV had converted the idle land into a privately owned natural park name Kasalagan Park. ACV created legal groups and ventures to sustain Kasalagan Park and areas surrounding it. ACV adopts natural resource conservation, sustainable tourism and development of society approaches in its operation in Kasalagan Park. The approaches adopted by ACV will be discussed in this paper.

*Keywords: Natural resource, Sustainable tourism, Development of society, Privately owned natural park, Ecological-friendly recreational programs*

## **INTRODUCTION**

Malaysia was once depending on agricultural, mining and manufacturing industry for earnings. Now, service industry is the largest industry in Malaysia and it contributes a large portion to the country's economy. It accounted eighty percent of Malaysia's economy in 2008 and tourism is one of the sectors in the service industry notably contributing to Malaysia's earning (Ninth Malaysia Plan 2006-2010). Tourism can be considered the largest industry in the world because it comprises of extensive range of economic activities. Other than providing employment opportunities, it provides considerable economic benefits for communities within the area (Nepal 1997). However, tourism can adversely impact natural resources, environment and ecosystem (Neto 2002). If improperly planned and monitored, it can disturb natural landscape.

Sabah is a state in Malaysia famous for its nature's beauty. This had led an opening to a venture name Adventure Cultural Village (ACV). ACV turns a naturally beautiful piece of idle land in a rural area near Kota Kinabalu, the capital city of Sabah into source of extra income for its host community. By partnering with the local community, ACV had converted the idle land into a privately owned natural park name Kasalagan Park. ACV created legal groups and venture to sustain Kasalagan Park and areas surrounding it from unattended or

further damage by creating environment of opportunity, healthy, interactive and profitable but yet conserving natural resources and promoting sustainable tourism while fostering the development of society (Siti-Nabila, Wahid, Amran & Haat 2008). One of them is Koperasi Kampung Natai Sabah Berhad (KKNSB). KKNSB is a cooperative venture registered under the Malaysian Cooperative Commission (SKM).

### **BACKGROUND OF ADVENTURE CULTURAL VILLAGE**

Adventure Cultural Village (ACV) was established in 2008. It is a venture operating on a hundred acres riverside property of Kasalagan Park located in a village name Natai Telipok, about sixty minute drive from Kota Kinabalu city. ACV with its motto “Always Forward” runs varies ecological-friendly recreational programs and activities. It adopts natural resource conservation, sustainable tourism and development of society approaches in running its operation in Kasalagan Park. It has illustrated the natural beauty of Kasalagan Park in its logo as shown in Figure 1. ACV’s logo is adopted from the three hills located upstream of waterfall, valleys and rivers in Kasalagan Park where it currently operates. The name Adventure Cultural Village is chosen as the term “Adventure” signifies the walk to challenging ancestry trails, river crossing activities, rock and hill climbing, hunting, bush cooking and tree climbing for fruit harvesting. While the term “Cultural” refers to eating native food, doing community service, camping in rugged hut, beating bamboo and gong to interact and have fun. The last term, “Village” denote the operations are always in rural and village areas to permit community participation in activities such as guiding, cooking, logistic and friendly presence.



**Figure 1:** Adventure Cultural Village (ACV) Logo  
*Source:* <http://adventureculturalvillage.blogspot.com>

ACV emerged after seeing the opportunity which followed by the courage to take the risk to start a business without much capital. The inspiration, idea and motivation to pursue establishing ACV were the people, land, human needs and technology. These are opportunities which can be turned into income. The community in the village are those people who formed the team that forms the company. The land is the main asset functioning as cash cow and this asset needs to be maintained to preserve its value as natural resource and the environment. Computer, short message service, internet, facebook, twitter and other applications had assisted in many ways to promote ACV and its operations in Kasalagan Park.

Adventure Cultural Village is responsible to design and develop programs for teambuilding purposes and outdoor programs. It is also in charge of promoting and marketing the programs as well as monitoring the safety and hygiene in Kasalagan Park. Programs are designed in line with personal and group development. With ample spaces like in Kasalagan Park, ACV is flexible to adjust and tailor activities suited to clientele requests. ACV makes safety its top priority in designing and delivering programs. At times, mobile program is also tailored upon special requests.



ACV runs its business via outdoor and traditional activities as the tool to learn by doing in village environment. It not only had conducted several programs for local groups and organization such as schools, colleges, universities and companies but also international groups and organization from Singapore, Hong Kong and the United States. Among common activities conducted in Kasalagan Park are hiking, jungle trekking, river crossing, fishing, paddy planting, rubber tapping, fruit hunting and harvesting, group dynamics, camping, treasure hunt, and campfire.

In 2011, Koperasi Kampung Natai Sabah Berhad (KKNSB) was established to assist in ACV's operations. It is accountable for the up keeping of the campsite and activity areas. KKNSB is responsible to take care of basic needs of ACV to run its programs and activities such as logistics, meals and also basic facilities available in Kasalagan Park. KKNSB can be considered as a vehicle to seek funding to manage and improve the base camp at the park. Hence, it is accounted to apply government grant to support natural resource conservation, sustainable tourism and development of society in Kasalagan Park.

### **Kasalagan Park**

The existence of Kasalagan Park as a private owned natural park had actually supported the emergence of Adventure Cultural Village. Programs and activities conducted by ACV in Kasalagan Park are more towards supporting and promoting natural resource conservation, sustainable tourism and development of society. With reference to Figure 2, Kasalagan Park is located on a piece of land covering waterfall, rivers, small rapids, water pools, trees, varies plants and vegetation, fruit orchard, campsite, fish ponds, rice field, hills and valleys. There are three routes to get to Kasalagan Park. By driving about forty-five minutes from Kota Kinabalu City over Kampung Kokol Menggatal hill, one will enjoy the scenic views of the City, South China Sea, Mount Kinabalu and native villages. Alternatively, one can also drive from Telipok Town via the radio and television station and lastly from Kiulu Town by pass Tombongon, Raganan and Talungan villages.



**Figure 2:** Location of Kasalagan Park

Source: <http://adventureculturalvillage.blogspot.com>

Kasalagan Park's strategic location provides atmosphere for outdoor enthusiasts to have adventures and challenging outdoor activities that still preserve the natural landscape. Apart from ice-breakers, group dynamics, flying fox and abseiling, the multi challenge activities are also stationed along ancestry trails via rivers and waterfall, a sure way to 'unleash' one's potentials. ACV also does trial to preferred activities prior to actual program for the better coordination, efficiency and effectiveness. In fact it is also very much encouraged for better

understanding of the overall operations, parties involved, safety management, disciplines and educational objectives. For teambuilding type of program, it consists of learning processes and debriefs. These activities are used as vehicle to demonstrate and learn about teamwork, communication, interaction, leadership, self-confidence and resilience in the hope to uplift, empower and encourage individual to face today's challenges with courage.

### **Adventure Cultural Village and natural resource conservation**

The main natural resources are land, freshwater and aqua resources. Adventure Cultural Village is a venture that appreciates and preserves nature. One of its noble intentions is to preserve natural resource in Kasalagan Park. ACV had planted quite a number of hardwood plants obtained from Sabah Foundation and also local fruit trees. At the same time, ACV also educates the community in and around Kasalagan Park the importance of conserving natural resources and the consequences of failure to do so. It had instilled the awareness of natural resource conservation among village folks. ACV monitors the activity of unnecessary act of cutting trees especially at the river bank and slopes to avoid landslides and erosion (Figure 3). At times due to natural occurrence, landslides and erosion do exist but they will be treated with local tradition that is by planting vegetation like bamboo at the sides for a better and greener environment.



**Figure 3:** Landslide at a slope in Kasalagan Park  
*Source:* <http://adventureculturalvillage.blogspot.com>

One of the most important natural resources in Kasalagan Park is freshwater resource and its contain. ACV adopted the approach of “Sistem Tagal” to protect river and conserve aqua life especially fish. This initiative is known as “Bawang Tinondukon Sungai Tagal”. It is an initiative instigated by ACV in partnering with Fisheries Department, the local community, Police Department and the Native Court. Bawang Tinondukon Sungai Tagal is divided into three main zones i.e red zone, yellow zone and green zone. Red zone is for breeding purposes and fishing is strictly prohibited. Yellow zone allows fishing activity once a year. While the green zone permits fishing activities on daily basis. Other than that, the Bawang Tinondukon Sungai Tagal initiative had restricted fishing to outsiders, prohibiting cutting of trees and vegetation along rivers and prohibition of rubbish dumping into rivers. Notices and signboards are fixed to indicate demarcations of zones.

### **Adventure Cultural Village and sustainable tourism**

Adventure Cultural Village saw the local community and idle land are two crucial assets in promoting nature-based tourism in rural areas. As claimed by Simpson (2009), sustainable tourism can help to provide livelihood benefits to local communities while protecting indigenous cultures and environments. Lee (2013) supported that community attachment and community involvement are precedents for sustainable tourism development. To date, ACV had tried its very best to keep very minimal modification to Kasalagan Park's natural

landscape to minimize impact to ecology. ACV had all along involve the local community in its effort promoting Kasalagan Park as nature-based and rural tourism spot and its operation, considering that it is very important to incorporate both strong commitment to nature and sense of social responsibility to create and satisfying hunger for nature (Western, Lindberg & Hawkins 1993). Thus, ACV ensures that all hiking and jungle trekking activities must utilize only ancestry trails and that no any new trail will be made. There are lots of attractions to nature lovers in Kasalagan Park like the river, waterfall and vegetation as shown in Figure 4. Most groups and guests enjoy dipping and swimming in the river. Kasalagan Park is situated near the Crocker Range. This is a bonus for ACV to organize expeditions and trekking on the Crocker Range. All expedition and trekking activities give the groups the opportunity to admiring the sceneries of green hills and mountains, the nature and environment in Kasalagan Park. They can also enjoy local food cooked by the local ladies and local fruits at the park.

Any waste derives of programs and activities conducted at Kasalagan Park are managed accordingly. All forms of paper waste, bottles and cans are sent to Kota Kinabalu City Hall (DBKK) recycling centres. While food waste is used as organic fertilizers to fruit trees, crops, vegetables and herbs planted in Kasalagan Park.

**Figure 4:** Nature, sceneries and activities in and around Kasalagan Park



Source: <http://adventureculturalvillage.blogspot.com>

**Adventure Cultural Village and development of society**

The presence of Adventure Cultural Village actually had provided livelihood benefits to local communities living in and around Kasalagan Park while protecting indigenous cultures and environment. This is in line with suggestion made by Hardy, Beeton & Pearson (2002) and Dorobantu & Nistoreanu (2012). They recommend that not only sustainable tourism should focus to environment and economic development aspect but focus should also be given to community involvement. ACV had created opportunity to various partners. It had provided opportunity for the local community to establish KKNSB. Various level of local community living in and around in Kasalagan Park participated in ACV operations. The ladies are engage to cook meals for program participants and groups, while the men are appointed to manage logistic matters and the youth are involved in conducting activities as facilitators. They get paid for their contribution. ACV in fact buys fresh vegetables, fish and poultries from the local communities. The village folks also offer their houses for lodging purposes to Kasalagan Park's guests. As so, other than getting their produces sold, they also get the chance to meet people and derive tangible benefits.

## CONCLUSION

It can be concluded that Adventure Cultural Village's operations in Kasalagan Park is in line with United Nations' call for sustainable development. Despite of the challenges to environmental protection and sustainable use of natural resource, ACV had responsibly promoting socio-economic development of host community while preserving and rehabilitating natural and cultural assets. It is hope that ACV's continuous efforts and initiatives will leads to biological diversity and ecological balance.

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# MALAYSIAN PRIMATE DIVERSITY FOR TOURISM ATTRACTION

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## ABSTRACT

The number of primates in Malaysia vary upon primatologists which about more than 20 species. Tropical rain forests of Borneo contains one species of the endangered Orang Utan (*Pongo pygmaeus*) with three different subspecies: *Pongo pygmaeus pygmaeus*, *Pongo pygmaeus morio*, *Pongo pygmaeus wurmbii*. In addition, Malaysian forests contain four lesser apes (*Hylobates lar*, *H. agilis*, *H. muelleri* and *Symphalangus syndactylus*), three cercopithecines (*Macaca fascicularis*, *M. nemestrina* and *M. arctoides*) and several colobine monkeys (*Nasalis larvatus*, *Presbytis* spp and *Trachypithecus* spp). Malaysia also has two types of prosimians, *Tarsius* and *Nycticebus*. Nowadays, tourists can appreciate and sight Malaysian primates in many ecotourism sites. Sepilok, Matang and Bukit Merah are well known for Orang Utan. Tawau Hill Park is the best place to observe Red Langurs. Many groups of Spectacled leaf monkeys can be seen in Langkawi Island. In addition, tourists can have a close contact with Silvered leaf monkeys in Bukit Malawati Kuala Selangor. Macaques can be easily encountered throughout Malay Peninsular even tourists are afraid to their aggressiveness.

Keywords: *Malaysian Primates, Ecotourism, Ape, Langur, Macaque*

## INTRODUCTION

The number of primates in Malaysia vary upon primatologists (**Brandon-Jones et al. 2004**). Tropical rain forests of Borneo contains one species of the endangered Orang Utan (*Pongo pygmaeus*) with three different subspecies: *Pongo pygmaeus pygmaeus*, *Pongo pygmaeus morio*, *Pongo pygmaeus wurmbii*). In addition, Malaysian forests contain four lesser apes (*Hylobates lar*, *H. agilis*, *H. muelleri* and *Symphalangus syndactylus*), three cercopithecines (*Macaca fascicularis*, *M. nemestrina* and *M. arctoides*) and several colobine monkeys (*Nasalis larvatus*, *Presbytis* spp and *Trachypithecus* spp). Malaysia also has two types of prosimians, *Tarsius* and *Nycticebus* (**Brandon-Jones et al. 2004**). Here, we described several tourism sites in Malaysia where tourists can experience observing primate closely. Sepilok and Semenggok are already well known places for tourists. Thus in this article we are just highlighted several sites that tourists might not familiar.

## Primates and Ecotourism in Malaysia

### Orang Utan Bukit Merah

The best site to observe Orang Utan in Malay Peninsular is in the Bukit Merah Oran Utan Island in Perak. The nearest town is Taiping, Perak and Buterworth, Penang. The Orang Utan Island or formerly known as Pulau Panjang covers an area of about 35 acres of dipterocarp forestland. The main goals of the Orang Utan Island are conservation, education, breeding, tourism and research.

The orang utans are housed in the indoor enclosure every evening until the next morning before they are released into the outdoor enclosure which is also the exhibit where orang utans are observed. In the exhibit, visitors go through a tunnel to look for the orang utans who roam freely within the exhibit. The tunnel gives visitors a safe way to observe the orang utans in their natural environment. The semi-wild condition encourages more natural behaviours of the orang utan that often lack in most zoos and recreational parks. All the orang utans on the island are of the Bornean subspecies.

Figure 1 : Bukit Merah Oran Utan Island



### Macaques

*Macaca fascicularis* mostly known as kera in Malaysia is the most successful non-primates in terms of distribution, biological and ecological adaptations. This species are distributed all over Peninsular Malaysia including its surrounding islands, Sabah and Sarawak. Although being labelled as pest species almost everywhere it is distributed, this species has proven its evolutionary process in surviving in a wide range of habitat and feeding on almost everything they can get their hands on (Abdul-Latiff et al. 2014).

Population of *M. fascicularis* distributed neighboring the human settlements has caused human-wildlife conflicts due to their feeding adaptations, but in some places like Penang Botanical Garden, Langkawi Island, Dayang Bunting Island and Gunung Keriang in Alor Setar this species has attracted local and foreign tourist. In these places, the aggressiveness of the species is far reduced especially due to abundance of foods provided by the incoming

tourist. However a small scale of conflict did occurs in these places involving physical violence towards humans (Md-Zain et al. 2014).

*Macaca nemestrina* is another species of macaque which are distributed in Peninsular Malaysia, Sabah and Sarawak and are often called as beruk by local people. Like *M. fascicularis*, this species is much more aggressive especially the adult females. There are no recorded data of this species occurring in tourism spots in Malaysia like *M. fascicularis*. However there are abundance of monkey school in Peninsular Malaysia that train this species to pluck coconut and other greens in exchange for wages, which have potential to be highlighted as tourist attraction. Beruk are trained to follow specific instructions by the owner to execute a specific command, and this command varies from school to school. The best sites to visit Monkey schools are Bachok (Kelantan), Selama (Perak) and Baling (Kedah). Lata Bayu located at Kg Asam Jawa in Baling, Kedah, whereby tourists can experience waterfall and also watching long-tailed macaques and visiting monkey school (Figure 3).

The marketability of *M. fascicularis* and *M. nemestrina* for tourism purposes is taken for granted by the local people and respective authorities. Due to their nuisances behaviour, both species are treated as pest and invader species by the people. Thailand for instance held Lop Buri Monkey Festival which ideally is the buffet party for thousands of macaques that live around the Khmer temple in Prang Sam Yot. The festival which are held annually has successfully attracted thousands of tourist to the temple to watch the joyous expression of the macaques during the buffet. This prove that by responsive and continuous management plan, macaque can be used as natural tourist attractions to Malaysia.

Figure 2: *M. fascicularis* and tourists at a) Gunung Keriang b) Pulau Dayang Bunting c) Telaga Tujuh, Langkawi d) Penang Botanical Garden



a



b





## Leaf Monkeys

Silvered leaf monkeys (*Trachypithecus cristatus*) are an important attraction at Bukit Melawati, Kuala Selangor, Malaysia. Bukit Melawati offers visitors an ideal glimpse of the behavior of free ranging habituated leaf monkeys from only a meter away, as does many other primate tourism sites worldwide. One unique attribute of silvered leaf monkeys at Bukit Melawati, Kuala Selangor, is that among the world's langur populations, they have experienced continuous habituation process and have been the subject of many findings from previous research. Bukit Melawati is a small hill park located in Kuala Selangor, Malaysia. People are attracted for its historical site, beautiful offshore scenery and the presence of free ranging habituated silver leaf monkeys. Social interactions between visitors and habituated silvered leaf monkeys at Bukit Melawati can be seen for almost everyday especially in the evening when visitors come to feed the monkeys (**Figure 4**).



**Figure 3:** *M. nemestrina* at Kg Asam Jawa monkey school and tourists at Lata Bayu waterfall



**Figure 4:** Silvered leaf monkeys of Bukit Melawati

*Trachypithecus obscurus* or also known as dusky leaf monkey or spectacled leaf monkey is a species under subfamily Colobinae. In Malaysia, *T. obscurus* is locally called *lutung mata putih* or *lutung bercelak* due to its unique white mascara patch over the eyes (Md-Zain and Ch'ng 2011). Individuals from *T. obscurus* have different pelage coloration in which on the top of their body the pelage is grey or black and their bottom body is usually darker than on top. For the face, it is dark grey with white around the eyes and over the top of the mouth.



The hair color on the stomach region is creamy white. Meanwhile, for the newborn of this species it has a bright orange pelage color all over its body with pink skin underneath.

In Langkawi Island, many groups of this species can easily be found. As we all know, Langkawi is home to many interesting fauna because it appears to be as low impact as possible and possess thickly forested hillsides as the habitat of this species. In the early morning, the main groups of this species will split up into smaller groups of less than 10 individuals which the visitor can easily see foraging in the lower branches of the forest canopy. At The Andaman in Langkawi, it is not hard to look for them as they often visit the resort for their favorite vegetation and young leaves. This species usually consumes fruit and young leaves because it contains a high proportion of the diet for them. Besides, in the late afternoon they also can be found at Gunung Mat Chinchang where the Langkawi Cable Car is situated. The spectacled leaf monkeys can also be seen in the main campus of Universiti Kebangsaan Malaysia and Gua Kelam, Perlis (Figure 5).



**Figure 5:** Spectacled leaf monkey

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# **DEVELOPING EFFICIENT WATER PRICE IN TERENGGANU, MALAYSIA: AN APPLICATION OF DOUBLE BOUNDED CONTINGENT VALUATION METHOD (CVM)**

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## **ABSTRACT**

Population growth is just one of many challenges facing water supply and resource management in Terengganu. The population is rising and driving demand for water and accelerate the degradation of water resources in the state. The total estimated population of Terengganu is around one million people in 2013 and is expected to increase up to two million by 2035. Water industry is just too costly in order to deliver the best to its consumers. Sufficient funding is required to implement various programs and not only left to water providers, who are already burdened by the less remunerative revenue derived from low water rates. The last water tariff reviewed in Terengganu was in 1997, about 17 years ago. At a fundamental level, the facts about good water management are tied to poverty reduction and improved human health. This study utilizes Contingent Valuation Method (CVM) to derive consumers' willingness to pay (WTP) for improved water services, and based on the WTP value obtained; the aggregate monetary benefits of improving water services for the consumers of Terengganu are estimated. This study will use Logit model in order to analyze primary data gathered during the survey. The findings offer policy recommendations to address the numerous, serious water issues faced by the state. The appropriate water tariff may help the water provider to overcome the problems/challenges in providing better services in the state.

*Keywords: Contingent Valuation Method, willingness to pay, water prices, Logit model, water demand*

## **INTRODUCTION**

Population growth is just one of many challenges facing water supply and resource management in Terengganu. The population is rising and driving demand for water and accelerate the degradation of water resources in the state. The total estimated population of Terengganu is around one million people in 2013 and is expected to increase up to two million by 2035.

Water industry is just too costly in order to deliver the best to its consumers. Sufficient funding is required to implement various programs and not only left to water providers, who are already burdened by the less remunerative revenue derived from low water rates. The last water tariff reviewed in Terengganu was in 1997, about 17 years ago.

At a fundamental level, the facts about good water management are tied to poverty reduction and improved human health. Previous research has indicated that an investment in basic water and sanitation offers the same benefit as an investment 7 to 15 times larger in medicine

(British Medical Journal, 2007). Changing in urban metabolism, through population growth, urbanization and climate change impacts requires the water profession and other key actors to rethink water management in cities. Given these issues, it is likely that the current problems of water services will increase in future unless they have very efficient strategy for expanding the water services is developed. Application of effective technologies and upgraded in services needs to be a key component in any strategy aimed at improving water services in developing countries. We need water systems that minimize the use of scarce natural resources, improve health, social equity and urban comfort, and develop resilience to climate change. Public always care about the environment and be aware of the adverse impacts of poor water management on it. They are not only concern about the bad impacts of pollution, but also those of hydrologic modification such as water withdrawals, dams and many more.

### **BACKGROUND OF STUDY**

Terengganu lies 400km east of Kuala Lumpur, Malaysia which is located in East Coast of Peninsular Malaysia. The state is one of the beautiful coastal states which include a number of marine parks such as Pulau Redang, Pulau Perhentian and Pulau Kapas. The state is divided into eight administrative districts of Setiu, Besut, Kuala Terengganu, Kuala Nerus, Hulu Terengganu, Marang, Dungun and Kemaman. Though, almost two thirds of the state falls under the jurisdiction of Lembaga Kemajuan Terengganu Tengah (KETENGAH) which is located to the west of the state and it is beyond the control of the state local authorities. Figure 1 depicts the map of Terengganu which includes 8 districts of the state.

**Figure 1:** Map the State of Terengganu



Source: Terengganu Tourism, 2014.

### **BACKGROUND OF WATER SERVICES IN TERENGGANU**

Currently the water supply service in the state is exclusively supplied by the sole provider which is Syarikat Air Terengganu Sdn. Bhd (SATU) and the water operator operates in all districts in the state. Their company's missions are to supply sufficient high quality of clean water and to improve the quality of services in order to fulfill consumer satisfaction. The main activity in its operation is to supply continuous water services to consumers. Other than that, the water company improves their services by repairing and increasing water supply

standard in the state. The company is accountable in preparing services that are more responsive and prioritize to consumers. Besides, their corporate visions are to support sustainable development, to concern and protect the environment, and to educate society about the importance of water conservation.

In 2012, the state was supplying water roughly 96% of the state's population. There are two main sources of water supply in Terengganu which are from river extraction and dams. About 440 million litres per day is direct extraction from river and 187 million litres per day is from storage dams in 2012 (Malaysian Water Association, 2013). SATU serves about 85.2% for domestic users and 14.8% for non-domestic users. Based on statistics from Malaysian Water Association (2013), it shows that about 99.1% in urban areas and 92.9% in rural areas get connected to water supply. There are still some cases where households still using alternative sources.

### **Problem Statement**

Assessing to clean drinking water is an essential of human needs. According to the International Water Association (IWA), about 4 billion people in the world are still live without reliable access to safe water supplies. Water is the most essential element to life on Earth. Water is needed for survival, used for a variety of purposes, such as for industry, domestic water supply, recreation, and many more. Malaysia is abundant with water resources which consist of surface and groundwater to fulfill consumer's necessities. In future, it is expected that there will be problems of water supply shortage due to rapid urbanization in the country. In the past, water was plentiful and sufficient for the size of the population, but now, water is becoming a rare commodity around the globe.

Broader population, urbanization and climate change makes water supply is insufficient to cater the demand. Water services complaints and interruptions rate slightly increases in Terengganu from 2011 to 2012. The disruptions in water services affect household, business and even commercial production in several ways which may result in huge losses. Presently, water tariffs seem too cheap and it is unable to generate enough revenue to cover the full cost of capital investment, operation and maintenance. The state ranked at 2<sup>nd</sup> place in 2012 which demonstrates lowest water prices for domestic water services in Malaysia (RM0.50 applies for first 30m<sup>3</sup>). Cheaper water prices will limit implementation of infrastructure projects to upgrade facilities and it implies low value of water, though the sources are valuable and insufficient.

### **LITERATURE REVIEW**

The Contingent Valuation Method (CVM) is a broadly used non-market valuation particularly in the field of environmental cost benefit analysis and environmental impact assessment (Venkatachalam, 2004). CVM has been extensively used in many previous WTP studies in the water industry such as Raje, Dhobe and Deshpande (2002), McPhail (1993), Shultz and Soliz (2007), and many more. A good CVM is intended to be realistic for respondents to interpret the "hypothetical" choice seriously (Whittington, 1998). The CVM obtains values which are contingent on the level of information by the respondents, and the extent of information provided by the survey (Wang et al., 2009). The vital part of CVM is when it creates a realistic contingent valuation scenario which precisely states the options of water supply price that will subsequently reveal the levels of prices the water supplier can charge to provide the service. Economists use CVM which depends on hypothetical conditions when the data are unavailable or unreliable (Callan and Thomas, 1996).

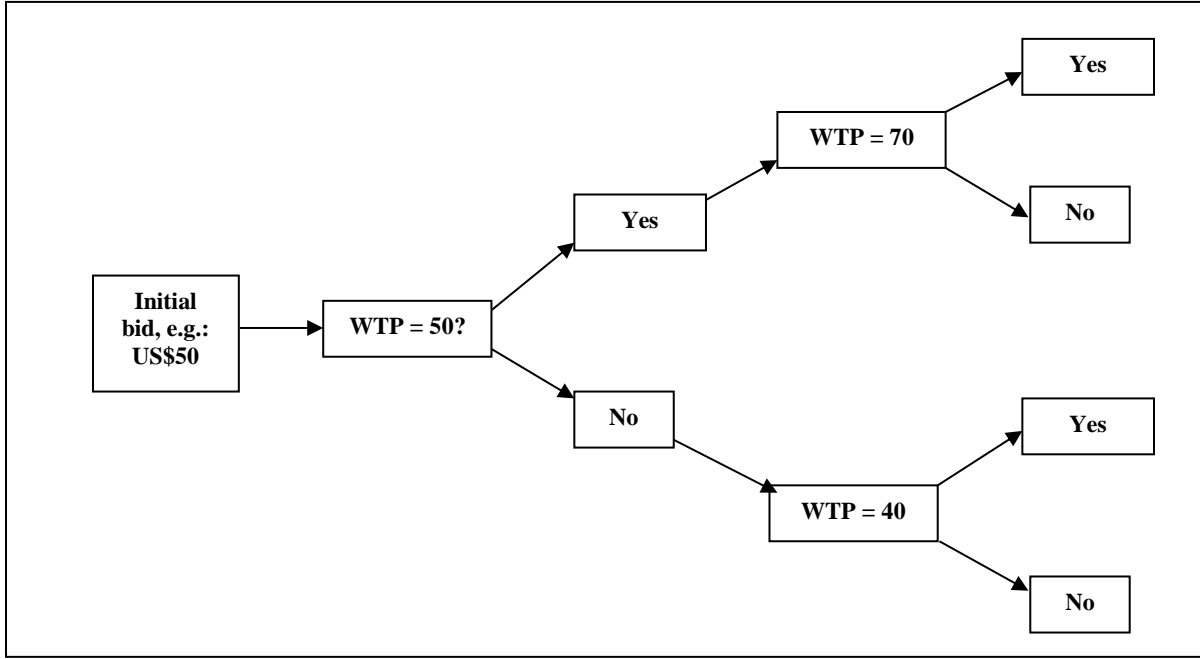
## **CONSUMER WILLINGNESS TO PAY (WTP)**

The willingness to pay (WTP) is a method to determine the price of a good when a market does not exist and therefore the price is unknown. Most environmental goods, such as clean air and water, landscape, diverse flora and fauna, and many more are not traded in the markets. These natural resources are precious and have significant function in the ecosystems. It is difficult to value these environmental goods since they are unpriced and consumption of the goods has ‘public goods’ characteristics. Hence, a complete and accurate economic valuation of natural resources, particularly non-marketable goods is needed. Many countries, states and cities have used the WTP for water services in determining water prices. WTP describes the highest amount consumers are willing to give up for certain benefits in exchange for others, sooner than without having it. WTP usually refers to the value of a good to an individual as what they are willing to pay, sacrifice or exchange for it. According to the law of demand, the lower the price of a good, the larger the quantity consumers wish to pay (Browning and Zupan, 2004). The demand curve is based on the basis that the lower the price, the more people will be willing to pay and obtain it. Most studies demonstrate that individual’s WTP differs according to their profile such as income, age, household size, demographic aspects, and many more.

## **RESEARCH METHODOLOGY**

In contrast to other previous papers which determine WTP by using a single bounded CVM approach, this paper uses another measure followed by double-bounded CVM approach. In this study the CVM approach uses closed-ended format to estimate WTP. The conventional dichotomous choice CVM can be more efficient in improving the method. It improves efficiency of the estimated variables of WTP (Hanemann *et al.*, 1991). Respondents can be asked again and followed up by second rounds of bidding with additional proposed bids. This approach is first proposed by Hanemann (1985) and it is well known as “double-bounded” CVM. This approach involves respondents to answer the first bid and continue to the second bid with a new proposed bid amount which depends on “yes” or “no” responses in the first round. Flachaire and Hollard (2005) mention that this approach consists of starting point bias since respondent responses on second bid may be influenced by the first proposed bid. This method can create inconsistency between answers on second and first bids. The bias may arise because the subject’s value is weakly defined and not clearly noticed by respondents.

Question in this method may begin with “*Are you willing to pay RMxx for domestic water services improvement so that you can enjoy higher water services in the future?*” If respondents state “yes” on the first bid, the second proposed bid will be revised upward and higher. If they response “no” on the first bid, the second proposed bid will be revised to smaller amount. Consequently, double-bounded CVM may generate four possible results such as “yes/yes”, “yes/no”, “no/yes” and “no/no”. An example of double-bounded dichotomous choice CVM (Figure 2) is as below:



**Figure 2:** Example of “Double-Bounded” Dichotomous Choice CVM

Kanninen and Khawaja (1995) assert that the mathematics of the double-bounded CVM is a straightforward extension of the single-bounded CVM model. Model formulation for double-bounded CVM closely followed Hanemann *et al.*, (1991). The second bids produce outcomes which are  $Pr_i^{YY}$ ,  $Pr_i^{NN}$ ,  $Pr_i^{YN}$  and  $Pr_i^{NY}$ . The probabilities of responses to both the initial and the follow-up WTP questions are given by;

$$Pr_i^{YY} (1^{st} \text{ BID, HBID}) = \text{Prob} \{ 1^{st} \text{ BID} \leq WTP_{\max} \text{ and HBID} \leq WTP_{\max} \} \quad (1.1)$$

$$Pr_i^{NN} (1^{st} \text{ BID, LBID}) = \text{Prob} \{ 1^{st} \text{ BID} > WTP_{\max} \text{ and LBID} > WTP_{\max} \} \quad (1.2)$$

$$Pr_i^{YN} (1^{st} \text{ BID, HBID}) = \text{Prob} \{ 1^{st} \text{ BID} \leq WTP_{\max} \leq \text{HBID} \} \quad (1.3)$$

$$Pr_i^{NY} (1^{st} \text{ BID, LBID}) = \text{Prob} \{ 1^{st} \text{ BID} \geq WTP_{\max} \geq \text{LBID} \} \quad (1.4)$$

The above equations explain that if respondent responses “yes” to the first bid (1<sup>st</sup> BID) and the second bid signifies higher bid (HBID) than the initial bid is 1<sup>st</sup> BID < HBID. If respondent answers “no” to the initial bid, the second bid is lower (LBID) than the initial bid, 1<sup>st</sup> BID > LBID. In addition, the probabilities for the dichotomous choice double bounded CVM for logit model in this study are as follows;

$$Pr_i^{YY} = [1 + e^{-(\alpha + \beta \text{HBID})}]^{-1} \quad (1.5)$$

$$Pr_i^{NN} = 1 - [1 + e^{-(\alpha + \beta \text{LBID})}]^{-1} \quad (1.6)$$

$$Pr_i^{YN} = [1 + e^{-(\alpha + \beta \text{HBID})}]^{-1} - [1 + e^{-(\alpha + \beta \text{1stBID})}]^{-1} \quad (1.7)$$

$$Pr_i^{NY} = [1 + e^{-(\alpha + \beta \text{1stBID})}]^{-1} - [1 + e^{-(\alpha + \beta \text{LBID})}]^{-1} \quad (1.8)$$

This study also applies the log-likelihood function for double bounded CVM that has four parts which is given as below;

$$\ln L^{\text{DCVM}} = \sum_{i=1}^N \{ c_i^{yy} \ln Pr_i^{YY} + c_i^{nn} \ln Pr_i^{NN} + c_i^{yn} \ln Pr_i^{YN} + c_i^{ny} \ln Pr_i^{NY} \} \quad (1.9)$$

### **Sampling Technique**

A stated preference technique is used to investigate issues on WTP. Thus, this study conducts the surveys by using Contingent Valuation Method (CVM) in order to determine willingness to pay for improved domestic water services for a sample of households in Kelantan. The CVM involves a structured questionnaire of consumer's WTP at specified prices in a hypothetical situation. Respondents will be given a set of questionnaire with situations that ask how much they are willing to pay for improvement in the domestic water services. The amount that respondents would be willing to pay depends on how strong they feel about the improvement in that program. The sampling that will be used is the domestic users of water supply in Terengganu; who have registered active accounts with SATU. Besides, the targeted respondent is the head of household since they are accountable for monthly water bill and we would like to know their contribution and WTP regarding to services. We will tell them that the study will help the water industry and in the end the water company will understand consumers' expectations regarding improvement in water services. This study uses stratified random sampling since the survey sample is from a broad population and it is problematic to identify every member in the population in the state. Thus, this study will stratify the sampling according to the districts (rural and urban areas).

### **CONCLUSION AND FUTURE RECOMMENDATION**

It is important to determine consumer's willingness to pay and how many percent increases that they are willing to contribute for better transformation in water services. Thus, study on economic valuation on water service is needed in order to develop management policies and enhance the contribution for sustainable development in water services in Terengganu. The valuations used in the study can convince the government to allocate more investment, resources and financial aids to the industry. The highlighted policies will benefit those involved in the industry such as policy makers, water companies and consumers. From policy maker's perspectives, new suggested equitable water prices will give advantages to the consumers and it will help the water industry's development. Hence, both sides (producer and consumer) can enjoy the interests in positive ways. At least, by revising water tariff will help the water operator to finance their sustainable water management. Water is a resource to be managed and a source of services that come at a cost. Even for countries that charge for water, tariffs are not always revised. By increasing the prices, it will lead to economic effectiveness of water utilization among consumers. Consumers need to be educated about the specific value and benefits that they would get if the services are improved. The money that households allocate to improve water services will benefit their health and economic development for the broader community.

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# REDEVELOPMENT IMPACT ON THE LOCAL COMMUNITY OF FRASER'S HILL IN PAHANG

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## Abstract

Fraser's Hill, a popular eco-tourism based highland hill resorts in Peninsular Malaysia, is located at the Pahang-Selangor borderline. For a number of reasons it has become an important biological and ecological site. The aim of this paper is to analyze the impact of redevelopment on the quality of life of the local community at Fraser's Hill, Pahang. This study used descriptive draw the inferences. A total of 60 respondents comprising on-site visitors and residents were randomly selected for getting the primary data through interviews at this study area. The findings show that some redevelopment enterprises has to a limited extent reduced the breakable eco-system. There is also a lack of community well-being in ecotourism activities within Fraser's Hill. Above all, the redevelopment of Fraser's Hill is clearly applicable, nonetheless, the community people's understanding about the redevelopment is very diminutive. Comprehensive efforts should be taken for the local community welfare as they could partake in activities that are associated with highland eco-tourism destination.

**Keywords:** *Development, Eco-Tourism, Local Community, Well-Being, Fraser's Hill*

## INTRODUCTION

Tourism denotes travelling to natural areas for learning, appreciating and getting pleasure from the wild life and the scenic beauty of a certain place, as well as from other existing cultural and historical heritage. Archaeological sites and places of historical importance, religious sites, nature preserve, parks, hill resorts and sea beaches, and many other similar places are considered to be popular tourist destinations. A typical service industry, multi-faceted in nature, tourism industry caters a plethora of activities including transportation, accommodation, restaurant businesses, retail shops, entertainment businesses, and fun activities, different travel oriented facilities and other hospitality services offered for both individual travelers and people travelling in groups. (Bhargava, 2009).

As a development strategy, the tourism sector has achieved significant earnings and provided substantial contribution to the local and national economy for many countries. Not surprisingly, it is identified as one of the largest and fastest growing industries in the world. (Miller, 1990; Hunter, 1995; McMinn, 1997). A 'critical component' in several developed and developing countries' national economy impacting on the local, regional and national economy, with important contribution in creating employment opportunities, GDP growth and foreign exchange earnings. Not merely for developing countries, tourism has turned out to be one of the very important sources of earnings for the developed countries where it has already created substantial foundation for tourism based economy, for example in countries like Singapore, Maldives and Malaysia of which the total contribution of Travel & Tourism to GDP in 2011 is 8.2%, 70.5%, 15% respectively.

Natural splendor couple with historical heritage turns Fraser Hill a unique place for the highland holiday getaway. The recent Fraser Hill's attractions include: the Pine Tree Hill,

Abu Suradi, Kinderley, Maxwell, Rompin, Bishop and Mager. Bird watching, Jeriau Waterfall, Allan Water and Paddock, Wildlife Reserve are some of the prominent natural attractions. On the basis of the above mentioned features of Fraser's Hill, it is classified as a typical eco-tourism destination and becomes a part of the Hutan Simpan Ulu Tranum and Hutan Simpan Batu Talam (Raub District Local Plan 2003-2015). This study attempts to understand the impact of redevelopment on the quality of life of the community surrounding Fraser's hill. Here the term 'Quality of Life' is a highly subjective measure of happiness that play a role in financial security, job satisfaction, family life, health and safety matters.

Fraser's Hill, one of the most popular highland tourist destinations in Malaysia, occupies an area of around 28 square kilometers. It is situated in Pahang, between 1,000 to 1,524 meters above the sea level and a slightly north to the Genting Highlands. (Choy & Lazim, 2014). Calm, cool and peaceful mountain air and highly rich varieties of vegetation are at the core of its beauty that has made a safe heaven for bird species which attract birdwatchers from around the world. Other fascinating attractions however are no less charming that add to the existing beauty, tranquility of the hill and entertain the visitors. These include: trails in the jungle, abundant flora, waterfalls, and a huge golf course along with a stable for riding. Playground for children and a rink for roller skating. Depending on taste and budget, Fraser's hill offers a wide array of accommodation facilities in star rated hotels, chalets and colonial bungalows. Just 1.5 hours' drive is the resort from Kuala Lumpur. Therefore, to improve the quality of highland tourism at Fraser's Hill in Malaysia, there is a need to study about the impact of redevelopment on the quality of life of the local community.

## **DATA AND METHODOLOGY**

The study used primary data that were collected from Fraser's Hill in Pahang state of Malaysia. The data of the study were collected from a questionnaire survey and interviews on 60 on-site visitors and local residents. Their views allow an assessment made for the prospects of eco-tourism development in Fraser Hill. All the information gathered were analyzed using a qualitative approach. The non-probability convenience sampling technique was used for this study. The survey was carried out from September to October 2014. This study used descriptive statistics to draw the interpretations.

## **FINDINGS AND DISCUSSION**

### **Demographic profile of the respondents**

There is a difference in terms of gender and marital status among the respondents: female (56.7%) which were higher than male (43.3%), on the other hand 53.3% were married and rest were single (46.7%) (Table 1). In terms of age range, most of the respondents were categorized within the 20 to 29 years age group followed by the 30 to 39 years age group. Around 76.7% of the tourists were Malay, 13.3% were Indian and the rest comprised of different ethnic and national backgrounds. Most of the respondents were also Muslim. The majority of the respondents were government (46.70%) service holder, around 50% of them passed high school level, and 18.30% Diploma/Degree and 25% completed their Bachelor / Master. Around 45.00% of the families comprised of 3-4 members while around 33.40% of the families consisted below 2 people. The income of most of the respondents were between RM 1000-2000 (around USD \$300-\$600). Among the respondents, 56.70% were permanent residents and rest stay on temporary basis (43.30%).

**Table 1: Demographic profile of the respondents**

Gender	Male (43.3)	Female (56.7)			
Age	20-29 (50.00)	30-39 (35.00)	40-49 (10.00)	50-59 (5.00)	
Ethnicity	Malay (76.70)	Indian (13.30)	Others (10.00)		
Religion	Islam (81.70)	Hindu (18.30)			
Marital Status	Married (53.30)	Single (46.70)			
Occupation	Self Employed (15.00)	Government (46.70)	Private (33.30)	Others (5.00)	
Income (RM/ monthly)	Below 1000 (13.30)	1001-2000 (26.70)	2001-3000 (25.00)	3001-4000 (16.70)	4001+ (18.30)
Education	Primary school (3.30)	High school (50.00)	STPM (3.30)	Diploma/Degree (18.30)	Bachelor / Master (25.00)
Residence Type	Permanent (56.70)	Temporary (43.30)			
Number of Households	Below 2 (33.40)	3-4 (45.00)	5-6 (11.60)	7 (5.00)	8< (5.00)
Type of Locality	Residential Area (18.30)	Flats/Quarters/Dormitory (81.70)			

Percentage are given in the parenthesis

Source: Survey from the Fraser Hill 2014

### Well-Being of the Local Community

Involvement (46.7%) in the project and activity of the redevelopment process in Fraser's Hill when it was carried out was shown in Table 2. Furthermore, the community people have got the opportunity to involve in the tourism activity (60%). They are interested to involve in a business or enterprise (65%). Only 35% agrees with the statement that the business or enterprise carried out by the capital of local community. In reality, after redevelopment, job opportunities in Fraser's Hill has increased (53.3%) and most of the job opportunities are based on the high land eco-tourism sector (73.3%). This redevelopment efforts have been carried out to transform and to improve of the local economy (96.6%) and standard of living in the community (86.6%). It promotes the sharing of profit from the community project (75%), incurring side income by selling handicrafts, fruits and others (83.3%) and local community people have their own house ownership (61.7%). Among the community people

15% people want to work with government project and 33.3% are willing to involve with enterprise or business.

**Table 2: Economic Impact**

<b>Economic Issues</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Me an</b>	<b>SD</b>
Involved of the redevelopment project	5 (8.3)	7 (11.7)	20 (33.3)	25 (41.7)	3 (5.00)	3.23	1.0 15
Involvement in the tourism activity	3 (5.0)	7 (11.7)	14 (23.3)	30 (50.0)	6 (10.00)	3.48	1.0 0
Involvement in the business	3 (5.0)	3 (5.0)	15 (25.0)	21 (35.0)	18 (30.0)	3.80	1.0 86
Business sponsored by the local community	3 (5.0)	11 (18.3)	25 (41.7)	18 (30.0)	3 (5.0)	3.12	0.9 40
Increasing job opportunities after the development	4 (6.7)	8 (13.3)	16 (26.7)	23 (38.3)	9 (15.0)	3.42	1.1 09
Priority in the eco-tourism sector	5 (8.3)	0 (0.0)	11 (18.3)	39 (65.0)	5 (8.3)	3.73	0.7 33
Develop the local economy	0 (0.0)	0 (0.0)	2 (3.0)	44 (73.3)	14 (23.3)	4.20	0.4 80
Raised the standard of living	2 (3.3)	3 (5.0)	3 (5.0)	41 (68.3)	11 (18.3)	3.93	0.8 61
Sharing of profit	3 (5.0)	6 (10.0)	6 (10.0)	36 (60.0)	9 (15.0)	3.70	1.0 13
opportunities for earning a side income	3 (5.0)	0 (0.0)	7 (11.7)	38 (63.3)	12 (20.0)	3.93	0.8 80
Sufficient income for household expenses	4 (6.7)	18 (30.0)	2 (3.3)	25 (41.7)	11 (18.3)	3.35	1.2 73
Need more side income	2 (3.3)	0 (0.0)	5 (8.3)	39 (65.0)	14 (23.3)	4.05	0.7 90
Opportunity to get a side income from eco-tourism	2 (3.3)	0 (0.0)	5 (8.3)	36 (60.0)	17 (28.3)		
House ownership	14 (23.3)	6 (10.0)	3 (5.0)	34 (56.7)	3 (5.0)		

Note: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree

Percentage are in the parenthesis

Source: Survey from the Fraser's Hill 2014

### **Social facilities that are provided in Fraser's Hill**

According to the respondents they have school (78.3%), playground (68.3%), golf course (81.7%), recreational parks, e.g., strawberry park, flower garden, etc. (55%). Besides, horse farm (58.3%), car parks (95.0%), public toilets (91.7%), and rest areas (88.3), food court/food stall (78.3%), other rest facility and public amenities are also available.

On the other hand they don't have any community hall (63.3), building or activity room (80%), community center (85%), resource/computer center (83.3%), tennis court (51.7%), sport complex (68.3%), swimming pool (95.0%), skating rink (96.7), bus/taxi stands (83.3), main drainage facilities (86.7%), The respondents say that the redevelopment only focuses its

benefit (80%) for tourist and rest of (20%) for local people. If local community faces any problem, they usually consulted with police (83%) or local community people (6.7%). In terms of the social aspects, table 4 the involvement of the local community is significant (91.6%), prioritize communities projects (91.6%), Community people are involved for planning (83.3%), tolerance level among the local residents (85%), Unemployment has declined by the redevelopment (74%). Among the respondent 43.4% agreed that the social problems increased (e.g. crime, theft) by the tourists, while 56.6 do not think this is true.

**Table 3: Impacts on Social Aspect**

Social Issues						Mea	SD
	1	2	3	4	5	n	
Involvement of the local community	3 (5.00)	2 (3.3)	0 (0.00)	35 (58.3)	20 (33.3)	.124	0.95 8
Prioritize Projects	3 (5.00)	2 (3.3)	0 (0.00)	35 (58.3)	20 (33.3)	.124	0.95 8
Community involvement on planning	5 (8.3)	0 (0.00)	5 (8.3)	27 (45.0)	23 (38.3)	.143	1.11 1
tolerance among the local residents	3 (5.0)	2 (3.3)	4 (6.7)	30 (50.0)	21 (35.0)	.130	1.00 6
Unemployment reduction process	3 (0.41)	0 (0.00)	9 (4.35)	23 (25.85)	25 (48.16)	.130	1.01 0
Increased social problems (eg. crime, theft) by the tourists	20 (33.3)	8 (13.3)	6 (10.0)	16 (26.7)	10 (16.7)	.200	1.54 9

Note: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree

Percentage are in the parenthesis

Source: Survey from the Fraser's Hill 2014

## CONCLUSION

Tourism is the second largest economic sector in Malaysia. The study confirms that development of certain guidelines would promote the prospects of ecotourism. Mainly three features have enhanced the prospects of Fraser's Hill as a more promising eco-tourist spot. Furthermore, integrating the local stakeholders with every aspect of tourism has also been underscored. Finally, sustainability issues related to tourism/ecotourism should be at the core of all the potential initiatives to be undertaker for development of tourism business in Fraser's Hill. Each year many tourists come and visit the highland tourist destinations and attractions in Malaysia. This study found that several factors from the economic, environmental, cultural and community constructs play important roles in attracting tourists at Fraser's Hill.

## ACKNOWLEDGEMENT

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# TOURISM

# **ENVIRONMENTAL CONSIDERATIONS INTO ECO-LODGES DESIGN IN NAJRAN PROVINCE, THE KINGDOM OF SAUDI ARABIA**

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## **Abstract**

Ecotourism is considered one of the tourism patterns contributing to the achievement of sustainable tourism development concept since it plays a role in fulfilling economic and social benefits for local communities and raising awareness of the environment preservation importance. The Eco-lodge is a form of ecotourism pattern representing one of the ecotourism products and being a place for tourism stay, achieving complete tourism experiences for tourists and presenting tourism as an awareness and educational process in cooperation with the local community. Studying the relation among environmental attributes (natural, social, urban, architectural) and designing eco-lodges represent the focus of this study constituting a basis on which the architectural feature of eco-lodge projects is formulated. Hence, the integration and harmony with the surrounding environment and local culture and traditions will be ensured representing a focal point of eco-lodge projects designs. Najran Province, in the south of the Kingdom of Saudi Arabia (KSA), was the case study of experimenting the relation among different environmental considerations and built and architectural feature of eco-lodges in the Province.

*Key Words: Ecotourism, local architecture, Eco- lodge, sustainability*

## **INTRODUCTION**

The tourism patterns range between civilization, cultural, natural, agricultural, and environmental patters. The ecotourism is one of the most prominent patterns that has witnessed a high growth within the last decades. That was a result of the increased awareness of environment preservation amongst local communities and tourists in addition to the role that ecotourism plays in achieving sustainability (Khalid, 2002; Beaumont, 2001; Dabour, 2003; Wood, 2003; Ross and Wall, 2004; Himberg, 2004). The eco-lodges are the most prominent tourism attractions in ecotourism pattern beside to the natural and cultural potentials and the local communities' customs and traditions. Such tourism products provide a complete tourism experience for the tourist, taking into account how important for those lodges to harmonize with the surrounding area (Bottrill and Pearce, 1995; Hawking et al, 1995; Metha, 2002; SCTA, 2005). The Kingdom possess a rich cultural and natural legacy distributed to thirteen administrative provinces, each of which has its own topography, social life, customs, and traditions (Al-Sulbi, 2010). Najran Province, in the south of the KSA, is considered one of those provinces that has a wide variety of environmental, built, and social attributes. Therefore, this research aims to study the relation between the different environmental considerations and their impacts on the architectural design of eco-lodge projects in Najran Province. Also, it is intended to present some technical guidelines of eco-lodge design in conformity with the surrounding area and local identity of Najran Province.



## **RESEARCH METHODOLOGY**

The study has relied in its methodology on the theoretical aspect through examining the intellectual, scientific, and practical concepts, which were derived from international and regional researches and studies concerning the relation between different environmental considerations and eco-lodge designs. Therefore, the facts and considerations will be reached and used in understanding the relation between the different environmental factors and eco-lodge projects in Najran Province. The practical aspect of such study focuses on field visits to Najran Province so as to study the built and architectural vocabulary of eco-lodges and the relation between different ecological conditions (natural, social, architectural) and forming the vocabulary architectural style. As a result, an intellectual and practical framework will be reached presenting the architectural solutions used to improve the residential environment and preserve the Province's built and architectural identity. In addition, this practical framework would improve eco-lodge designs in Najran Province as a model that can be applied to any province similar to Najran by having the same different environmental considerations.

### **Built and Architectural Vocabulary of Eco-lodges in Najran Province**

This part will focus in details on the built and architectural vocabulary of the existing eco-lodges in Najran. The study of such vocabulary is the cornerstone of architectural planning and designing processes related to eco-lodge projects. Understanding the heritage, cultural, climatic, and social vocabulary in Najran is considered a basic step in establishing such projects - whether new eco-lodges or restoration and rehabilitation projects such as those implemented in built heritage sites. Below is an overview and analysis of the built and architectural vocabulary of the eco-lodges in Najran Province:

### **Built and Architectural Vocabulary of Eco-lodges in Najran Province**

The environmental, social, and security factors have clearly affected the diversity of traditional architecture in Najran Province. The variety of topography, climatic factors, and soil types has led to a wide range of architectural styles – whether in planning villages or designing buildings and building materials. Below is a summary of the built and architectural characteristics of eco-lodges in Najran Province.

#### **Built Characteristics in Najran Province**

- Built Fabric (structure)

Built Fabric in Najran Province includes the scattered pattern, which is formed as a result of the Province topography. The buildings of this type seem like forts that aim to fulfill security purposes as well as providing privacy suitable for Najran's customs and traditions. This building pattern is widespread in Aba Al-Saud Historic Area, Najran Province. Shapes of Traditional Buildings in Najran Province are distinguished for tall building pattern. The buildings here consist of 2-7 floors, in some cases, according to the social status of the family. Such buildings are called "Al-Doroub" (plural of Al-Darb). This mud building (Al-Darb) has usually a rectangular shape with a high altitude and it gets narrower from all sides when heading up that its base is wider than its top. Al-Darb (figure 1) is consisted of the ground floor that contains entrance and warehouse for storing forage.



**Figure 1:** example of scattered pattern in Najran province  
**Source:** researcher (2014)

The reason for using this pattern of buildings is to reduce the built area to avoid occupying a large area of the agricultural land, because of its prestige among the Najran communities being as a legacy inherited from fathers and grandfathers. The environmental circumstances play a role in the building direction in Najran Province. The buildings might be directed towards the northeast or the southwest side according to the wind direction in the Province throughout the year. Many small openings are made in the buildings' facades in order to increase ventilation in the mud houses.

#### The Architectural Characteristics of Eco-lodges in Najran Province

The most distinctive architectural characteristic of eco-lodges in Najran is having a set of architectural fundamentals that are strongly linked to traditional architecture. The authentic fundamentals were a result of the creative traditional imagination that serves the life and environment, for example, the traditional architecture is connected with the environment materials that proved to be flexible and harmonized with the surrounding area.

- **Building Materials:**

- ❖ The buildings in Najran are constructed by using mud as a basic material. The water and soft straw are added to the mud and mixed by feet on-site. This mixture is used in building walls (Midmak). The mud is taken into bulks and given to the constructor by the worker, who is called "Al-Mulaggif", the mud masses are lined next to each other to form a complete wall (Midmak). The thickness of Midmak (figure 2) ranges between 40 and 60 cm.



**Figure 2:** Midmak in mud houses in Najran  
**Source:** researcher (2014)

- Building Methods
  - ❖ **Digging Foundations:** they are dug at 50-150 cm deep as per the land solidity. Then, they are constructed above the surface to provide strength and protection for the wall against the rainfall impacts.
  - ❖ **Discharging Rainwater:** the rainwater is discharged from the top of the roof into wooden Mazareeb (pipes) fixed on the walls. Sometimes, the houses with no roof have a discharge vertical channel built in the wall.
  - ❖ **Ceilings:** the house ceiling is built of wooden beams made of rush plants and palm fronds. The beams are lined next to each other horizontally on the edges of walls in an arranged way.
  - ❖ **Pillars and Corners:** they consist of stone masses lined above each other and connected by gypsum. The pillar stones are chosen with intensive care and most of them are cylindrical.

- **The Architectural Style in Najran Province**

The traditional buildings show aesthetic elements that distinguish the architectural style in Najran Province. The creative works of the artisans are seen in the construction, architectural details, and precise decorations – whether on the buildings’ facades or inner walls of the house. Here are some examples of such aesthetic elements:

- Al-Sharaneef (figure 3)

It is the popular name of the aesthetic elements that are usually found above the roofs. Al-Sharaneef is a structure made of adobe bricks arranged in an organized way on the roof’s perimeter. Such structure also used as a partition (in the modern building concept) and it takes different shapes depending on the design and surrounding area. Al-Sharaneef, in addition to its aesthetic dimension, provides privacy for the households in Najran.



**Figure 3:** Al-Sharaneef in mud houses in Najran  
Source: *researcher (2014)*

- Al-Bawasheer

It is an additional source of lighting. It is located at the last third of the room' wall from the top. It is usually open without any cover.

- Al-Qamariyat

They are crystal windows with bright colors creating a calm and peaceful atmosphere in the reception rooms. Beside the light they provide, they are as high as Al-Bawasheer.

- Windows and Doors

The windows are about half meter high above the room floor. They are made of wood and consisted of two pieces of wood so as to be opened and closed easily. The window size is 40 cm x 70 cm. This window is made by hand, and inner screen is fixed to such window to prevent insects from entering the house. A white outside frame is fixed around the windows and Al-Qamariyat in addition to another separate frame fixed around Al-Bawasheer. The doors are made of wood that is obtained from the local environment.

## **CONCLUSION**

Through studying the built and architectural vocabulary of eco-lodges in Najran, we can realize the strong relation between the built pattern and the different environmental attributes. For example, the certain environmental conditions have made Najran locals adapt with them. This is obvious in the building pattern and the used materials, which are obtained from the environment and endure different weather conditions. Moreover, the buildings were constructed as per the wind direction throughout the year in order to benefit from the natural ventilation. The social characteristics have played a role in forming the build environment in Najran Province. This can be seen via the traditional building style that shows the house as if it is a closed castle with many high small openings in order to provide privacy for the household in a manner suitable for dominant customs and traditions. The high construction pattern (about seven storeys) provides security dimension in addition to preserving the agricultural land and avoid using large areas of it, for, the land is highly important for Najran community. The built and architectural attributes of eco-lodges include a set of architectural fundamentals strongly linked to traditional architecture. The authentic fundamentals were a result of the creative traditional imagination that serves the life and environment, for example, the traditional architecture is connected with the environment materials that proved to be flexible and harmonized with the surrounding area. The architectural fundamentals as well as the environmental and social attributes must be taken into account when designing eco-lodge projects as a basic step for such projects –whether new eco-lodges or restoration and rehabilitation projects such as those implemented in heritage sites and other mud houses.

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# DOES SHADOW ECONOMY MATTERS FOR TOURISM? INTERNATIONAL EVIDENCE

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## Abstract

Tourism has been an important sector by contributing government revenues, national income, foreign exchange earnings as well as provides job and business opportunities for many nations. In 2013, international tourist arrivals reached a record 1.1 billion arrivals worldwide, with USD1.2 billion in international tourism receipts. At the same time, the shadow economy in the tourism sector also flourishes. In the European countries, Schneider reported that 20 to 25 percent of the shadow economy is represented in the tourism-related industries – wholesale and retail, automotive and motorcycle sales and maintenance; transportation, storage and communications; and hotels and restaurants. Services given by these operators (unregistered and/or underreporting) will ultimately wiped off the map of high quality tourist destinations and destroyed the development of the tourism industry itself. This study examines the short-run and long-run dynamics between international tourists' arrival and shadow economy for 141 countries over the period 1995-2008. We use an error-correction model (ECM) in combination with a system Generalized Method of Moments (GMM) to explore the long-run relationship between these two variables. Our results suggest that tourists' arrival and shadow economy are cointegrated. The long-run coefficients indicate a negative impact of the shadow economy on the tourism sector. This implies that shadow economy matters for the tourism industry worldwide.

Keywords: *Tourism, Shadow economy, Governance, Error-correction, System GMM*

## INTRODUCTION

It has been recognized that the tourism sector can be an important driver of economic growth by contributing foreign exchange earnings, increasing wealth and provides employment and business opportunities for the communities. The tourism industry can also play a leading role in the alleviation of poverty particularly in the developing economies. In 2013, the tourism sector, in terms of international tourist arrivals have reached a record 1.1 billion arrivals worldwide, with USD1.2 billion in international tourism receipts. International tourism receipts are the earnings generated in destination countries from expenditure on accommodation, food and drink, local transport, entertainment, shopping and other services and goods. Europe share the largest number of international tourist arrival (563.4 million) followed by Asia and the Pacific (248.1 million), the Americas (167.9 million), Africa (55.8 million) and the Middle East (51.6 million). In terms of growth, the Asia and the Pacific recorded a 6 percent increase in international tourist arrivals, followed by Europe and Africa (5.4 percent), and the Americas (3.2 percent). On the other hand, the Asia and the Pacific region (+8 percent) recorded the largest increase in international tourism receipts, followed

by the Americas (+6 percent) and Europe (+4 percent). However, for the year 2013, the Middle Eastern countries experienced a decrease in both international tourist arrivals (-0.2 percent) and international tourism receipts (-1.9 percent) (WTO, 2014).

The number of tourist arrivals has been linked to the level of safety of the destination countries. It has been pointed out that the developing countries and particularly the least developed countries suffers from law and order problem and therefore a risk to potential tourists (Levantis and Gani, 2000; Perry and Potgieter, 2013; Moyo and Ziramba, 2013). Altindaq (2014) point out that besides terrorism and war, countries with higher crime rates will receive fewer visitors from abroad. The negative impact of terrorism on international visitor demand are supported by Fleisher and Buccola (2002), Smyth et al. (2009), Feridun (2011), and Drakos and Kutun (2003). On another note, organized crime also plays a part in the tourism industry. According to Mekinc et al. (2013) tourism is appealing to organized crime because poses opportunities to invest illegally gained money into hotels and other tourism related facilities and activities. Prostitution, gambling, drug trafficking, and illegal migration are typical activities involving organized crime. Thus, by investing criminal proceeds into tourist infrastructure is one way to launder illegally gained money.

Terrorism, organized crime, illegal market activities has been linked to underground or shadow economy (Warde, 2014; Schneider and Enste, 2000). The broad definition of the shadow economy would include both legal and illegal market activities, monetary and non-monetary transactions that are not included in the calculation of the gross domestic product. Studies have indicated that the existence of the shadow economy has been a major obstacle for the development of the tourism sector. Shadow economic activities has been detected to be associated with tourism-related activities and facilities such as wholesale and retail, hotels and restaurants, and transportation and communication industries. Schneider (2009, 2013) reports that in Turkey, Spain, Italy, Germany and Poland; the shadow economy comprises 25 to 35 percent of the tourism-related industries - wholesale and retail, hotels and restaurants, and transportation and communication industries. In Croatia, Radnic and Ivandic (cited in Bicanic and Ott, 1997) reported that the shadow economy in tourism and the hotel and catering industry was 22 percent. On the other hand, Schneider (2010) reports that the shadow economy in the tourism sector in Greece is 22 percent of the official economy. The UNCTAD Secretariat (2013) point out that “The majority of tourism-related business in developing countries, particularly in least developed countries (LDCs), tends to be small, medium-sized and micro enterprises, many of which are operating in the informal economy”.

The negative impact of the shadow economy on the tourism sector has been reported by Pavicevic (2014). Pavicevic point out that the development of the Montenegrin tourism has been halted as a result of the uncontrolled activities in the shadow economy. The uncontrolled huge number of unregistered informal sector on the Montenegrin coast beds in private accommodation, holiday houses and apartment would compromise the high quality tourist destination and destroyed the development of the basic industries in the Montenegro Gori. On extreme case, shadow economy forms a major component of the ‘real economy’ in Mindanao, Philippine. Mindanao’s shadow economy include the proliferation of illegal firearms, kidnapping for ransom, informal land markets, cross-border trade, informal credit provision and illegal drug markets (Schoofs and Lara Jr., 2014). Shadow economy that are outright criminal in nature, such as illegal drug trafficking or kidnap for ransom will shy away tourists. According to Sonmez and Graefe (1998) the risk of terrorism directly influences tourist’s decisions.

The purpose of the present study is to investigate the long-run relationship between tourism and the shadow economy in 141 countries for the period 1995-2008, by using the error-correction model combined with the system Generalized Method of Moment (GMM) estimator. Our study suggests that there is long-run relationship between tourism and shadow economy worldwide with shadow economy impacted negatively the tourism sector.

The paper is organized as follow. In the next section we discuss the method used in the analysis. Section 3 presents the results, while the last section contains our conclusion.

## METHODOLOGY

To examine the long-run as well as the short-run dynamics of the relationship between tourism and the shadow economy, we employ the popular error-correction model. Banerjee et al. (1993, 1998) has criticized the two-stage error-correction models of giving substantial small-sample bias compared to the one-step error-correction model, where the long-run relation is restricted to being homogenous. In this study, following Bond et al. (1997) and Yasar et al. (2006) the generalized one-step error-correction model (ECM) is estimated using the system GMM estimator.

We define the following autoregressive distributed lag model:

$$\begin{aligned}
 arrival_{it} = & \delta_1 arrival_{it-1} + \delta_2 arrival_{it-2} + \alpha_0 shadow_{it} + \alpha_1 shadow_{it-1} \\
 & + \alpha_2 shadow_{it-2} + \beta_0 governance_{it} + \beta_1 gover\text{□}ance_{it-1} + \gamma_t + \mu_{it}
 \end{aligned}
 \tag{1}$$

with  $\mu_{it} = \varepsilon_i + \tau_{it}$  and  $i = 1, \dots, N, t = 1, \dots, T$ , and  $i$  is the cross-sectional units, and  $t$  is time periods. *arrival* is our measure of tourism sector proxy by the numbers of international tourist arrivals; *shadow* is the size of the shadow economy; *governance* is a measure of safety of tourist destination countries. The time-specific effect  $\gamma_t$ , is included to capture aggregate shocks, which can appear in any year. Assuming fixed effects, the cross-section error term,  $\mu_{it}$ , contains the following two effects: unobserved time-invariant, country effects,  $\varepsilon_i$ , and a stochastic error term,  $\tau_{it}$ , which vary across time and cross section.

Following Banerjee et al. (1993, 1998), equation (1) can be transformed into the following one-step ECM equation that provides an explicit link between the short-run effects and long-run effects:

$$\begin{aligned}
 \Delta arrival_{it} = & (\delta_1 - 1)\Delta arrival_{it-1} + \alpha_0 \Delta shadow_{it} + (\alpha_0 + \alpha_1)\Delta shadow_{it-1} \\
 & + \pi(arrival_{it-2} - shadow_{it-2}) + \theta shadow_{it-2} + \beta_0 \Delta governance_{it} \\
 & + (\beta_0 + \beta_1)governance_{it-1} + \gamma_t + \mu_{it}
 \end{aligned}
 \tag{2}$$

with  $\theta = \alpha_0 + \alpha_1 + \alpha_2 + \delta_1 + \delta_2 - 1$  and  $\pi = \delta_1 + \delta_2 - 1$ . Parameter  $\pi$ , the coefficient of the error-correction term,  $(arrival_{it-2} - shadow_{it-2})$  gives the adjustment rate at which the gap between tourism and shadow economy is closed. If  $\pi$  is negative and significant, then we conclude that the relationship between tourism and shadow economy exists in the long-run. The sum of the contemporaneous, and one-period lagged *shadow* captures the short-run dynamics. To calculate the true long-run relationship (elasticity) between tourism and shadow economy, we subtract the ratio of the coefficient of the scale effect (two-period lagged value of the *shadow* variable) to the coefficient of the error-correction term, from 1; that is,  $1 - (\hat{\theta}/\hat{\pi})$ .



For consistent and efficient parameter estimates of equation (2), we apply the system GMM approach proposed by Arellano and Bover (1995) and Blundell and Bond (1998). This estimation procedure is especially appropriate when:  $N$  is large, but  $T$  is small; the explanatory variables are endogenous; and unobserved country-specific effects are correlated with other regressors. Under the assumption that  $\mu_{it}$  are serially uncorrelated and that the explanatory variables are endogenous, the lagged values of endogenous variables dated  $t - 2$  and earlier are valid instruments for the equation in first differences.

To determine whether our instruments are valid in the system GMM approach, we apply the Sargan test, a test of over identifying restrictions, to determine any correlation between instruments and errors. Failure to reject the null hypothesis could provide evidence that valid instruments are used. Further, we also test whether there is second-order serial correlation with the first differenced errors. The GMM estimator is consistent if there is no second-order serial correlation in the error term of the first-differenced equation.

## **DATA**

This study uses unbalanced panel data on 141 countries for the period 1995-2008. Data on international tourist arrivals are taken from World Development Indicator available from the World Bank database. For the measurement of shadow economy, we used the estimates of the shadow economy by Elgin and Oztunali (2012). In this study, six governance measures – voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption were used which was based on the database - World Governance Indicators provided by the World Bank (Kaufman et al., 2008). The indicators were constructed by Kaufman and his colleagues based on several different sources and using the linear unobserved components model to aggregate those various sources into one aggregate indicator. Kaufman et al. (2008) define governance as, “Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them”. All variables were transformed into natural logarithm except for the governance indicators.

## **RESULTS**

Equation (2) was estimated using the two-step system GMM, and the results are presented in Table 1. Table 1 show that the error-correction coefficients have statistically significant, negative signs in all six estimated equations. The Sargan tests cannot reject the null hypothesis that the instruments are valid. The AR2 test for second-order serial correlation clearly suggests that the null hypothesis that the errors are serially uncorrelated cannot be rejected. The estimated error-correction models suggest that government effectiveness, rule of law, and voice and accountability affected tourist arrivals. Nevertheless, only government effectiveness show positive relationship with tourist arrivals; while good governance – better rule of law and voice and accountability decreases the number of tourist arrivals.

The results in Table 1 suggest that there is a strong long-run relationship between tourism and the shadow economy. The statistical significance of the error-correction terms implies that, if there are deviations from long-run equilibrium, short-run adjustment will be made to the dependent variable to re-establish this long-run equilibrium. The result suggests that convergence to equilibrium is quite slow, with a discrepancy of about 0.01 percent corrected in each period.

The magnitude of the short-run effects is measured by the short-run coefficient. From Table 1, it is evident that the temporary shock from the shadow economy impacted negatively on tourist arrivals. On the other hand, the long-run elasticities indicate that long-run tourism response to permanent shocks in the shadow economy is large (model with rule of law); a 1 percent increase in shadow economy decreases international tourist arrivals by 5 percent.

## CONCLUSION

In this study, we investigate the short-run and long-run dynamics of the relationship between the tourism sector and the shadow economy for 141 countries for the period 1995-2008. An error-correction model is estimated using a system GMM estimator to obtain consistent and efficient estimates of the short-run and long-run relationships of tourism and shadow economy. Generally, we conclude that the temporary (short-run effect) and permanent (long-run effect) shocks of the shadow economy induce large negative impact on the tourism sector. Thus, shadow economy does matter for the tourism sector worldwide. One policy implication of this study is that mitigating shadow economy can enhance the growth in the tourism sector.

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**Table 1:** Estimated Error-correction Model: Long-run and Short-run Dynamics of Shadow Economy on Tourism

Independent variables	Dependent variable, $\Delta arrival$					
	Corruption	Government effectiveness	Political stability	Rule of law	Regulation quality	Voice & accountability
$\Delta shadow$	-1.8825 (4.3914)	-2.8298 (7.1963)	-4.1098 (5.2587)	-7.2962* (3.9017)	-1.9473 (5.6986)	0.9439 (4.5500)
$\Delta shadow_{t-1}$	-1.0590 (3.5437)	0.1710 (6.4415)	0.7935 (4.3916)	3.4359 (3.0688)	-0.9465 (4.7886)	-3.2461 (3.6794)
$shadow_{t-2}$	-0.0304	-0.0139	-0.0379	-	-0.0243	-0.0172

				0.0744*		
				*		
$arrival_{t-2} - shadow_{t-2}$	(0.0301) -0.0113**	(0.0208) -0.0159***	(0.0250) -	(0.0361) -	(0.0247) -0.0114**	(0.0196) -0.0085*
			0.0145*	0.0124*		
			*	*		
$\Delta arrival_{t-1}$	(0.0050) -0.0211	(0.0049) -0.0360	(0.0057) -0.1905	(0.0056) -0.1658	(0.0057) -0.0620	(0.0048) 0.0255
	(0.2998)	(0.3006)	(0.3016)	(0.1826)	(0.2596)	(0.2798)
$\Delta governance$	0.2690	0.8756**	-0.1733	-0.9731	-0.0181	0.1710
	(0.5886)	(0.4247)	(0.2254)	(0.6069)	(0.4365)	(0.3140)
$governance_{t-1}$	-0.0147	0.0005	-0.0244	-	-0.0136	-0.0224*
				0.0397*		
				*		
	(0.0162)	(0.0126)	(0.0148)	(0.0190)	(0.0142)	(0.0119)
Summation:						
Short-run coef.	-2.941	-2.658	-3.316	-3.860	-2.893	-2.302
Short-run Wald test ( $p$ -value)	0.0291	0.0214	0.0089	0.0041	0.0216	0.0685
Long-run coef.	-1.690	0.125	-1.613	-5.000	-1.131	-1.023
Long-run Wald test ( $p$ -value)	0.4692	0.9231	0.1711	0.1463	0.6125	0.5137
Sargan test ( $p$ -value)	0.472	0.809	0.606	0.617	0.646	0.690
AR1 ( $p$ -value)	0.154	0.034	0.111	0.005	0.106	0.101
AR2 ( $p$ -value)	0.803	0.931	0.387	0.114	0.615	0.946
No. of countries	141	141	141	141	141	141
Observations	1234	1234	1234	1234	1234	1234

Notes: Estimation using two-step system GMM, with asymptotically robust standard errors reported in the parentheses. The Sargan test is a Sargan test of overidentifying restrictions. The null hypothesis states that the instruments used are not correlated with the residuals. AR1 and AR2 are tests for first- and second-order serial correlation in the first-differenced residuals. The null hypothesis for the second-order serial correlation test states that the errors in the first-differenced regression do not show second-order serial correlation. Lagged levels of shadow and arrival, and arrival-shadow differential (as well as the governance indicators) (dated  $t-3$  and earlier) in the first-differenced equations, combined with lagged first-differenced of shadow and arrival, and arrival-shadow differential (as well as the governance indicators) (dated  $t-3$  and earlier) in the level equations are used as instruments. Constant and year dummies are included in each model but are not reported here. Asterisks (\*),(\*\*),(\*\*\*) denote statistical significance at 10%, 5% and 1% respectively. All variables are in natural logarithm except for governance indicators.

# COMMUNITY-BASED ECOTOURISM (CBET) ACTIVITIES IN ABAI VILLAGE, LOWER KINABATANGAN AREA OF SABAH, EAST MALAYSIA

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## Abstract

Ecotourism related activities such as river boating, wild life viewing, jungle trekking, fire fly watching, trees planting and homestay programme have been introduced in Abai Village, Lower Kinabatangan, Sabah since 2005. Majority of the local communities are willing to participate in ecotourism activities because they believe ecotourism and homestay programmes can provide them with extra income for their livelihoods. This village can be reached by boat in about 2 hours from Sandakan Town. Even though local communities at Abai are willing to participate in ecotourism activities, there are a few challenges faced by them in order to gain real benefits from ecotourism development. The study was carried out in September until November 2014 to observe local participation in ecotourism activities. In-depth interviews were conducted with various participants such as homestay operators and management of Community Abai Project (CAP). The findings have revealed that ecotourism activities in Abai such as the Habitat Forest Restoration Project and Homestay Programme are managed by the local people. Although the local community are supporting the ecotourism activities in Abai, they are still facing some challenges such as (1) lack of capital resources, (2) out migration of youths, (3) lack of public facilities, (4) leadership, local capacity and communication issues, and (5) threats to wild life animals makes the local participation in ecotourism development unclear.

Keywords: ecotourism activities, Abai Village, local participation

## INTRODUCTION

The Lower Kinabatangan River, in Sabah is one of 10 special destinations for Malaysian ecotourism and was outlined in the National Ecotourism Plan 1996. Moreover, the Lower Kinabatangan area becomes a 'protected area' for wildlife where Wildlife Conservation Enactment was established in December 1997 and the sanctuary is protected under the State Land Ordinance (1930) (Vaz & Payne, 1997: 8). In the early 1990s, WWF of Malaysia in collaboration with the Ministry of Tourism, Culture and Environment Sabah (previously known as the Ministry of Tourism, Environment, Science and Technology) produced the National Ecotourism Pelan where Lower Kinabatangan area was highlighted as 'an ecotourism hotspot' in Malaysia. Studies on ecotourism research have been undertaken by several researchers in the field of tourism in Lower Kinabatangan area of Sabah, which mainly focused on Sukau Village (Hussin, 2008, 2009; Hussin & Mat Som, 2008; Chan & Baum, 2007). Other areas at Lower Kinabatangan still lack of empirical research on the potential of ecotourism activities especially in Abai Village and a research should be conducted in order to identify the potential benefits of ecotourism. Thus, this study aims to bridge the gap by examining the current ecotourism activities in Abai Village, Lower Kinabatangan, where several stakeholders are involved in the ecotourism development in this area.

## **Research Objectives**

The objectives of this paper are: (1) to identify the types of ecotourism activities managed by the local communities in Abai Village, and (2) the challenges faced by the local communities in ecotourism activities in Abai Village.

## **LITERATURE REVIEW**

### ***The Concepts of Ecotourism and Community-based Ecotourism (CBET) in Tourism Studies***

Petrovska, et al. (2009: 259) argued that ‘ecotourism is a relatively new concept, and it is still often misunderstood or misused’. Even the definition is quite different according to researchers from different regions and they often tend to give their own perspective regarding the concept of ecotourism. Basically, ecotourism is similar to terms such as green tourism, adventure tourism, alternative tourism and nature-based tourism (Fallon & Kriwoken, 2003). The Malaysian Ecotourism Master Plan (1996) adopted the official definition of ecotourism developed by the International Union for the Conservation of Nature (IUCN), of which Malaysia is a member. According to IUCN ecotourism is:

‘Environmentally responsible travel and visits to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features, both past and present), that promote conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local population’ (Ceballos-Lascurain, 1996: 20).

Tourism researchers have defined the concept of ecotourism in many ways. The Ecotourism Society (1992), for instance, has described the concept of ecotourism as:

‘Purposeful travel to natural areas to understand the cultural and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources financially beneficial to local citizens’ (Hawkins, 1994: 261).

For further understanding about ecotourism, Cater (1997) introduced two types of ecotourism. The first is ‘a deep form of ecotourism’, commonly represented by small, specialist-guided groups with highly responsible behaviour towards the natural environment. The second is ‘a shallow form of ecotourism’, where those who visit a destination area for a few days, are unlikely ever to return to the same place because they may be more interested in their travel experience and behave less responsibly towards the natural environment (Hussin, 2006; Hussin, 2008: 74).

## **RESEARCH METHODOLOGY**

This is an exploratory qualitative research. This research design was applied to investigate the experience of local community engagement on ecotourism activities in Abai Village, Sabah. Hence, in-depth interview is deemed as a relevant method for data collection. Moreover, the researchers also performed field observation throughout the fieldwork process and secondary data were also used to obtain information for this study. A purposive sampling technique was applied in this study because all the respondents have the experience in managing ecotourism activities in Abai Village (see Table 1). Selection of the informants is on the basis they have the best position to provide data for this research (Sekaran, 1992). Abai Village was selected

on the basis of a potential ecotourism site in Lower Kinabatangan and several ecotourism activities were run by the locals. The researchers lived at Abai Village for 2 week in September 2014. A semi-structured interview method was employed in this study in order to ensure that the respondents feel comfortable and provides their opinion freely. All the interviews were recorded after the researchers gain respondents' permissions. All the respondents were asked about their involvement in ecotourism related activities and the benefits that they received. Moreover, respondents were asked regarding the challenges often faced by them in managing ecotourism activities in Abai Village. The interviews were usually conducted at the interviewee's homes and they felt comfortable to co-operate with the researchers. The interviews lasted between 45 minutes to 1 hour. The interviewees preferred to speak in Malay as it is a common language in their daily lives. After the interviews, the raw data were analysed using thematic analysis (Braun & Clarke, 2006).

**Table 1: Samples of Informants**

Characteristics of the informants (Purposive sampling)		Sample size
CAP Management	Coordinator/Homestay	1
	Coordinator	1
	CAP Treasurer	2
	Homestay operator	2
	CAP's Habitat Restoration Project member	1
	Abai's Head Village	
Total		7

Source: Fieldwork, 2014

## RESEARCH FINDINGS AND DISCUSSION

### *The Role of Community Abai Project (CAP) in Ecotourism Development in Lower Kinabatangan area.*

#### *i. Homestay Programme*

A CAP treasurer (Respondent 1) in Abai Village explained about the background of CAP in her interview. According to her, CAP was formed on November 27<sup>th</sup> 2010 in Abai Village, and it is a community-based ecotourism initiatives. The CAP main focuses are on homestay programme, forest restoration and capacity building project implemented by the community members of Abai Village. She also mentioned that CAP is a replication effort of the successful 17-year old model known as Model Ecologically Sustainable Community-Based Tourism (MESOCOT) that was pioneered by the community of Batu Puteh Village of Lower Kinabatangan.

Under the management of CAP, homestay programme and Habitat Forest Restoration projects regarded as a community based ecotourism activities in Abai, Lower Kinabatangan. During an interview session, a CAP Management Coordinator as well as homestay coordinator explained about the implementation of the homestay programme and its current progress in Abai Village. According to her, homestay programme is one of the ecotourism activities under the management of CAP and applied community-based tourism concept. She claimed that the introduction of the homestay programme in her village was under her responsibility for the past 14 years. In homestay programme, there are a number of products that become tourist attractions such as river cruise, wildlife watching, firefly watching, boat service, tree planting or restoration activities, local traditional foods, cultural performances,

showcasing traditional method of catching prawns, showing mass flowering of Mangfera (a prominent species around the Lower Kinabatangan Sanctuary) and other. When asked about what are the most favourite activities in homestay programme which are preferred by the tourists, the homestay operator added:

“In our homestay programme, we pay more attention on outdoor activities such as wildlife watching, river cruise, and traditional food and other. Majority of the tourist liked to see wildlife animals like elephant, monkeys at the jungle and they told to me they were really enjoyed with these activities” (Interview with Informant 5, 25. 9. 2014).

ii. ***CAP Habitat Restoration Project***

CAP Habitat Restoration Project is one of the ecotourism activities under the responsibility of CAP management. Ecotourism activities which are based on environment like forest restoration activities play a good role in promoting and enhancing the local knowledge the importance of natural resources and simultaneously providing economic benefits to the locals who are actively involved in this project. Informant 2 (Habitat Restoration Project Member) agreed that, Habitat Restoration Project in Abai was attracted the tourist to visit to Abai and this one of the favourite activity under the CAP management.

Recently a bio-diversity project was carried out in Abai Village. The contractor supported that this project was LEAP SPIRAL which was based at Kota Kinabalu, Sabah. This project had started in July 2012 and ended in April 2014. The significance of this project is that it is fully managed by the community in Abai Village and CAP management. This project benefited 76 members in Abai Village. Out of 76 members, 30 were male participants, 36 were female participants and 10 were the children of the members. On the other hand, a total of 52 local communities have taken part in capacity building and training programmes. These activities are organised by CAP’s Habitat Restoration Project in order to enhance empowerment among the members. This project covered issues of environment, socio-cultural and politics, which exposed the members of this project for better lives and enhancing the livelihood of Abai Village. There are several objectives of this project, which are (Community Abai Project (CAP): Forest Restoration & Ecotourism Progress Report July 2014. pp. 5):

1. To plant 25,000 trees over 10 hectares of degraded forest areas to provide a critical food source for wildlife such as orang-utan and other wildlife;
2. To enhance local capacity and skills in areas such as bookkeeping, organizational management, nature guiding, food and beverage and leadership issues;
3. To increase sustainable sources of revenue through forest restoration and ecotourism, including seedlings collection, nursery management, planting, homestays, guiding, and ecotourism services;
4. To increase community involvement and increase shared benefits of this project, especially in leadership positions through a community-based model, in which all project coordinators are community members and restoration and ecotourism activities are open to the entire community;



5. To protect and restore critical wildlife habitat and forest connectivity in the Lower Kinabatangan Wildlife Sanctuary with a focus on indigenous tree species and fruit trees that will serve as sources of food and shelter for wildlife.

### ***Challenges of community participation in ecotourism activities in Abai Village***

- a) *Lack of capital resources:* a homestay operator (Respondent 4) agreed that lacked of capital resources to set up homestay facilities such as renovating houses, add additional rooms, builds new toilets, rooms facilities and others. The income they received from homestay programme is only sufficient for their daily expenses and there is not much to put in savings. Abai Village is considered as poor village in Lower Kinabatangan, where almost 90 per cent of the residents' main jobs are as fishermen. This situation makes them difficulties to organise the homestay programme well.
- b) *Out migration of youths:* Over the past years, the youths in Abai Village tend to go outside for better lives and secure job opportunities. Some youths, who stayed in the village are great fishermen. However, some of them without fishing skills have to go to the city for seek job for their survival.
- c) *Lack of public facilities:* Abai is a poor village in terms of public facilities but rich with natural resources. From Sandakan Town to Kinabatangan, it would takes 2 to 3 hours journey by a speed boat. Majority of the residents still expecting for some facilities to be provided by the authorities in order to make their daily lives easy. To date, Abai Village is only have a primary school and other facilities are still in progress. Lack of clean water supply and 24 electricity supply remains a major challenge in Abai. The villagers fully depend on rain and generators to fulfil their daily needs. In addition, the river alongside Abai is fully utilized by the residents to wash clothes and cleaning plates.
- d) *Leadership, local capacity and communication issues:* The field observation of this study shows that, there is a communication problem between CAP committee members and head of village. The communication among them does not take place effectively. A head of village (Respondent 7) commented that some of the youths do not put respect on him. He argued that the residents should show some respect to his position and he would co-operate with them with more enthusiasm.
- e) *Wildlife animal threats:* This is the main challenges faced by the participants of forest restoration activities. The young planted trees often destroyed by wildlife animals such as elephants, and *Sambar deer*. It was determined that at least 30 per cent of the young trees planted were damaged by *Sambar deer* and other wildlife animal likes monkeys and elephants.

### **RECOMMENDATIONS**

The study recommends the following actions based on the research findings are:

- i. The community who interested to involve in the homestay programme should be supported by the development agencies (private and public agencies) in terms of financial support, public facilities such as 24 hours electricity supply and a clean water supply (Homestay Coordinator, 25 September 2014).
- ii. To enhance skills and knowledge of the homestay operators through short term courses in the village in order to provide good services to the guests.

- iii. To strengthening teamwork and co-operation between JKKK Leadership and the villagers in order to increase mutual understandings and respects (Abai's Head Village, 26 September 2014).
- iv. To Enhance NGOs networks – CAP network among the villagers along Kinabatangan River in order to build strong relationship and benefits for the community regarding Habitat Restoration Project and ecotourism activities (CAP's Coordinator, 26 September 2014).

## CONCLUSION

In Abai, ecotourism activities through homestay programme have a potential to be developed because the serious participation by the local community are significant. The findings indicate that, the ecotourism activities are mainly focused on homestay programme. Under the homestay programme, several products are identified such as CAP Habitat Forest Restoration Project, wildlife viewing, firefly watching, boat service, tree planting or restoration activities, local traditional foods, cultural performances, showcasing of traditional method of catching prawns, showing of mass flowering of Mangfera (a prominent species around the Lower Kinabatangan Sanctuary), River Cruise along the RAMSAR Site, Balat Damit Wildlife Reserve, Lower Kinabatangan Wildlife Sanctuary, and Irrawaddy Dolphin Cruise are the major tourist attractions in Abai Village. In Abai Village the ecotourism products are unique and have potential to attract tourist to visit and enjoy the natural resources at the sites. However, research findings revealed that there were some challenges faced by the participants in ecotourism development. This study highlighted that the community-based ecotourism activities (CBET) and relevant stakeholders must play an important role in order to solve these problems and to ensure the survival of ecotourism activities in Abai is sustainable.

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# **TOURISM AND WILDLIFE LEGISLATION: PROTECTING ANIMAL WELFARE IN ZOOS AND NATIONAL PARKS**

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## **Abstract**

Issues pertaining to tourism and wildlife are related as many zoos and national parks are used as tourist attractions where the captive animals are used either as passive displays or act in exhibitions. Issues of the welfare of wildlife and animals are important from the legal and conservation perspectives. To that end, Malaysia has enacted and enforced legislation such as the Animals Act 1953 and Protection of Wildlife Act 2010. In particular, the Wildlife Conservation (Operation of Zoo) Regulations 2012 serves such purposes. This article will examine welfare issues of animals in zoos and national parks within the parameter of the said legislation and regulations. The methodology used is legal description. The study found that the Wildlife Conservation Act 2010 is comprehensive in ensuring the welfare of animals especially the section on zoo operators.

Keywords: *Malaysia, legislation, animal welfare, zoos, national parks*

## **INTRODUCTION**

Wildlife contributes to the tourism industry and its attractions with its unique and distinctive characteristics provide good selling points in tourism promotion. Wildlife has its distinct uniqueness and many animals represent particular countries: for instance, China is identified with its pandas, while Malaysia and Australia have their orang utans and kangaroos respectively. These animals are kept in zoos or national parks some of which have become so popular that they have become the main pulling factor for their tourism industries, such as the Safari Zoo in Central Africa. In Malaysia, the *orang utan* is found in zoos and national parks and is an icon of the country's tourism industry. While it can't be denied that wildlife has contributed much to tourism, its utilization for such purposes should be balanced with other considerations such as wildlife conservation and animal welfare (Fraser, 1995; Kiley-Worthington, 1989; Rollin, 2006). This article discusses animal welfare in particular wildlife (animals) in zoos and national parks within the context of wildlife legislation in Malaysia.

## **METHODOLOGY**

This research is based on the qualitative method using legal description as its main approach (Yaqin 2007). Legal research or writing seldom apply the quantitative method, and analysis is primarily based on statutory provisions, regulations, judicial cases, parliamentary Hansards while secondary sources rely on documents such as articles, books and official documentation. Interviews are also carried out to clarify certain legal issues. For this article however the author adopts a legal analysis within the parameters of relevant legislation. The statutes referred to are the Animals Act 1953 and the Wildlife Conservation Act 2010, while specific regulations on the operations of zoos refer to the Wildlife Conservation (Operation of Zoo) Regulations 2012.

## **Definition of Wildlife and Animal Welfare**

The meaning of wildlife has varied over time (Appleby, 1999). Earlier definitions were restricted to animals that could be hunted for food or sport and covered mainly vertebrates or animals with a backbone namely mammals and birds. However, over the years the term was extended to include both vertebrates and invertebrates, and currently wildlife includes also plants (Yarrow, 2009). In the words of Hodges (2010), wildlife is a collective name for all living things. However, this research focuses only on animals, and animal welfare here refers to the manner of management and treatment of all living animals housed in zoos or national parks.

Previously the welfare of animals depended on the human belief that as God's creations, they should not be harmed (Broom 1991; Duncan, 1996; Hewson, 2003) but it has now assumed greater dimensions involving the enactment and enforcement of legislation to provide for their protection and conservation (Fraser, 1995). Most countries have specific laws that protect animal welfare and this has spread as active global movements seeking to protect animal welfare not only by governments and NGOs but also by the public at large (Kiley-Worthington, 1989). Legislation has already been formulated defining animal welfare in terms of food, hygiene, health, enclosure, confinement, and other treatments (Fraser et al., 1997). For example, animal and wildlife in zoos are protected by specific regulations (Hassan, 2014; Hosey et al., 2009; Kleiman et al., 2010). Detailed provisions have been made in the relevant legislation for all aspects of animal welfare and special government agencies established to enforce the law. Thus animal welfare is not just a matter of science to determine their wellbeing and lives but also an issue of social science especially when it concerns public awareness and legal enforcement (Duncan, 2002; Rezai et al., 2013). In short, welfare of animals is generally accepted as falling within the responsibility of government, social organizations, and the public.

## **Animal Act 1953 (Act 76)**

The purpose of the Act is to prevent and control the spread of animal diseases, the movement of animals, and preventing cruelty to animals, among others. The Act only applies to Peninsular Malaysia. The ultimate aim of the Act is not only to ensure the spreading of diseases to animals but also to human beings and enforcement is by the Department of Veterinary Services, Ministry of Agriculture and Agro-based Industry. The Act is not comprehensive in addressing all animal welfare issues being specific to containing the spread of animal diseases. As such, its narrow scope does not contribute to the protection of animal welfare as it is more concerned with ensuring that animals remain healthy. Part II of the Act deals with the movement of animals and birds and states that no person, without the licence/permit, is allowed to import or export animals to and from Peninsular Malaysia. Powers are given to the authority to examine any animal upon its arrival, and it is also the duty of the master of any ship or aircraft to report the arrival or intended arrival of animals to the relevant authority.

In discharging their duties, veterinary officers are given discretionary powers to either refuse a permit or order the infected animals to be destroyed or quarantined. The Act not only provides for examination of animals at the entry points of the country but also at any given time. If the veterinary officer has reason to believe that an animal is infected by disease it can be subjected to examination and the officer may order its immediate isolation or destruction. No compensation shall be paid for animals destroyed by the authority.

The Act (Part IV) also provides for protection against cruelty to animals. Such powers are given to veterinary officers, police officers and the local authority to take action against any person or body inflicting cruelty on animals such as beating, kicking, torturing, overriding, overloading, torturing, terrifying, ill treating and not maintaining confined animals properly. The penalty, upon conviction, is a fine not exceeding RM200 or imprisonment not exceeding six months or both. The monetary fine is considerably low. However, the Act has no special provision relating to keeping animals in enclosures or closed premises such as zoos. This is covered by other legislation on the provision of better treatment and management of captive or confined animals.

### **Wildlife Conservation Act 2010 (Act 716)**

The Wildlife Conservation Act 2010 (Act 716) replaced the Protection of Wildlife Act 1972 (Act 76). The Department of Wildlife and National Parks (PERHILITAN) under the Ministry of Natural Resources and the Environment is responsible for the protection, management and preservation of wildlife and national parks in Peninsular Malaysia. Act 716 is more comprehensive in ensuring and promoting animal welfare compared to the Animal Act 1953, and the main duty of PERHILITAN is to grant licences and permits to operate or carry out activities pertaining to animals.

A special permit is required for the above activities for totally protected wildlife which is specified in the second schedule of the Act.

Cruelty to wildlife under the present 2010 Act has the same meaning as under the Animals Act 1953. However the punishment is higher where upon conviction a fine of not less than RM5,000 and not more than RM50,000 or to imprisonment for a term not exceeding one year or both is imposed. It is interesting to note that the 2010 Act provides a fine that specifies a minimum and maximum amount. Considering that the fine imposed under the 1953 is small (a maximum of RM200), it is highly likely that offenders will be charged under the 2010 Act.

### **Wildlife Conservation (Operation of Zoo) Regulations 2012**

Taking into account the large number of wildlife kept and confined in zoos and in national parks, the Ministry concerned has passed specific regulation that is the Wildlife Conservation (Operation of Zoo) Regulations 2012. In Malaysia, there are 12 zoos and 21 permanent exhibitions being operated currently. Under the 2012 amendment Act, a zoo is defined as 'any area or premises which keeps or places 50 or more species of which the total number is 100 or more whether for the purpose of conservation, education, research or recreation, and is open to the public'. The new definition is to ensure only operators of places with a sufficiently large number of animals are entrusted with the responsibility as provided under the Regulations.

The purpose of the 2012 regulations is to ensure the wellbeing of animals in zoos. Zoos house many species of wildlife which are used as tourist attractions and they not only display the wildlife as they are they are also used for shows or performances. The duty to ensure the welfare of the animals in their zoos lies with the operators and cover issues such as the size of the enclosures, quarantine area, diet, wildlife health care, cleaning enclosure, vaccination, euthanasia and wildlife shows.

The penalty for contravening any of the provision of the regulations is a fine not exceeding RM100,000 or imprisonment for a term not exceeding five years or both.

The size of the enclosure is the most important element in ensuring animal welfare in zoos. The 2012 Regulations in its Schedule specifies the sizes of the enclosures according to the category of the wildlife species, that is, based on whether they are mammals, reptilians and amphibians, and birds.

Besides zoos, animal are also kept and used by operators for animal exhibitions. For this purpose, special regulations have been enacted called the Wildlife Conservation (Exhibition) Regulations 2013. The operators of animal exhibitions are entrusted with similar responsibility as those operating zoos except for animal performances.

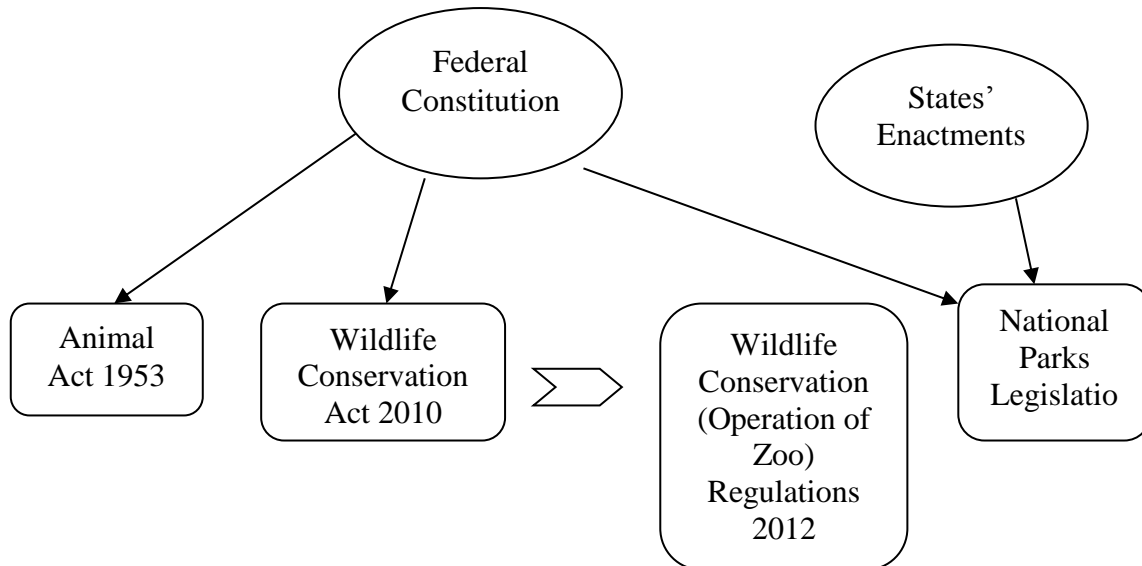
### **National Parks Legislation**

The purpose of establishing national parks is to preserve and conserve wildlife which includes fauna and flora and other natural habitats. The relevant federal legislation is the National Park Act 1980 which applies throughout Malaysia except for Sabah, Sarawak, Pahang, Terengganu and Kelantan. The latter three states have their own legislation, namely the Pahang National Park Enactment 1990 (No.6), Terengganu National Park Enactment 1939 (No.6) and Kelantan National Park Enactment 1938 (N0.14). Under these enactments, the three states have jointly dedicated certain parts of state land to constitute a national park called the Taman Negara National Park in perpetuity and for public purposes. Besides the Taman Negara National Park in Peninsular Malaysia, other gazetted or declared national parks are Endau-Ropin National Park, Gunung Ledang National Park, Island of Mersing National Park, and Penang National Park. Sabah and Sarawak have many national parks declared under their respective legislation.

Under the 1980 Act, certain animals are prohibited from being taken into or remaining within a national park, as specified by the Regulations. Section 11 of the Act prohibits the killing, maiming, trapping, capturing or impounding of any wildlife within a national park.

All the three enactments of Pahang, Terengganu and Kelantan provide that no person other than a park official acting in the performance of his duty shall:

- Introduce any animal into the State Park or permit any domestic animal to stray into the State Park;
- Within the State Park disturb or take the nest of any animal or kill, injure or capture or molest any animal;
- Remove any from the State Park any animal other than an animal lawfully introduced into the State Park.



**Figure 1:** Legislation pertaining to Wildlife

## DISCUSSION AND CONCLUSION

As mentioned, wildlife has contributed tremendously to national tourism through zoos which house animals of all species, both indigenous and imported. Wildlife contributes to the tourism industry and its attractions with its unique and distinctive characteristics provide good selling points in tourism promotion. Wildlife has its distinct uniqueness and many animals represent particular countries. Tourists are able to identify specific wildlife to a particular country. A major responsibility of zoo operators is to ensure the wellbeing of animals kept in their zoos whether for display or performances. For that purpose, legislation has been enacted to enforce the provision of such welfare through legal means (Hassan, 2014; Yoga 2012). In Malaysia, the Wildlife Conservation Act 2010 is the primary legislation and a perusal of the Act reveals that it is comprehensive in ensuring the welfare of animals especially the section on zoo operators. Zoo operators are entrusted with the responsibility of providing a minimum enclosure size, quarantine areas, diet, wildlife health care, cleaning enclosure, vaccination, and euthanasia as well as ensuring exhibitions are discharged in accordance with the Regulations.

The development of national parks is aimed at ensuring a balance between preserving the scenic beauty of the natural environment of certain parts of the country and the conservation of wildlife. While national parks legislation allows for physical developments such as hotels, resorts, buildings, bridges, reservoirs, etc, it also seeks to conserve wildlife such as fauna and flora and animal species. It cannot be denied that during the early stages of a country's development, some wildlife was harmed. However, to a certain extent, the legislation ensures the conservation of some animals at the national parks and in this respect, animal welfare is protected. Of course, the conditions ensuring animal welfare at national parks are not as comprehensive as in zoos as the animals are allowed to roam freely and live according to their natural behavior whereas in zoos they are kept in places which are man-made.

The welfare of animals whether confined in zoos or allowed to roam at the national parks is governed by special legislations, i.e., the Wildlife Conservation Act 2010 and its Regulations and the National Park Act and state enactments, and are comprehensive enough to serve their purposes (see Figure 1 above). It cannot be denied that wildlife is a major pull factor in tourism, but this should be balanced with other considerations such as wildlife conservation



and animal welfare. Such an approach is well provided for by the respective legislations in Malaysia.

## ACKNOWLEDGEMENT

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# **TAWHIDIC PARADIGM AND ECONOMIC POLICIES ON HALAL TOURISM FOR SUSTAINABLE WEALTH CREATION IN MALAYSIA**

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## **Abstract**

This study examines the perceived effects of *Tawhidic* paradigm on economic policies in relation to the promotion of the growth of halal tourism industry for sustainable wealth creation in Malaysia. *Tawhidic* paradigm offers economic policy thinking that is guided by the principles of *Qur'an* and *Sunnah* in formulating and implementing policy blueprints and instruments. In contrast, the current policy thoughts are guided by market forces and sentiments which contribute to speculative uncertainties. A proposed index of *Tawhidic* paradigm policy thinking and process is developed to ascertain the level of intensity of *Tawhidic* based policy thinking and practices at three levels - policy making, implementation and evaluation. This study uses personal interviews with economic policy makers, key representatives from halal industry trade associations, and selected halal tourism operators. Preliminary findings disclose that the economic policies on halal tourism reflect some levels of *Tawhidic* paradigm but nevertheless inadequate to sustain wealth creation.

Keywords: *Tawhidic paradigm, Halal tourism, Wealth, Malaysia*

Theme: Tourism and hospitality management (Tourism policies)

## **INTRODUCTION**

Public policy making process requires both art and science input due to its dynamic nature. In recent years, public policy making process is becoming more challenging, difficult, and complex due to the dynamism of the market, governmental and technological forces (Ascher, 2004; Broner, Franczak, Dye, & McAllister, 2001; Hall, 1993; Mendelson, 2007; Ogawa & Wildasin, 2009; Pellow, 1999; Scheve, 2004). Each factor is related to the stakeholders and it needs a response whether in the form of decision or action. The main reason is due to the use of public fund and the impact to the stakeholders and beneficiaries (Broner et al., 2001). In each decision, it needs legitimacy and justification when it involves the use of public fund (Mendelson, 2007). Under the current approach, public policy making is responsive to the market forces and the stakeholders. However, such approach would create uncertainty and instability, particularly to the developing and under-developed economies (Mitchell, 2012; Ogawa & Wildasin, 2009; Z. Tang, 2015).

Economic policies provide the guideline on how the economy can experience growth on a continuous basis. In the context of tourism, economic policies on tourism should encourage economic growth through tourism activities (Mitchell, 2012; C. F. Tang & Tan, 2015; Webster & Ivanov, 2014). The contribution of tourism on economic growth is essential despite the different nature of contribution (Mitchell, 2012; Muganda, Sahli, & Smith, 2010; Sharpley, 2009; Steiner, 2010; Thompson, Ohare, & Evans, 1995). There are challenges to

strike a balance between poverty eradication and the provision of incentives to encourage tourism (Davidson & Sahli, 2015; Muganda et al., 2010; Spenceley & Meyer, 2012). The priority for under-developed countries, tourism activities are essential to spark economic growth (Davidson & Sahli, 2015; Sharpley, 2009). In Muslim majority countries, Islamic-based or Halal tourism packages are expected (Battour, Battor, & Bhatti, 2014; Eid & El-Gohary, 2015).

The wealth of nation should experience continuous growth. The reduction of wealth of the nation can lead to dependency to aid from other nations. There may be challenges, but the wealth creation through tourism activities must be continued (Huggins, Lzushi, Prokop, & Thompson, 2014; C. F. Tang & Tan, 2015; Webster & Ivanov, 2014). The current paradigm for policymaking process for wealth creation is part of the foreign direct investment mechanism and the market forces (Huggins et al., 2014; Sharpley, 2009; C. F. Tang & Tan, 2015; Webster & Ivanov, 2014). Some countries prefer fiscal development mixed with other packages (Sharpley, 2009) as part of instrument to encourage local development and entrepreneurship (Fallah, Partridge, & Rickman, 2014; Santarelli & Vivarelli, 2007; Sharpley, 2009; Webster & Ivanov, 2014), which can lead to competitiveness and sustainable economic growth (Sharpley, 2009; C. F. Tang & Tan, 2015; Webster & Ivanov, 2014).

A few contingency approaches were introduced to complement the current policy approach that based on market sentiments such as integrated approach (Lofsten & Lindelof, 2002; Webster & Ivanov, 2014), human talent development (Reiter & Steensma, 2010), small business with innovation emphasis (Freel, 2003; Lofsten & Lindelof, 2002), and competitiveness through innovation and creativity effort (Hall, 1993; Mendelson, 2007; Reiter & Steensma, 2010; Sheng, 2011; Webster & Ivanov, 2014). More importantly, the economic policy could offer dynamism and sustainability (Howells, 2005; Huffman & Quigley, 2002; Johnston & Scicchitano, 2000; Mitchell, 2012; Scheve, 2004).

In *Tawhidic paradigm*, it emphasized on unity or oneness of submission to Allah as mean to execute duty and responsibility as prescribed by Allah. The unity in terms of oneness of objective, which means everyone must be focused in the mind to submit to the will of Allah. *Tawhidic* paradigm denotes the supreme reference that must be referred in any idea, decision and action. Literally, *Tawhidic* paradigm requires a full concentration to devote to Allah through various rituals and deeds (Ali, 2010). The *Tawhidic* paradigm requires Muslim to align and focus in life by integrating the life and Allah as the two contexts are interrelated (Machlis, 2014).

This study postulates that perceived effects of *Tawhidic* paradigm with its comprehensive, complete and continuity nature on economic policies to boost halal tourism industry will lead to sustainable wealth creation. The market-based economic orientation requires the tourism industry to earn maximum profit without realizing the impact of economic uncertain situation would lead to non sustainability of economy, political and growth. *Tawhidic* paradigm integrates the duty in this World with the expectation in the Hereafter.

This study examines the perceived effects of *Tawhidic* paradigm on economic policies in relation to the promotion of the growth of halal tourism industry for sustainable wealth creation in Malaysia. *Tawhidic* paradigm offers economic policy thinking that is guided by the principles of *Qur'an* and *Sunnah* in formulating and implementing policy blueprints and instruments. In contrast, the current policy thoughts are guided by market forces and sentiments which contribute to speculative uncertainties. A proposed index of *Tawhidic*

paradigm policy thinking and process is developed to ascertain the level of intensity of *Tawhidic* based policy thinking and practices at three levels - policy making, implementation and evaluation.

## **LITERATURE REVIEW**

### **Economic policymaking experience in Malaysia**

Malaysian economic policy experience is based on two requirements, that is to encourage for unity among the people and to use the unity and stability as a mean to encourage for economic activities, including tourism. This issue has been examined into the economic development stages in Malaysian economic historical analysis by a few researchers for example Drabble (2000, pp. 247-247, 121-147, 181-194, 235-266), Spinanger (1986, pp. 42-62), Jomo (1990, pp. 101-117), Ali (1992, pp. 6-31), Rasiyah (1995, pp. 48-49, 52-57), Gomez (2003, pp. 59-67) and Samad (1998, pp. 62-104) suggested that the unity of people and economic prosperity are operationalized into three core elements: (a) cost effective ease of doing business, (a) provision of facilities and tax allowances, and (c) the supportive macro and micro economic policies at various levels of the community.

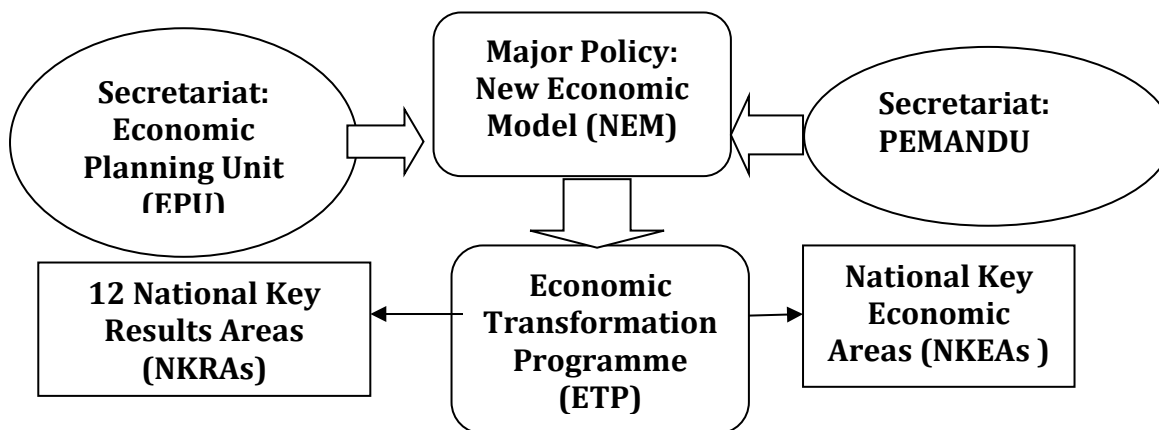
The unity and prosperity orientation in the public policy making particularly the economic policies is commendable for developing countries to provide basic needs to people and to generate commendable national income to boom economic activities. According to Drabble (2000, pp. 121-147), the unity and prosperity approach is reasonable to encourage economic growth and at the same time to address the poverty situation because poverty can counter the progression of economic growth. Therefore, it is commendable and rationally acceptable for Malaysian public policy making to be consistent with the unity-prosperity approach to ensure economic activities (Drabble, 2000, pp. 152-154, 181-187).

The implementation of capital intensive industrialization was in two phases (See Jomo (1990, pp. 128-132), Ali (1992, pp. 95-96), Samad (1998), Drabble (2000, pp. 235-266) and Rasiyah (2003a, pp. 785-791)). Phase 1 was the period between 1981 and 1985 and Phase 2 was between 1986 and 1995. The first phase was implemented under the Fourth Malaysia Plan (4MP) (1981-1985), the New Economic Policy (NEP) (1970-1990) and the First Outline Perspective Plan (OPP). Within that framework, the implementation of the capital intensive industrialization was limited to fulfilling the national agenda to eradicate poverty, to restructure society, and to encourage Malay participation in the economy. In this first phase, however, most of the work involved preparing to move into the high technology sector.

The government implemented the Fifth Malaysia Plan (5MP) (1986-1990) together with the First Industrial Master Plan (IMP) (1986-1995) and the Promotion Investment Act (PIA) 1986 in order to stimulate the economic growth through capital-intensive export orientated industrialization, as an immediate response to a quick recovery from the recession (1984-1985) (Ali 1992, pp. 32-37).

The task of developing a sound economy was shared with the private sector through a national plan for privatization (Jomo 1990, pp. 143-165). This was known as the Privatization Master Plan, which was introduced in 1991 (Malaysia, 1991a, pp. 2-5). This plan was part of a post-NEP economic development instrument called the National Development Policy. This policy was incorporated into the Sixth Malaysia Plan (1991-1995), the Second Outline Perspective Plan (OPP2) (1991-2000), and Vision 2020 (1991-2020) (Malaysia, 1991b, 1991c, 1996a, 1996b, 2001a).

The policy formulation or crafting requires the policy makers to have a big picture or sky views about the organization. More importantly, Economic Planning Unit (EPU) and Performance Management and Delivery Unit (PEMANDU) through consultative meeting with various stakeholders proposed 12 National Key Economic Areas (NKEAs) as at the core of the ETP. Each NKEA carries important weight as catalyst of economic activity. Figure 1 depicts the major policy used by the government to participate in the new economic model.



**Figure 1:** New Economic Model and ETP  
Source: PEMANDU (2010)

### Tawhidic paradigm

*Tawhidic* paradigm refers to the rationalization, perceptions, and thinking that based on the Islamic teachings. The monotheism thinking in *Tawhidic* paradigm enables harmonious integrated linkages between the worldly affairs (*al Dunya*) and the Hereafter (*al Akhirah*) in various aspects, processes, actions and decisions (Rahman, 1995; Hamid, 1999). The immediate task to imply *Tawhidic* paradigm is to promote goodness (*al 'amr bi al ma'ruf*) and prevent evil (*wa nahyu anil munkar*) (Hamid, 1999).

Prior to execution of *Tawhidic* paradigm is the possession of knowledge (*al 'ilm*), true conviction (*al iman*), and integrity (*al ihsan*) (Mawdudi, 1991; Laming, 2002; Ismail, 2004). Knowledge incorporates broad concept of goodness (*al ma'ruf*) that includes noble deed (*al khayr*), righteousness (*al birr*) and lawful (*halal*) which deserve positive rewards (*ajr*) (Mawdudi, 1991; Qardawi, 2007). *Munkar* includes bad (*sharr*), sins (*ithm*) and prohibited (*haram*), which are related to corresponding punishment (*al 'idam*) (Mawdudi, 1991; Qardawi, 2007).

The *Tawhidic* paradigm emphasises on the execution of primary duty as servants and vicegerents of Allah that guided by the *Qur'anic* and Prophetic teachings. The unity concept in the *Tawhidic* paradigm reflects the unity of Divine Command and Guidance, with the objective of people to submit fully to the Divine Wish. The primary orientation of public policy making in Malaysia is unity-prosperity that emphasizes on unity among people or unity in diversity and translates the unity-prosperity-diversity into ideas, decisions and actions to generate maximum wealth for the nation while not forgetting to address poverty eradication and encouraging national unity despite the diversity in terms of faith, culture, and preferences. The unity-prosperity orientation in the public policy remains unchanged despite the changes in the economic landscape globally.

## **METHODOLOGY**

This study examines the perceived effects of *Tawhidic* paradigm on economic policies in relation to the promotion of the growth of halal tourism industry for sustainable wealth creation in Malaysia. Since the nature of the study requires exploratory data, it is reasonable for this study to use personal interviews with economic policy makers, key representatives from halal industry trade associations, and selected halal tourism operators.

## **FINDINGS AND DISCUSSION**

The results of the study are based on the feedback of two (2) economic policy makers, two (2) key representatives from halal industry trade associations, and five (5) selected halal tourism operators. PM 1 argued that economic policymaking in Malaysia remains with its unity-prosperity orientation and top down approach despite numerous factors to be considered in light of the regionalization and globalization. PM 2 echoed PM 1's feedback, but supportive of the incorporation of Islamic values in the public policymaking process such as the *Shura* approach, moderation or *wasatiyyah* in handling issues, and priority or preferences based on the *Maqasid al Shariah*. Based on the feedback of the economic policy makers (PM1 and PM2), the perceived effects of Tawhidic paradigm are limited to contingency or complementary mechanism to support the current system. The core process is still based on the market-based system.

The key representatives (KR) from halal industry trade associations argued that the top down and following the directions from the government has been in the tradition. KR 1 argued that the halal economy has been the impetus of the government when it involved in various world economic forum. However, KR 2 was not convinced that the top down approach remains relevant when KR 2 could be vocal in bringing the voices of the industry. KR 2 indicate that the market-based system still dominant.

The five tourism operators (TO) are following the direction provided by the government. They pointed out that the incentives under halal tourism is part of the halal business promoted by the government. Since halal food can be part of the tourism, it has been extended to the tourism activities.

Preliminary findings disclose that the economic policies on halal tourism reflect some levels of *Tawhidic* paradigm but nevertheless inadequate to sustain wealth creation.

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# **A SUSTAINABLE COMMUNITY BASED TOURISM ENTERPRISES THROUGH AMANAH IKHTIAR MALAYSIA IN SEMPORNA, SABAH: OPPORTUNITIES AND CHALLENGES**

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## **Abstract**

The development of a sustainable community based tourism is determined on satisfying the objectives of all stakeholders in the system. The inter relationships among the stakeholders must be fully recognized since each stakeholder's needs may be dissimilar from the others. The challenge for local communities and policy makers is to ascertain or generate opportunities that will provide sustainable development. Tourism is seen as one sector that could possibly provide such opportunities by the creation of tourism enterprises among local communities. Tourism enterprises are in most situations likely to be micro businesses. Most of the micro businesses ventured by local communities have relatively high failure rates. Therefore, it is important to deliberate a substantial integration among responsible stakeholders as to encourage and support tourism micro business ventures. This paper seeks to explore the opportunities and challenges of the community based tourism enterprises development in Semporna. The paper reports on panel data obtained from various local authorities, semi-structured interviews and author's observations. The study highlights lack of participation in tourism micro enterprise among local communities and challenges faced by local authorities in supporting the ventures.

Keywords: Community based tourism; Rural tourism; Microfinance; Microenterprise.

## **INTRODUCTION**

Community based tourism (CBT) emphasizes that local community has substantial ownerships and control over the development and management of tourism resources, and a major proportion of the benefits remain within the community. Local community participation is vital to the success of tourism industry (Choi & Sirikaya, 2006). Its core idea is the integration of hospitality and tourism related activities involvement by the local community such as in accommodation as well as food and beverages services. In addition to that, other basic public services such as infrastructure, health, education, communication channel and sense of ownership among local community can be considered as the main characteristics for community participation. These attributes enable interrelationship among local community and visitors in the creation of tourism product (Cioce *et al.*, 2007). However, Semporna's local communities have been observed not actively participating in tourism related activities despite of its vast marine resources. Therefore, local community should be seen engaging and utilizing these resources as an activity that would complement to their existing socio-economic activities which concentrated on agriculture, fishing and livestock farming.

## **LITERATURE REVIEW**

The development of nature-based tourism which is also known as "ecological tourism" or "ecotourism" is to promote sustainable tourism development. The International Ecotourism Society (1990) defines ecotourism as: "*Responsible travel to natural areas that conserves the environment and sustains the well-being of local people*". Moreover, the International Union of the Conservation of Nature (IUCN, 1996:20) defines ecotourism as: "*Environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy study and appreciate nature (and any accompanying cultural features—both past and present). It is a type of tourism that promotes conservation, has low visitor impact and provides for beneficially active socioeconomic involvement of local populations*".

It can be concluded that, cultural and environmental tourism are incorporated in ecotourism. Thus, it should be an integral part of the activity that benefits local population (Scheyvens, 1999). The creation of tourist products which incorporate active participation by local community is the main concept of CBT. (Guzman, Canizares and Pavon, 2011). The involvement of local community has been accepted as part of the component for sustainable tourism development. (Murphy, 1985; Haywood, 1988; Jamal & Getz, 1995). The creation of activities by the community which is related to hospitality and tourism industry will help to establish the relationship between local community and visitors. Therefore, various stakeholders such as federal and state government, non-governmental organizations (NGOs), private and public financial institutions and local community should be working together as to materialize tourism development especially in rural areas.

Connell (1997: 250) indicates that, "participation is not only about achieving the more efficient and more equitable distribution of material resources: it is also about the sharing of knowledge and the transformation of the process of learning itself in the service of people's self-development". It has been acknowledged that CBT contribute directly in improving socio-economic conditions of the society. (Manyara and Jones, 2007). However, unique geographical conditions and heterogeneous demographic characteristic of local community in Semporna, imposed greater challenge to participate in tourism activity among local community.

In developing rural areas, it is essential to initiate with community development (Catley, 1999) and community based tourism is commonly associated with ecotourism which concern with natural environmental resources surrounding a specific rural areas. Haywood (1988: 106) defines “community participation as a process of involving all stakeholders (local government officials, local citizens, architects, developers, business people, and planners) in such way that decision-making is shared”. (Catley, 1999, p.6) further reiterates the reason behind community development; “it was to educate and remove the stigma of charity and involve local people in decision-making”. However, rural development obviously involved top down approach in development. Thus, discourage active local community involvement (Catley, 1999). Various agencies such as the World Bank, United Nations and World Travel Organization have started promoting community participation, especially in the area of community development for poverty eradication strategy. The initiatives incorporate bottom-up approach which involves local community in planning, decision making and sharing the benefits of the tourism development program (Catley, 1999).

The incorporation of local community wishes in tourism planning and development ensure economic returns from the industry benefits the society living in the rural areas (Murphy, 1985). Tosun (2000, p.615) asserts that “it is a tool whose aim is to readjust the balance of power and to reassert local community views against those of the developers or the local authority”. Tosun (2006) further reiterates that ensuring local community involvement will enable wider opportunities for the local people to reap the benefits from tourism development that is happening at their locality. Therefore, inculcate positive attitudes and increase the level of awareness in conservation of local resources.

An inclusive believed by most scholars is that tourism development will not be able to reflect their true values and will unlikely to generate sustainable outcome if lack of participation and empowerment from local community (Lea, 1988). This increased participation of local community should incorporate the low income community in both rural and urban areas (Lea, 1988). In addition to that, local community will have the ability to contribute in providing inputs in decision making processes and eventually involved in tourism planning and developments (Murphy, 1985).

## **OBJECTIVE**

The aim of this paper is to identify the opportunities and challenges of community-based tourism development in Semporna and to add more insight and knowledge on community-based initiatives among Amanah Ikhtiar Malaysia (AIM) entrepreneurs. The focus of this paper is on sustainable tourism development through the development of tourism micro enterprises at the district of Semporna where tourism potential is often overlooked, as much focus is concentrated on Taman Tun Sakaran Marine Park (TSMP).

## **METHODOLOGY**

This paper is an exploratory study conducted based on primary and secondary source of information. The primary sources include personal observations and personal communications through semi-structured interviews conducted with the relevant local authorities in Semporna and Kota Kinabalu, Sabah such as Sabah Ministry of Rural Development, Sabah Parks, District Office of Semporna, Labor Office of Semporna and Amanah Ikhtiar Malaysia head office and its Semporna’s branch.

The information was gathered through a few occasions during the visitation to the research area in February 2013, December 2013 and April 2014. During this period, collection of background information, making contacts and inspecting possible case of the study locations was conducted. Key individuals at the respective department were chosen comprises of the District Officer, Director of Sabah Park, Rural Community Development Officer of Sabah, Officer at the Labor Office, Deputy Director of Finance, head office and Semporna's Branch Manager of Amanah Ikhtiar Malaysia.

The secondary source consisted of secondary information such as existing studies, journals, published books, published and unpublished reports and newsletters, local authority documents as well as the internet. This information was to complement the semi-structured interviews and discussions undertaken in Kota Kinabalu and Semporna with local authorities.

The author's observation was incorporated, particularly with respect to local community participation and experiences, infrastructure and facilities for tourism development in Semporna. Information and data gathered were examined using descriptions and classifications.

## **STUDY SITE**

Semporna is a district located in Tawau Division, in the east coast of Sabah, Malaysia on the island of Borneo. The district has an area of 1145 KM<sup>2</sup> and is divided into two sections, Semporna mainland and island areas. Its population was estimated to be around 133,164 with 19,860 total numbers of households. 68 percent of the population are local bumiputra, 2 percent are non-bumiputra and 30 percent of the population are non-Malaysian (Department of Statistics, 2010).

Bajau's ethnic group is among the main population, they live in stilt houses along the coastal area of Semporna's town. From the discussion with the District Officer, indicates that there are thousands of people living on the sea around Semporna. These are the Sea Gypsies (Bajau Laut) who spend most of their lives on boats and earn a living from marine resources.

Semporna is unique due to its diverse ethnics groups. In addition to Sabahan Malay which is the main language spoken in this area, they are also communicating in many different local dialects from various ethnic groups such as Bajau, Bajau Laut, Bugis and Suluk. According to the District Officer the cause of various dialect exist here is due to Filipino and Indonesian refugees that bring the language to this area. However, over 95 percent of the populations are Muslim (District Office of Semporna, 2014).

The District of Semporna is the gateway to diving paradise in world-renowned islands like Sipadan, Mabul, Kapalai, Matakang and Sibuan (District Office of Semporna, 2014). These islands are off the coast which is under the purview of Sabah Parks called Tun Sakaran Marine Park (TSMP) also known as Semporna Islands Park. It was gazette by Sabah Parks in 2004. The Marine Park comprises of eight beautiful islands – Bohey Dulang, Bodgaya, Sebangkat, Selakan, Mantabuan, Sibuan, Miaga, Church Reef and Kapikan Reef. (Sabah Parks, 2014).

Semporna is also known for the 'Regatta Lepa', its annual water festival which includes traditional boat races occur in April. Among other things to do when visiting Semporna is Bukit Tengkorak Archeological Sites. It is a volcanic rock shelter site located on top of a hill about 600 feet above sea level and a part of volcano mouth of 2 kilometer in diameter (District Office of Semporna, 2014).



**Figure 1.2:** Location of Study Site  
 Source: Adapted from Google Maps, 2015

## FINDINGS

### The Opportunities for CBT development in Semporna

The potential community-based tourism activities in Semporna will create several opportunities which will benefit socio-economic conditions of the local community. These can be summarized as follows:

#### Tourist numbers

It has been identified that the number of tourists arrival has been increasing between the years 2007 and 2012 (Table 1 and Table 2); thereby implying vast opportunities for local community such as employment, tourism product development, conservation and the supply of local product and services through the creation of tourism enterprises. However, in 2013 the insurgency incidence and a few separate kidnapping incidences has caused the decline in tourist arrival (Sabah Parks, 2014).

**Table 1:** Tourist Arrival in Tun Sakaran Marine Park

Year	Local Tourist	Foreign Tourist	Total
2007	12	51	63
2008	3700	909	4609
2009	3737	663	4400
2010	7910	2039	9949
2011	22891	6505	29396
2012	45942	13338	59770
2013	4614	30155	35155

Source: Sabah Parks, 2014

**Table 2: Tourist Arrival in Sipadan Island Marine Park**

Year	Local Tourist	Foreign Tourist	Total
2007	39288	4094	43382
2008	39172	4453	43625
2009	38015	5538	43553
2010	37784	5691	43475
2011	37861	5810	43671
2012	38467	5431	43898
2013	38942	4715	43657

Source: Sabah Parks, 2014

Results from the interview with the Officer at the Ministry of Sabah Rural Development highlights that the majority of the local community are involved in the Estate Project and Mini Estate Program organized by the ministry. Furthermore, the rural industry center which is established to encourage local community to produce local product such as handicraft is not active in Semporna.

The District Officer states that, most of the tourist only stayed in Semporna town as a stopping point before they commute to the islands for diving activities. Local community has been observed as less interested in extending a warm welcome to the visitors.

### **Entrepreneurship Activities**

It has been observed that, CBT should enable the local supply of goods and services from the local community. The creation and establishment of small, medium and micro enterprises among local community provide a number of services to the district. This is evidence from the number of license issued by the District Office of Semporna (Table 4).

**Table 4: Type of Business License**

License Type	Number of License
Fish market	84
Market & general stall	24
General shop	12
Vegetable stall	56
Putu stall	20
Anjung Lepa stall	18
Banana market	24
Taman Sempaul stall	21
Coffee shop	2
Restaurant	99
Karaoke Centre	1
Snooker Centre	5
Cyber internet cafe	5
Hotel & Accommodation	19
Saloon & Barber	26
Workshop	19
Ice factory	6
Scrap metal services	4
Petroleum storage	6

**Source:** District Office of Semporna, 2014

### **Financial services**

In many developing countries, growth in the tourism sector is still held back by a lack of funds (WTO, 2005) and it is difficult for the poorest populations to gain access to appropriate loans. However, in Semporna there are a few private financial institutions such as Agrobank, Maybank, Bank Simpanan Nasional, Bank Islam and CIMB Bank. In addition, a few microfinance institutions are available for the eligible local community. Among these microfinance institutions are Amanah Ikhtiar Malaysia (AIM), TEKUN Nasional, Yayasan Usaha Maju (YUM) and Majlis Amanah Rakyat (MARA).

### **The Challenges for CBT Development in Semporna**

Interviews, discussions and observations highlighted a number of challenges for community based tourism in Semporna as follows:

#### **Employment**

The Department of Labor Office reports locals being employed in varieties of jobs ranging from accommodation, food and beverage services, transportation, guides etc. Results from the employment placement as at April 2014 (Table 3) indicates lack of encouragement from local community to register for the placement of jobs through the Labor Office. Discussion with the Officer highlights that many locals are self-employed working as a fisherman and involved in the traditional agricultural activities at their own land. A part from that, they are also working part-time as drivers, picking up passengers using their own private vehicles (kereta sapu) around town.

**Table 3: Number of Workers Based on Job Placement by Industry**

Industry	Local	Foreign	Total
Agriculture, Forestry & Fishery	190	1746	1936
Wholesale, Retail & Workshop	124	6	130
Transportation & Storage	40	10	50
Accommodation, Food & Beverage	66	3	69
Financial & Insurance Services	110	-	110
Administration & Support Staff	3	-	3
Other services	157	1	158

**Source:** Labor Office of Semporna, as at April 2014

Furthermore, from the discussion highlights that local are occasionally hired as casual laborers when the need arises. Feedback from the Officer at the labor office indicates that locals are much more comfortable being self-employed and undertake traditional socio-economic activities primarily on agriculture, fishing, sea weed farming and livestock farming.

#### **Language barrier and high illiteracy rates**

The District Officer indicates language barriers, high illiteracy rates, lack of public amenities and illegal immigrants are among the attributes of lack of involvement by the local community in tourism sector in Semporna. This is supported by the heterogeneous characteristics of the local community which comprises from a diverse ethnic groups and communicating in many different local dialects.

#### **Lack of public amenities and basic needs**

Tourism need for infrastructure such as road, drinking water, sanitation, electricity, telecommunication and health services (WTO, 2005). It is evidence from the researcher's



observation that public transportation services does not exist around the district. The main transportation commuted by the local community is by using private hire vehicle (kereta sapu) around town. Boats are used to hop from one island to another. Clean drinking water is scarce at the islands and they are harvesting rain for cleaning and washing purposes.

Discussion with officer at the Ministry of Rural Development highlights unique geographical conditions and demographic characteristic of local community in Semporna, imposed greater challenge to public authorities to initiate tourism development among local community. These leads to a high transaction cost for the community as well as business operators.

### **National security issues**

The insurgency and various kidnapping incidences occur in separate occasion in 2013 and 2014 has led to decreasing in tourist arrivals. The repeated kidnapping incidents have negatively impacted tourism sector in Semporna (Borneo Post, 2014).

### **CONCLUSION**

Community based tourism (CBT) is a possible solution to improve the socio-economic conditions of local community through the creation of tourism micro-entrepreneurs. The integration of various stakeholders (Kibicho, 2008) in Semporna such as federal government, local government and relevant authorities, non-government agencies, financial institutions, business operators and local community need to be assessed as to ensure the community empowerment through economic, political and social aspects be realized as a means for poverty alleviation in rural area especially, Semporna. Addison (1996) asserts other barriers such as lack of education, business inexperience, insufficient financial assistance and conflicting interests from various stakeholders need to be resolved before local community involvement can be incorporated. Arnstein (1969) states that the purpose of participation is for power redistribution, therefore it should enable local community to equally redistribute costs and benefits and enable them in the establishment and creation of micro enterprises among local community by allowing them to manage its own tourist resources is fundamental (Lepp, 2007) in Semporna.

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# A COMPARISON STUDY BETWEEN DOMESTIC AND INTERNATIONAL RURAL TOURIST PROFILE AND TRAVEL EXPENDITURES IN SEMPORNA, SABAH

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## Abstract

Tourist's profile plays a vital role in tourism planning. This paper analyses the subject by comparing the tourist's profile and travel expenditures between domestic and international tourists to Semporna, Sabah. This paper compares profile of tourists based on socio-demographic characteristics, trip related variables, and travel expenditures. Furthermore, travel expenditures are compared based on six different expenditure groups: accommodation, foods and beverages, transportation, diving services, others and total expenditure. This study uses face to face interview to obtain the results and the data was analysed using SPSS. The finding shows that the differences in socio-demographic characteristics, trip related variables, and travel expenditures between domestic and international tourists are noteworthy. Compare to domestic tourists, it was reported that international tourists prefer scuba diving and majority of them are first timer. They prefer to travel in a small group, with friends and spouse by bus and stayed at budget lodging. Also, international tourists stayed longer and know Semporna through words of mouth but they are less likely to purchase a package tour. Most of the international respondents are female, single, aged 19 to 40, had higher education background and work as private employees or self-employed. The average income for international tourists is RM7535 and they spent average RM1927. Finally, the main conclusions and implications for tourism marketing are discussed following by the recommendations.

Keywords: *Profile, expenditure, Semporna, socio demographic, trip related*

## INTRODUCTION

Tourism sector provides opportunities for economic development in many developing countries. It has been used as an instrument to reduce poverty (Saarinen, Rogerson, & Manwa, 2011). Also, it has the potential to improve the rural economy (e.g. agriculture) and development, increase the income and employment in many small regions (Forstner, 2004; Mafunzwaini & Hugo, 2005). The global destination competition drives many destination marketers to find out the distinctiveness of their tourist destinations in order to find competitive advantages over other tourist destinations (Leslie & Wilson, 2006). As a result, money has been invested to attract tourists (Blancas et al., 2013). In order to achieve sustainable tourism, understand the characteristics of visitors is vital (Obua & Harding, 1996).

Visitor surveys allow local communities to understand out how important different types of visitor's expenditure and visitor characteristics and preferences (Leones, 1998). This is vital for marketing purposes especially to find out what percent of visitors' expenditure and how money is spent during visitor's stay in Semporna. This allows business operators to recognise

potential business prospects. While most tourism marketers and local authorities in Semporna recognize the importance of information from visitor surveys, the information is seldom being used for detail analysis.

While most tourism marketers and local authorities in Semporna recognize the importance of information from visitor surveys, there is unknown of visitor survey conducted in Semporna and the information is seldom being used for detail analysis. Thus, there is a need to carry out visitor surveys in Semporna to obtain the tourist's information. This information is deemed as crucial for future planning and segmentation purposes.

## **LITERATURE REVIEW**

### **Rural tourists**

Some researchers (Gao, Huang, & Huang, 2009; Park & Yoon, 2009; Pesonen & Komppula, 2010; Urry & Larsen, 2011; Lane, 1994; Cai & Li, 2009) commented that rural tourists take a trip to rural areas to search for relaxation, run away from overcrowded and stressful urban life, to learn and explore culture and nature. Rural tourists prefer to participate in nature related activities. A study conducted by Farmaki (2012) found out that the main motive rural tourists travelled to Troodos, Cyprus were to run away from the city life to enjoy the nature and culture. On the other hand, Molera and Albaladejo (2007) found that enjoy the family togetherness in a nature setting is the key reason rather than experience the rural lifestyle.

A number of researchers (Cai & Li, 2009; Opperman, 1996; Peralas, 2002) attempted to summarise the profile of rural tourists based on few variables. Cai and Li (2009) reported that rural tourists are normally dominated by female and they are normally travelled with families or couples. Also, rural tourists have middle or upper class background and are professional workers, stay short. In Europe, rural tourists are generally viewed as domestic visitor travel not far from their home using own vehicle (Opperman, 1996; Sharpley & Sharpley, 1997). Rural tourists are characterised as middle aged, travel in small party (Opperman, 1996), educated, middle income, and professional workers. As different people travel with different interests and characteristics (Roberts & Hall, 2001; Molera & Albaladejo, 2007), identifying them based on their travel behaviour and socio demographic characteristics are crucial for future promotion and segmentation purpose (Molera & Albaladejo, 2007).

### **The economy of Sabah**

Sabah is the second largest and the third most populous state in Malaysia. In 2012, Sabah's state economy registered RM44.4 billion GDP, which ranked the sixth (5.9%) in term of percentage share after Selangor, Kuala Lumpur, Sarawak, Johor, and Pulau Pinang. An economic corridor entitled The Sabah Development Corridor (SDC) was launched at the beginning of year 2008 for 18 years (2008-2025) to leverage natural endowment to accelerate the economic growth and ensure maximum resource allocation. The corridor aligns the national program under the Economic Transformation Programme (ETP) and the National Key Economic Areas (NKEAs) to transform Malaysia into a high-income nation by the year 2020. The objectives of Sabah Development Corridor are to create sustainable economic growth, improve income and socio-economic standards by reducing regional imbalance and income inequality. The development of SDC has been planned, promoted, monitored, and coordinated by Sabah Economic Development and Investment Authority (SEDIA) regarding to economic growth and impacts. By 2025, the development is forecasted to triple the GDP per capita and to increase GDP by four times, created at least 900,000 new employments during implementation the period.

The first five years (2008-2012) of the projects has a noteworthy impact in rejuvenating the economic growth, generating new employments, enhancing socio welfare, increasing employment rate and household income and diminishing the poverty rate. As a result, the poverty incident had reduced almost half during the implementation period. In rural areas, the poverty rate has witnessed a dramatic declined almost 20.0 per cent to 12.9 per cent during the 2009-2012 period (Borneo Post, 2014). In year 2013, the unemployment rate for Sabah was recorded at 5.2%. Nevertheless, the average household income was RM4, 013, poverty rate 8.1% and Gini Coefficient 0.428. Table 1 demonstrates the economic performance for Sabah from year 2007-2012.

**Table 1** Economic performance for Sabah from year 2007-2012

<b>Year</b>	<b>GDP growth (%)</b>	<b>Unemployment rate (%)</b>	<b>Household Income (RM)</b>	<b>Poverty rate (%)</b>	<b>Gini Coefficient</b>
2007	3.2	5.5	2837	19.5	0.450
2008	10.7	4.9	-	-	-
2009	4.8	5.5	3102	19.7	0.453
2010	2.7	5.5	-	-	-
2011	1.3	5.6	-	-	-
2012	4.1	5.4	4013	8.1	0.428
2013	5.9	5.2	-	-	-

Adapted from Economic Planning Unit, Sabah and Department of Statistic Malaysia (2014)

There are six key focus areas to attract a total investment of RM77.5 billion by the year 2020. Semporna is part of the Marine Integrated Cluster, where it leverages the potential of marine resources to expand the marine related industries (aquaculture and fishing) and manages it in a sustainable manner (SEDIA, 2013). Semporna attracts FDI from United States for setting up in the integrated Lobster Aquaculture Park. It involves RM2 billion in investments and forecasted to bring RM3 billion in annual sales by 2030. Sabah targets to increase tourism receipts to RM16.8 billion by 2020, which is the 10.0% of the national tourism receipts (SEDIA, 2013; Business Monitor International, 2012). In 2012, tourism receipts were RM 5.3 billion to the Sabah's economy (see Table 2). Among other sectors, tourism sector has attracted the highest 29.1% of the planned investment. Semporna – Borneo Marine Paradise aims to generate RM854.0mil GNI, create 2232 jobs, and attracts RM1.8bilion in investments (SEDIA, 2013).

**Table 2** Sabah tourist arrival from year 2009-2013

<b>Year</b>	<b>Malaysian</b>	<b>International</b>	<b>Total Tourist Arrival</b>	<b>Changes (%)</b>
2009	1,683,924	562,144	2,246,068	-
2010	1,708,716	795,953	2,504,669	10.3
2011	1,998,687	845,910	2,844,597	11.9
2012	1,933,996	941,765	2,875,761	1.1
2013	2,293,923	108,9320	3,383,243	17.6

Adapted from Sabah Tourism Board (2014)

## **METHODOLOGY**

Semporna is a traditional fishing town situated on the east coast of Sabah. The town was once a well-known 'crime' town where illegal activities were carried out (Liss, 2010). Semporna is divided into mainland and islands, with land coverage 442 sq km and forty-nine islands surroundings (District of Semporna, 2014).

This paper utilised the information provided by Hartawan Stabil (2014). The jetty usage indicates the frequency of jetty usage for tourism activities. The jetty usage has increased almost a quarter compare to year before. It was reported that almost 85.0% of the usage are foreigners. However, the statistic showed that the usage of domestic visitors has dropped about 19.0% while there was an increase of 27.5% for international visitors compare to previous year. Data were collected using face to face interview with the help by three enumerators during the end of the year 2013. The boundary of the data collection was set within 5km radius from the town, including some islands. During the data collection, tourists were asked to participate in survey at various points such as restaurants, beaches and resorts. On top of that, merely tourists who had stayed for at least one night were qualified for survey. Local communities were disqualified since their expenditure would not generating new tourism dollars to the local economy.

The survey asked information on: 1) trip related information; 2) socio demographic information; and 3) travel expenditure. A descriptive-statistics analysis was executed to investigate the overall sample profile using SPSS 22.0. Additionally, a cross tabulation analysis was run to compare the trip related information, socio demographic information and travel expenditure. Tourist's nationality was grouped into two groups, namely domestic and international for comparison purpose.

## **FINDINGS**

The well trained and experience enumerators and the willingness to participate in the survey resulted in a total of 380 (return rate = 97.0%) valid questionnaires were utilized for the data analysis. There were 112 domestic respondents while the remaining 268 respondents were from overseas (international). Table 3 presents the findings based on trip related variables. The result showed that majority of the domestic respondent (39.3%) chose diving as the main leisure activity they did in Semporna while scuba diving (27.7%) and snorkelling (22.3%) are the another two main activities. Only few respondents mentioned that they travelled to marine protected areas, rural livelihood and ethnic minorities, cultural event and others. Conversely, the top three motivations of international tourists travelled to Semporna are scuba diving, snorkelling and holiday/vacation. However, none of the international respondents visit rural livelihood and ethnic minorities and others.

Majority of the respondents from domestic and international are first timer, with over 90.0% of international respondents travelled to Semporna for the first time while the remaining been to Semporna for 2-5 times. On the other hand, more than half of the respondents (60.7%) are first timers while approximately 30.0% been to Semporna for 2 to 3 times while the remaining 10.0% been more than 4 times. The findings reported that majority of the domestic respondents (63.0%) stayed between 1 to 3 day in Semporna; 37.0% stayed from 4 to 6 days, and none stayed more than 7 days. In contrast, majority of the international respondents (41.0%) stayed between 1 to 3 days; 40.0% stayed from 4 to 6 days, and the remaining proportion (20.0%) stayed more than 7 days.

Respondents were asked how they arrived at Semporna, majority of the domestic tourists (62.5%) mentioned they came by taxi and others while only a small portion came by bus (16.1%). However, international tourists demonstrated slightly different in choosing mode of transport. Approximately 73.0% of the international tourists chose taxi and bus as preferred transport. The rest (n=73) said they came either by rental car or others. While in Semporna, respondents stay in different kinds of accommodation. For instance, over half (57.1%) domestic respondents said they were on budget lodging. Another 34.8% stated that they

occupied at the hotel and luxury resorts, while only about 8.0% claimed they stay at friends and relative house. Similar to domestic tourists, a large number of international tourists (69.0%) chose budget lodging while another 38.1% stayed at the hotel and luxury resorts while only one respondent stayed at friends and relative house.

In term of party size, only 7.1% of domestic respondents travelled alone and approximately 41.0% travelled with 2 to 3 companion while the remaining 52.0% travelled with more than 4 companions. Nevertheless, about 15.0% of international respondents travelled alone and 69.0% travelled with 2 to 3 companions while the remaining travelled with more than 4 companions. A significant proportion (36.3%) of domestic respondents claimed they learnt about Semporna simply electronic media (TV, internet) by while about 28.0% learnt about Semporna as a place to visit from word of mouths. The remaning (35.8%) were travel agents, magazine/newspapers. tourism fair, and others. International respondents pose similar results like domestic respondents, where 41.7% claimed they learnt about Semporna by electronic media while 37.5% learnt from word of mouths. The survey found that less than 20.8% of the international respondents learnt about Semporna from tourism fairs and others. It is interesting to note that respondents quoted 'Lonely Planet' as others information.

**Table 3** Comparison between domestic and international tourists based on trip related variables

	<b>Domestic (n=112)</b>	<b>Percentage (%)</b>	<b>International (n=268)</b>	<b>Percentage (%)</b>
<b>Purpose of visit</b>				
Marine protected areas	1	0.9	6	2.2
Scuba diving	31	27.7	146	54.5
Snorkelling	25	22.3	56	20.9
Rural livelihood and ethnic minorities	1	0.9	0	0.0
Honeymoon	1	0.9	4	1.5
Holiday/vacation	44	39.3	53	19.8
Visit family and friends	4	3.6	3	1.1
Others	5	4.5	0	0.0
<b>First/repeat</b>				
1	68	60.7	249	92.9
2-3	33	29.5	17	6.3
4-5	5	4.5	2	0.7
≥5	6	5.4	0	0.0
<b>Mode of transport</b>				
By taxi	34	30.4	91	34.0
By rental car	24	21.4	8	3.0
By bus (including tour bus)	18	16.1	104	38.8
Others	36	32.1	65	24.3
<b>Length of stay</b>				
1-3	71	63.4	106	39.6
4-6	41	36.6	109	40.7
≥7	4	0	53	19.8
<b>Type of accommodation</b>				
Hotel	25	22.3	45	16.8
Budget hotel/guest house	64	57.1	165	61.6
Luxury resort	14	12.5	57	21.3



Staying at friends/relative house	9	8.0	1	0.4
<b>Party size</b>				
1	8	7.1	40	14.9
2-3	46	41.1	185	69.0
4-5	27	24.1	34	12.7
≥6	31	27.7	9	3.4
<b>Source of information</b>				
Word of mouths	47	28.0	124	37.5
Travel agents	13	7.7	18	5.4
Magazine/Newspapers	28	16.7	26	7.9
Electronic media (TV, internet)	61	36.3	138	41.7
Tourism fair	10	6.0	7	2.1
Others	9	5.4	18	5.4

Table 4 illustrates a demographic profile of the respondents. Majority of domestic respondents identified themselves as female (57.0%) and 43.0% as male. Also, there were more female (54%) than male (46.0%) for international respondents. The findings also revealed that domestic respondents were more likely to be married (54.5%) than non-married (45.5%) while international respondents were more likely to be non-married (64.6%) than married (35.4%). For some of the respondents, age is a sensitive issue. However, only 10 respondents did not report their age. Domestic respondents were predominantly aged between 19 and 30 (40.2%), following by aged between 31 and 40 (24.1%). There was only about 5.0% more than 51 years old. Also, international respondents were predominantly aged between 19 and 30 (56.3%), following by aged between 31 and 40 (34.0%). There was only one respondent reported his/her age 18 or less and four reported age 51 or older. In sum, most respondents had at least university graduates or above only a small proportion were high school leavers. About 29.0% of the domestic respondents had diploma education level, while 53.5% had a degree or above education level. Roughly 80.0% of the international respondents had a degree or above education level. There was only one domestic respondent and four international respondents had attended only elementary school.

More than half of both domestic and international respondents were professionals in different disciplines. For example, about 36.6% domestic respondents and 44.0% international respondents worked in private sectors. On the other hand, 33.0% domestic respondents and 13.1% international respondents were in government work, and nearly about 9.0% domestic respondents and 14.2% international respondents were self-employed. Fourteen domestic and thirty five international respondents identified themselves as student. Less than two domestic respondents and one international tourist were retired and the remaining four domestic and sixteen international respondents has no job. Approximately 27.0% respondents did not report their income. About 13.0% of domestic respondents and only 6.3% international respondents earned less than RM1000. Over half (53.0%) domestic respondents had monthly earnings between RM1001-RM6000, about 13.0% earned between RM6001-RM12000 and only a small portion (1.8%) earned more than RM120001. About 30.0% of international respondents did not report their income. Only a few (6.0%) earned less than RM1000 while majority of them (26.5%) earned between RM1001-RM6000 and about 21.0% earned more than RM12001. Compared with the domestic visitors, the monthly earnings of foreign visitors were about 2.5 times higher.

**Table 4** Comparison between domestic and international tourists based on socio demographic characteristics

	<b>Domestic</b>	<b>International</b>		<b>Domestic</b>	<b>International</b>
<b>Gender</b>			<b>Education level</b>		
Male	42.9%	45.9%	Primary school	0.9%	1.5%
Female	57.1%	54.1%	High school	15.2%	7.5%
			Diploma		10.1%
			Bachelor degree	28.6%	54.9%
			Postgraduate		24.6%
			Others	45.5%	1.5%
				8.0%	
				1.8%	
<b>Marital status</b>			<b>Occupation</b>		
Single	42.0%	64.2%	Government servant	33.0%	13.1%
Married	54.5%	35.4%	Self-employed		14.2%
Divorced/separated	3.6%	0.4%	Private sector employee	8.9%	44.0%
			Student	36.6%	13.1%
			Unemployed		6.0%
			Retiree	12.5%	0.4%
			Others		9.3%
				3.6%	
				1.8%	
				3.6%	
<b>Age group</b>			<b>Income</b>		
18 or less	5.4%	0.4%	<RM1000	12.5%	6.3%
19 - 30	40.2%	56.3%	RM1001 – RM3000		12.7%
31 - 40	24.1%	34.0%	RM3001 – RM6000	28.6%	13.8%
41 - 50	20.5%	6.0%	RM6001 – RM9000		9.7%
51 or older	5.4%	1.5%	RM9001 – RM12000	24.1%	6.3%
Not answer	4.5%	1.9%	> RM12001		20.9%
			Not answer	8.9%	30.2%
				4.5%	
				1.8%	
				19.6%	

Roughly 3.0% respondents (n=11) did not report expenditure on accommodation. Both domestic and international respondents spent similar expenditure pattern on accommodation, with majority of domestic respondents (87.5%) and international respondents (76.5%) spent between RM1-RM750. However, none of the domestic respondent spent more than RM2251 while there were three international respondents spent more than RM2251. Similar to accommodation group, majority of domestic respondents (92.0%) and international respondents (68.3%) spent between RM1-RM500 for foods and beverages. Less than 10.0% of domestic tourists and about 30.0% of international paid between RM501 to RM1500.

None of the domestic respondent spent more than RM1501 while there were only five international respondents spent more than RM1501.

In total, only 2.6% did not pay for transportation. About half of both domestic (49.1%) and over 60.0% of international respondents spent between RM1-RM250. In addition, 37.5% domestic respondents and 36.2% international respondents spent between RM251-RM750 while the remaining spent more than RM750. Since most of the respondents came for diving, but about 47.0% of respondents did not report their expenditure on diving services. More than half (55.4%) domestic respondents and 40.3% of international respondents did not pay for diving service. Again, a large number of respondents from international and domestic spent between RM1-RM1000 on diving activities. It is interesting that international respondents were willing to spend more than domestic respondents since there were 43 respondents reported expenditure more than RM1501. Compare to domestic respondents, over half (53.7%) of international respondents did not pay for others expenditure. Most of the respondents spent between RM1-RM250 and only fourteen domestic respondents and eight international respondents spent more than RM251.

Table 5 compares the expenditure of domestic and international tourists. Looking at the total expenditure in Semporna, expenditure between RM1-RM1500 was still the dominant category for both groups. Domestic respondents spent less than international respondents across all expenditure categories, where over half (67.0%) of them paid between RM1-RM1500 while the rest spent between RM1501 to RM4500. However, none of them spent more than RM4501. On the other hand, despite there were more international respondents spent between RM1-RM1500, over half (52.2%) were willing to spend more than RM1501.

**Table 5 Comparison between domestic and international tourists based on expenditure groups**

<b>Categories</b>	<b>Domestic</b>	<b>Percentage (%)</b>	<b>International</b>	<b>Percentage (%)</b>
<b>Accommodation</b>				
RM1-RM750	98	87.5	205	76.5
RM751-RM1500	3	2.7	40	14.9
RM1501-RM2250	1	0.9	19	7.1
>RM2251	0	0.0	3	1.1
Not answer	10	8.9	1	0.4
<b>Foods and beverages</b>				
RM1-RM500	103	92.0	183	68.3
RM501-RM1000	6	5.4	55	20.5
RM1001-RM1500	3	2.7	25	9.3
>RM1501	0	0.0	5	1.9
<b>Transportation</b>				
RM1-RM250	55	49.1	160	59.7
RM251-RM500	29	25.9	65	24.3
RM501-RM750	13	11.6	32	11.9
>RM751	11	9.8	5	1.9
Not answer	4	3.6	6	2.2
<b>Diving activities</b>				
RM1-RM500	20	17.9	62	23.1
RM501-RM1000	13	11.6	33	12.3

RM1001-RM1500	8	7.1	22	8.2
>RM1501	9	8.0	43	16.0
Not answer	62	55.4	108	40.3
<b>Others</b>				
RM1-RM125	43	38.4	104	38.8
RM126-RM250	14	12.5	12	4.5
>RM251	14	12.5	8	3.0
Not answer	41	36.6	144	53.7
<b>Total</b>				
RM1-RM1500	75	67.0	120	44.8
RM1501-RM3000	30	26.8	96	35.8
RM3001-RM4500	7	6.3	44	16.4
>RM4501	0	0.0	8	3.0

Table 6 outlines the comparison of average expenditure categories by domestic and international tourists. Overall, international respondent spent more on accommodation, foods and beverages, diving activities, and total expenditures except for transport and other expenditures. Domestic respondents spent average less RM268 than international respondents on accommodation. In addition, international respondents spent almost 2 times than domestic respondents on foods and beverages and diving activities. In addition, domestic tourists spent average RM65 and RM73 more than international respondents on transport and other expenditure, respectively. In term of total expenditure, domestic respondents spent average RM1314, an average RM613 less compare to international respondents.

**Table 6** Comparison between domestic and international tourists based on average expenditure

Categories	Domestic	International
1. Accommodation	RM294(n=102)	RM562 (n=268)
2. Foods and beverages	RM234 (n=102)	RM454 (n=268)
3. Diving activities	RM595 (n=70)	RM1244 (n=159)
4. Transport	RM341 (n=112)	RM276 (n=268)
5. Other	RM154 (n=71)	RM81 (n=124)
6. Total	RM1314 (n=112)	RM1927 (n=268)

Finally, the summary of the comparison between domestic and international tourists is presented in Table 7.

**Table 7 Summary of the comparison between domestic and international tourists**

	Domestic tourist	International tourist
1. Travel motivation	• Holiday	• Scuba diving
2. First/ Repeat	• 61% first time/39% repeat	• 93% first time/7% repeat
3. Mode of transport	• Taxi	• Bus
4. Accommodation type	• Budget lodging	• Budget lodging
5. Length of stay	• 3.2 nights	• 4.7 nights
6. Party size	• 5.9	• 2.5
7. Travel companion	• Prefer to travel with friends and spouse	• Prefer to travel with friends and spouse
8. Source of information	• Electronic media & words	• Electronic media & words

	of mouth	of mouth
9. Purchase of package tour	• 69%	• 46%
10. Gender	• More female than male	• More female than male
11. Marital status	• Married	• Single
12. Age	• Majority age 19-40	• Majority age 19-40
13. Education	• Bachelor degree or above	• Bachelor degree or above
14. Occupation	• Private employees & government servants	• Private employee and self-employed
15. Income	• Average RM3060	• Average RM7535
16. Expenditure	• Average RM1311	• Average RM1927

## CONCLUSION & RECOMMENDATION

Being a world class diving destination with a number of well-established tourism attractions; Semporna attracts large number of international tourism market (Hartawan Stabil, 2014). Identifying who are the tourists, the behaviours, the characteristics, and the expenditures are vital for tourism planning. This paper offers tourism stakeholders and policy makers with a resource that detail the behaviour, characteristics and expenditure of tourists visiting Semporna for future tourism development.

A number of conclusions can be reached from the results presented in this paper. Nearly 70.0% the people visiting Semporna are foreigners. The majority are young to middle-aged adults with far fewer older people. Many are on scuba diving and vacation and are visiting for the first time. In this paper, an analysis was made to explore the different in tourist expenditure between domestic and international tourists. The mean values show that, on average, international tourists spent more than domestic tourists for all types of expenditure, except for transport and others expenditure. The absence of domestic visitors in the RM3060 monthly income group merits mention here. In Malaysia, people in this income category would be described as 'middle income' with a relatively higher standard of living and possibly some extra income to spend on leisure. Therefore, the potential of domestic tourists should not be neglected. The study is expected to help the tourism development in Semporna by studying the tourist's profile and their expenditures.

The results recommend a number of potential marketing strategies. This study facilitates destination marketers and local authorities to get substantial information regarding to tourist's expenditure and understand particular tourist segments in enhancing the economic development of the area. The results show that the main motivation for domestic tourists is holiday while international tourists prefer scuba diving. This might due to the short stay (3.2 nights) of domestic tourists compare to international tourists (4.7 nights). Local operators should extend the length of stay of both tourist groups by diversifying the tourism products. Other than the marine activities, the local authorities (e.g. Sabah Parks, district office of Semporna) should promote the potential tourism activities, such as cultural events, proboscis monkey cruise, and hiking.

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# **A PRELIMINARY STUDY IDENTIFYING FACTORS OF MEMORABLE TOURISM EXPERIENCE IN MULU NATIONAL PARK, SARAWAK.**

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## **Abstract**

This paper aims to identify potential factors of Memorable Tourism Experience (MTE) which is unique to Mulu National Park (MNP), Sarawak. Review of previous studies in the area of tourism experience and a qualitative research approach was chosen for this study as it offered an avenue to understand of the factors that characterize memorable tourism experience. In-depth interviews were conducted, using a structured questionnaire, to collect data from individuals who are directly related to the national park. A total of 13 individuals were interviewed. The findings proposed a new construct of Memorable Tourism Experience (MTE) which can be used to measure the memorable experiences of tourists visiting Mulu National Park.

Keywords: *Tourism, Tourism Experience, Memorable Tourism Experiences.*

## **INTRODUCTION**

Tourism destinations are noted having mixtures of tourism products offering an integrated experience to consumers (Buhalis, 2000), therefore emphasizing on delivering unique, extraordinary and memorable tourism experiences is crucial in order to maintain a sustainable competitive advantage (Kim, Ritchie, & Tung, 2010b). However, review of the related literature pertaining on memorable tourism experience remains sparse since it is an emerging research interest with only a few academic studies available, for example, Kim, 2010; Kim, Ritchie, & McCormick, 2010a; Kim et al., 2010b; Morgan & Xu, 2009; Tung & Ritchie, 2011a; Tung & Ritchie, 2011b. Therefore, more studies in this area could lead to a better understanding of what it means for tourists to have a MTE and also to reveal specific constructs of MTEs (Tung & Ritchie 2011a). The purpose of this paper is to report the findings of an exploratory research which identify the themes that are likely to be the determinants of MTEs in Mulu National Park. The findings are based on the analysis 13 in-depth interviews with the tourism officials directly associated with Mulu National Park.

## **LITERATURE REVIEW**

Memorable tourism experience represents the new benchmark or standard that tourism marketers must seek to deliver. A memorable tourism experience is constructed from tourism experience based on the individual assessments of the experience. Numerous scholars have highlighted the importance of past memory because it is the single most important source of information when a traveller makes a decision to re-visit a particular destination. According to Hoch and Deighton (1989), there are three reasons behind the significance of past experiences stored in the memory. Firstly, the product involvement and motivation to purchase the product are high when the information is drawn from their past experiences, secondly, consumers tend to perceive past experiences as valuable and reliable information sources and, thirdly, there is great influencing power of past experiences on future

behavioural intentions. Therefore Kim et al. (2010b) suggested tourism businesses give due attention to this by facilitating the realization of memorable tourism experiences for travellers. Hence, the central role of tourism planners is to “facilitate the development of an environment (i.e., the destination) that enhances the likelihood that tourists can create their own memorable tourism experiences” (Tung & Ritchie, 2011a: 3). However, understanding of what makes a tourism experience more memorable for a traveller is crucial for such managerial efforts. Therefore, this research aims at exposing the likely determinants of memorable tourism experiences of holiday travelling.

## STUDY METHODS

This study used secondary data sources to explore the likely determinants of MTEs and 13 in-depth interviews with tourism officials directly related to Mulu National Park. The MTE constructs domain was initially generated from a comprehensive review of tourism research related to tourism experiences. To identify the themes of MTE to suit local environment of Mulu National Park, exploratory study as a preliminary step toward developing MTE scale items is conducted. Qualitative interview was done to 13 individuals directly related to MNP. The 13 individuals were comprised of tour guides, travel agents selling MNP packages and employees of MNP. Individuals were asked to recall their most MTE in MNP and list down the words that describe their experience. The individuals were given a structured questionnaire containing 51 different words potentially related to memorable tourism experiences that were generated from the comprehensive literature review as a guide for them to choose from prior listing them down. Besides, this will help to identify themes that constituted one’s MTE in order to suit local environment, this is also done to ensure the content validity of construct domains, which were predetermined from the literature review. The use of two data sources also enabled researcher to compare the findings and the results proved a higher consistency of the themes between the two data sources. In reviewing the answers, different words that could be categorised under one theme will be merged together. Through this process, the words were then reduced to themes that later can be used as a basis to measure MTE specifically in MNP.

## FINDINGS

Table 1 shows 16 themes emerged from comprehensive literature review conducted by Kim et al. (2010a). 12 themes emerged as the antecedents of memorable tourism experience from the analysis of in-depth interviews. 12 themes are common to the 16 themes identified from the literature review. As can be seen in table 2, the common themes that were associated with MTE were: (a) Hedonism, (b) Novelty, (c) Social Interaction / Local Culture, (d) Refreshment, (e) Meaningfulness, (f) Involvement, (g) Adverse Feelings, (h) Stimulation, (i) Challenge, (j) Unexpected Happenings, (k) Knowledge, and (l) Happiness. The following will discuss on the common themes identified.

**Table 1:** Potential Constructs of MTE

<b>Constructs</b>	<b>Related Literature</b>
Hedonism	Dunman and Mattila 2005; Lee, Dattilo, and Howard 1994; Mannell and Kleiber 1997; Otto and Ritchie 1996
Relaxation	Howard et al. 1993; Mannell, Zuzanek, and Larson 1988
Stimulation	Arnould and Price 1993; Bolla, Dawson, and Harrington 1991; Howard et al. 1993; Obenour et al. 2006; Samdahl 1991



Refreshment	Howard et al. 1993; Hull and Michael 1995; Samdahl 1991
Adverse Feeling	Aziz 1995; Ryan 1991, 1993
Social Interaction	Ap and Wong 2001; Arnould and Price 1993; Bolla, Dawson, and Harrington 1991; Howard et al. 1993; Obenour et al. 2006; Samdahl 1991
Happiness	Bolla, Dawson, and Harrington 1991
Meaningfulness	Bruner 1991; Kang et al 2008; Noy 2004; Wilson and Harris 2006
Knowledge	Blackshaw 2003; Otto and Ritchie 1996
Challenge	Lee, Dattilo, and Howard 1994; Mannell and Iso-Ahola 1987
Assessment of value	Latour and Peat 1979; Ryan 2002; Yoon and Uysal 2005
Assessment of service	Bartlett and Einert 1992; Leiss 1979; Cliff and Ryan 1994
Unexpected Happenings	Aziz 1995; Christianson 1992; Ryan 1991, 1993; Talarico and Rubin 2003
Personal Relevance	Bloch and Richins 1983; Blodgett and Granbois 1992; Celsi and Olson 1988; Park and Hastak 1994; Sanbomatsu and Fazio 1990; Swinyard 1993
Novelty	Dunman and Mattila 2005; Farber and Hall 2007
Participation	Berry, Carbone, and Haeckel 2002; Pine and Gilmore 1999

**Table 2:** Antecedents of Memorable Tourism Experiences

Themes	Number of interviews
a) Hedonism	12
b) Novelty	12
c) Social Interaction / Local Culture	11
d) Refreshment	11
e) Meaningfulness	11
f) Involvement	9
g) Adverse Feelings	6
h) Stimulation	9
i) Challenge	10
j) Unexpected Happenings	6
k) Knowledge	12
l) Happiness	11

The theme ‘Hedonism’ represents words such as thrill, enjoyment, exciting, indulged, fun, pleasant, and interesting. This theme was reflected in many responses which highlighted the pleasurable feelings that excite oneself in certain tourism experience. The second theme ‘Novelty’ referring to the psychological feeling of newness which is resulted from having a new experience. Almost all of the participants (12) listed words such having experience of culture difference, newness, exotic, unique and different experience.

‘Social Interaction / Local Culture’ was the third common theme which was reflected from the interview which consists of words stating the friendliness of local people, the interaction with the local people, and having a local culture experience. This theme refers to a feeling of connection and group identity with travel partners or with the local people. The next theme identified was ‘Refreshment’. It refers to the state of feelings refreshed. Words that can be described as providing a refreshing experience includes elements of inspirational, sense of freedom, revitalised, liberating, and therapeutic experience. One participant, a tour guide (interview 2) quoted “We had a great day with the tourists who has never done caving activities before. I think the family felt free and have great memories of that holiday’.

The ‘Meaningfulness’ common theme refers to a sense of value or gains a significant experience. The theme is described in terms such as of great value, meaningful, significant, learning about oneself, and done important things. Tourists engaging in tourism activities and consuming local products may find a way to learn different perspectives on matters in life. Furthermore, by participating in tourism activities may benefit a person’s psychological mood and well-being. Thus, this allows tourists to assert their self-identity and learning about other places and cultures (Kim et al 2010).

‘Involvement’ is another important antecedent. This can be another important antecedent for memorable tourism experiences and many participants (9) of this study spontaneously remembered this element when listing about their previous memorable trips. Participants remembered their memorable involvement with MNP, involvement with the activities they had experienced in MNP and are interested with activities offered.

‘Adverse feeling’ is another factor that is capable in making people remember sorts of negative emotional experience better than an ordinary tourism experience that occurred equally long ago. These are negative psychological feelings that tourists experience dissatisfaction because the service was not delivered as originally planned or expected. Tourism programs and services that are not providing enough or enough variety that happen during anytime during one’s tourism experience lead to various kinds of negative feelings. Adverse feelings are described as experiencing bad luck, stressful, tiring and frustration.

‘Stimulation’ is the next common theme identified. 9 participants of this study depict the importance of stimulation to deliver memorable experiences for travellers. This refers to arousal of feelings that heightens and / or invigorates oneself. It is illustrated in words such as having feelings of arousal, invigorating experience, feeling energized and stimulating experience.

The theme ‘Challenge’ represents an experience that demands physical and / or mental ability. Majority of the participant expressed the significant of this element in tourism experience. For example, one participant (interview 13) shares his experience in MNP “It was a challenge, physically and emotionally. It meant that you had an opportunity to go to a place that wasn’t frequently travelled by other tourists”.

The ‘Unexpected Happenings’ experiences can also make an experience memorable for travellers. These are situation or event, which are not foreseeable that a person faced when travelling. One participant (interview 2) reported that “memorable experiences in MNP usually begin with something going wrong, something unexpected that leads to adventure” Unexpected happenings are unplanned but positive and memorable incidents that happened during travelling.

The theme 'Knowledge' in the context of memorable experience refers to information, facts, or experiences known by an individual. The significance of knowledge in tourism experience is reflected in almost all (12) of the participants. These themes include the importance of experience as being subjective, based on sensations, involving participation in activities, and resulting in learning or knowledge acquisition. Furthermore, the knowledge experiential form of tourism implies that tourists are not just being 'there' but are participating, learning, and experiencing while they are there during the visit. Words that are associated with knowledge experience include exploration, educational, exploring, new culture, acquired knowledge, informational and learn facts.

The final common theme represents the affecting emotions associated with memorable tourism experiences is 'Happiness'. Feelings of happiness such as happy and heartfelt joy are some of the words to describe them. As one participant (interview 3) describes of having memorable experience when first time visited MNP, "I felt very happy, very emotional looking at the natural views of MNP that my eyes began to fill with tears".

### **MANAGERIAL IMPLICATIONS**

This paper has the potential to provide numeral recommendation based on the study findings on the importance of providing memorable tourism to tourists. Tourism destination may benefit from this study by re-evaluating their current marketing strategies focusing on experiential aspects rather than focusing on their destination attributes. Tourism destination should also emphasised on delivering memorable experiences in order to secure a sustainable competitive advantage over competitive destinations. Although destination attributes may be one of the important elements of memorable experiences, there are many experiential aspects of a memorable experience such as Hedonism, Novelty, Social Interaction / Local Culture, Refreshment, Meaningfulness, Involvement, Adverse Feelings, Stimulation, Challenge, Unexpected Happenings, Knowledge, and Happiness. Therefore, tourism destination should seek to enhance and plan ways to deliver memorable experience for example by providing easy information for visitors so they can better plan their trips. Another way is to design their tourism offerings by incorporating learning experiences for visitors rather than just 'seeing' and 'visiting' something. Other examples include possibilities of visitors to be involved with the local culture that can be more meaningful to them.

Other managerial recommendations that can be implemented by tourism destination are by designing experiential products that can provide elements of surprising, unique and novel experiences. This may help visitors gather more memorable experience and may influence them on how they may evaluate the trip. Furthermore, continuous product updates and development is crucial in providing visitor's destination experiences. For example, local guides need to be trained by destination managers so that they are knowledgeable, expert in their field and have the skill to deliver unforgettable experience to visitors.

Finally, tourism destination should educate local people to be more friendly and hospitable towards foreign visitors. This part of promotion and awareness campaign can help visitor further remembers the trip well and may lead them revisiting the destination in the future.

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# TRAVEL COST ADJUSTMENT OF INTERNATIONAL MULTIPLE DESTINATION VISITORS TO THE KILIM KARST GEOFOREST PARK, LANGKAWI, MALAYSIA

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## Abstract

Kilim Karst Geoforest Park (KKGFP) located in Langkawi island offers pristine nature based attractions to visitors. Apart from local visitors, the park receives many international visitor arrivals from all over the world. The demand model of international visitors to the park can be developed using one of the common environmental valuation techniques, the Travel Cost Method (TCM). And, using the demand curve, the benefit obtained by the international visitors to the park can be estimated using the concept of consumer surplus. In this research, Individual Travel Cost Model (ITCM) has been employed. One of the common issues in travel cost studies is to obtain the specific travel cost attributable to the specific location for multiple destination visitors. In regards to that, travel cost and consumer surplus adjustment techniques are among the popular techniques to determine the cost. Thus, the article determines the consumer surplus value of international visitors from the travel cost adjustment. Structured questionnaire and face-to-face data collection method are employed to obtain the primary data from 330 international visitors using the purposive sampling technique. The analysis using the Poisson regression shows that the travel cost, time cost, quality of site, age and education variables, are significant at 95% level of confidence. Hence, the average consumer surplus value per person/trip/year is estimated to be €216/RM 864, whilst the total consumer surplus value is estimated to be (€27 million/RM 108 million). It is hoped that the findings from this study could provide useful information to the Langkawi Development Authority (LADA) pertinent to the management of the park.

**Keywords:** *Adjustment, Consumer surplus, Demand, Individual travel cost method, International visitors*

## INTRODUCTION

Clough and Meister (1991) point out that there are three types of visitors' namely pure visitors, transit visitors and meanderers. They emphasized that the allocation of total travel cost incurred to a particular site is relevant only to visitors for whom the study site is the only site they intend to visit (pure visitors). However, the allocation of travel cost for the transit visitors should only be a small portion from the total travel cost incurred to arrive at the site. Finally, for meanderers (those who visit the site as one of the many visit sites), the travel cost should be apportioned accordingly to all the sites visited. Similarly, the researchers pointed out that the failure to apportion the travel cost for multiple destination (MDT) visitors would result in an overestimation of the consumer surplus.

In KKG, international visitors' arriving at KKG had reduced by 25% from 168,528 in 2011 to 126,982 in 2012. In 2011, the number of international visitor arrivals exceeded the arrival of local visitors (152,797). However, in 2012, the arrival of international visitors was lower than the arrival of local visitors (146,468). Besides that, an increase in arrivals of international visitors from 2006 (21,188) to 2012 (126,982) was about (83%), thus necessitating the need to identify whether the international

visitors to the park obtain benefits from their visit. Furthermore, the specific benefit gained or allotted by the international visitors specifically to the park is unknown since KKG would not be the only destination in their overall holiday trip. Therefore, the study determines the benefit attained or the consumer surplus value of international visitors from the travel cost adjustment.

The following discussion covers the literature review, research model; steps for travel cost adjustment, sampling, discussion on the analysis made and end with the conclusion section.

### **LITERATURE REVIEW**

Many techniques have been employed by researchers to overcome the problem of identifying the specific travel cost incurred by multiple destination (MDT) visitors to a specific site. The first technique is through the determination of travel cost beginning from the day or last stop prior of visiting the study site (Everitt, 1983 & Siti, 2009). However, the technique is strongly criticized by Clough and Meister (1991) because they claimed that the findings of the consumer surplus value would be an underestimation of the benefits obtained from the visitors. This is because the approach fails to take into account the travel cost from the point of departure (home of the visitor) of the visitors that should be apportioned accordingly, until the study site. Similarly, Ulph and Reynolds (1981) in Ward and Beal (2000) criticize the approach with a claim that the finding is biased particularly when the distance from the last stop to the study site is short. A shorter travel distance would result in a smaller cost, thus, the travel cost is lower and therefore, the consumer surplus would be underestimated.

The second technique is by excluding multiple destination visitors (MDT) visitors in the sample of study (Loomis & Walsh, 1997 in Kuosmanen, Nillesen, & Weseller, 2003 & Hanley & Splash, 1983).

This is followed by the travel cost adjustment and consumer surplus adjustment techniques. Both in the travel cost adjustment and the consumer surplus adjustment the adjustments are made based on the time spent (revealed preferences) at the site and satisfaction attained at the site (stated preferences). The assumption that has been made for the revealed preferences technique is that the benefits obtained from the visitors are proportional to the expenditure and time allotted for the site (Beardsley, 1971). Next, the increase in the period of stay or time spent at a particular site would augment the opportunity to enhance the visitor's value. Therefore, the benefit obtained by the visitors relies on the period of stay or time spent at the site.

On the other hand, the states preferences technique assumes that decisions made to travel to a particular site are based on the visitor's hope of obtaining positive impacts (Nillesen et al., 2005). In addition, it is assumed that the visitors would be able to rank the sites they had visited based on their preferences or the weightage they allocated to the sites. Other adjustments of the stated preference besides the satisfaction approach comprises of ratings, ordinal rankings, geographical weightings, fixed-point scoring and paired comparisons

(Hajkowicz, McDonald, & Smith, 2000). Ordinal ranking is the technique to rank the sites visited by the visitors based on the most preferable to the less preferable. With this technique, a greater portion of the total travel cost would be allocated to the most preferable sites (Kuosmanen et al., 2003).

## METHODOLOGY

The methodology section discusses the technique used to overcome the issue on MDT visitors, the model of study, explanations of the variables, consumer surplus estimation, sampling, and the data analysis.

Out of all the techniques available the present study chose the travel cost adjustment technique. This is because using the technique; the consumer surplus value is obtained from the true estimation of the KKGPs. This is unlike using consumer surplus adjustment whereby the consumer surplus or net benefit obtained by the visitors to Langkawi Island is directly apportioned to KKGPs instead of estimating the specific models for the KKGPs. Although, the adjustment is possible, a problem occurs if the travel cost variable (TCLKW) is found insignificant since the consumer surplus/benefit obtained by the visitors is determined using that variable. Consequently, this would fail the benefit or economic value determination for the park. Pertinent to that, Siti (2009) who estimated the model using the international visitors as sample found the travel cost variable to be insignificant. Hence, the study failed to determine the consumer surplus value of visitors visiting the three popular marine parks in Malaysia namely Pulau Payar, Redang, and Tioman. Therefore, as a precaution the study chose the travel cost adjustment technique.

### 3.1 ITCM Model

$$V = \beta_0 + \beta_1 RITC_{ij} + \beta_2 TTimeC_{ij} + \beta_3 MS + \beta_4 Age + \beta_5 Edu + \beta_6 GM + \varepsilon$$

(Eq.1)

Where:

$i$	=	Origin (Main cities of respondents)
$j$	=	Kilim Karst Geoforest Park, Langkawi
$V$	=	Number of visitors in a group to the Kilim Karst Geoforest Park
$RITC_{ij}$	=	Total round trip travel cost of individual from $i$ to site $j$
$TTimeC_{ij}$	=	Cost of travelling time of individual $i$ to site $j$
$MS$	=	Quality of the Kilim Karst Geoforest Park as measured by mean satisfaction
$Age$	=	Age of individuals
$Edu$	=	Education level of individuals
$GM$	=	Gross monthly income of individuals
$\beta_0 - \beta_6$	=	Coefficients to be estimated
$\varepsilon$	=	Random error

Specifically, in the present study there are two models developed for the travel cost adjustment technique. First model is based on travel cost to KKGPs based on number of hours ( $RITC_{HOURS}$ ), whilst travel cost based on satisfaction attained in the park ( $RITCSAT$ ) for the second model as shown below:

#### 3.1.1 Travel cost to Kilim based on the number of hours at the park

$$Vis = f (RITC_{HOURLYij}, TTimeC_{ij}, MS, Age, Edu, GM, \epsilon)$$

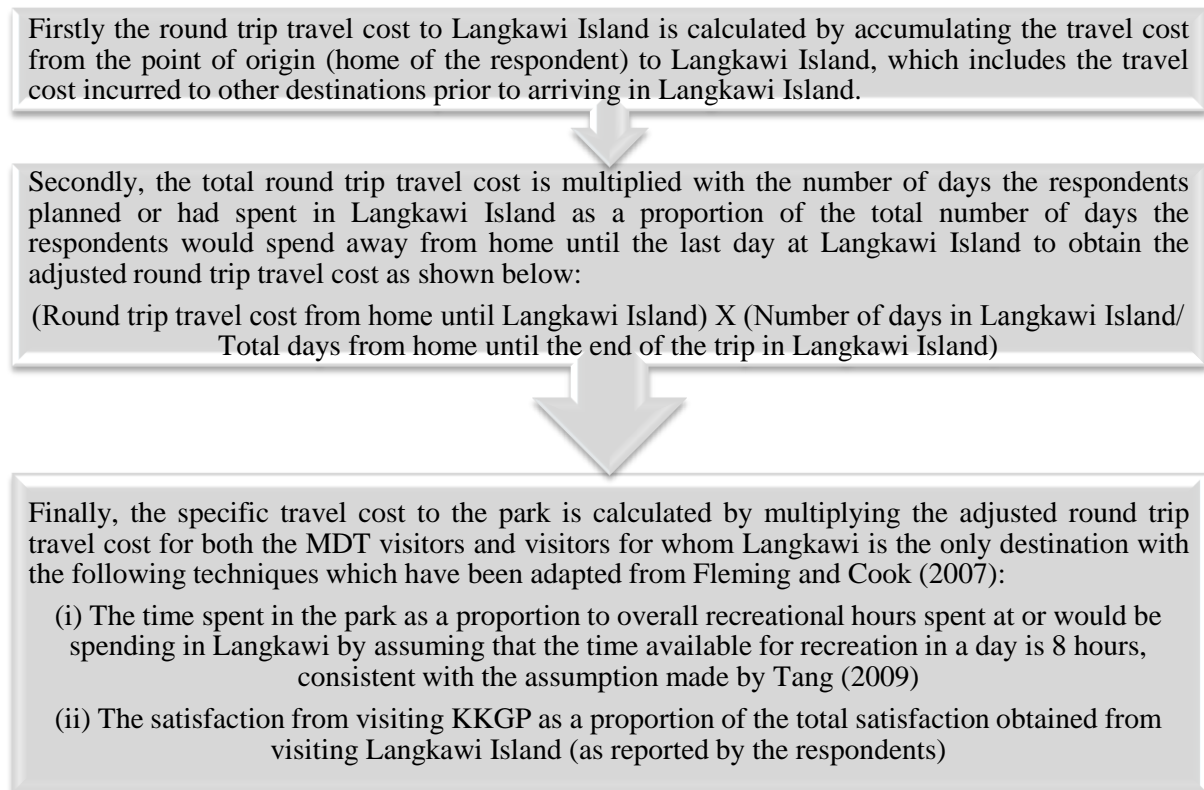
(Eq.2)

### 3.1.2 Travel cost to Kilim based on the satisfaction at the park

$$Vis = f (RITCSAT_{ij}, TTimeC_{ij}, MS, Age, Edu, GM, \epsilon)$$

(Eq.3)

Figure 1 shows the process to get the specific travel cost attributable to the park by the international multiple destination visitors whom KKGP is not the only destination of visit in their holiday trip.



**Figure 1:** Key steps involved in identifying the specific travel cost attributable to the park

In terms of sampling, the respondents are chosen mainly from KKGP and the Langkawi International Airport within duration of two weeks in November using the purposive sampling technique. The technique is chosen because the purpose of the present study is only to determine the demand of the international visitors. Furthermore, only those who have visited the park are chosen as respondents. Out of 330 respondents, 30 questionnaires are discarded due to irrelevant information. Thus, only 300 samples are used for further analysis. A Poisson regression analysis is conducted to run the ITCM model using the Limited Dependent Variable (LIMDEP) software version 4.

## FINDINGS AND RESULTS

Referring to equation 4 and 5, a higher negative log likelihood value implies that the model is more fit. Whilst, the Pseudo  $R^2$  (multiple determination coefficient) for example for the Kilim



based on hour's model suggests that only 36% of the total variation in the dependent variable could be explained by the independent variables. The time cost variable (TTimeC) is not tested in KKG based on satisfaction models due to high correlation with the income variable. Failure in taking into account the travel time cost variable would overestimate the consumer surplus estimation for the model. Therefore, a finding from the estimation of the KKG hour's model based on time spent is chosen as the most accurate model in this study.

The travel cost variable is found significant with a negative coefficient in the two models consistent with the demand theory. The negative coefficient implies a downward sloping demand curve from the left to right. Similarly, Juan, John, and Armando (2008), in a study on river recreation visitors to the Caribbean National Forest in Puerto Rico, United States found a negative coefficient in the Poisson regression analysis for ITCM. Thus, visitors who incur more travel cost would make fewer visits to the park. For instance, 10% increase in the travel cost would cause a reduction in visits by 0.009% based on KKG based on number of hour's model. By assuming a 10% increase in the travel cost for all international visitors to KKG in 2012 (126,982) at the average travel cost of RM 244 based on hours, the reduction in the number of visits would be 1,143 based on the hours model.

The quality of site variable measured by the satisfaction attained by the visitors is found to be significant at the 95% level of confidence with a negative coefficient. Likewise, Syamsul Herman (2010) has found a negative coefficient in the Poisson regression analysis for ITCM. The negative coefficient implies that an increase in the visitor's satisfaction level would shift the demand for goods inwards. For instance, 1% increase in the satisfaction of visitors' would reduce the visits to the park by 0.44% based on the adjusted hour model. This implies that the more the satisfaction gained from the resources available in the KKG as proportionate to the overall satisfaction obtained in Langkawi Island, the less number of visits to the park.

The age variable is found significant at the 95% level of confidence with a positive coefficient. Similarly, Chae et al. (2012) have found a positive coefficient for the income variable. This implies that the number of visits to the site is positively related to the age of the visitors. Hence, the demand for goods would shift outwards for an increase in the age of the visitors. Next, a positive coefficient found in education variable suggests that the demand for goods will shift outwards for visitors with higher levels of education. The finding is consistent with the findings from Okojie and Orisajimi (2011) and Suryani et al. (2012) who found a positive relationship between education level of visitors and the demand for the site. Lastly, the time cost variable is significant at a 95% level of confidence and inversely related to visits to the park in Kilim hour's model. This suggests that visits to the park by visitors would reduce following an increase in the opportunity cost of time. For instance, based on the Kilim hour model, 10% increase in time cost incurred by visitors would reduce the visits by 0.0044%.

#### Kilim Satisfaction Model Estimation

$$V = 1.62 - .44E-03 RITC_{ij} - .34MS + .71E-02AGE + .49E-01EDU - .23E-04GM \quad (4.378) ** \quad (-3.249) ** \quad (-4.473) ** \quad (2.725) ** \quad (4.226) ** \quad (-2.524) **$$

(Eq.4)

\*The values in the brackets are T- test value

\*Pseudo R square = 0.382, Log Likelihood Function = -823

\*\* Significant at 95% level of confidence

## 4.2 Kilim Hours Model Estimation

$$V = 1.67 - .90E-03 RITC_{ij} - 4.36E-03 TTimeC_{ij} - .435MS + .61E-02AGE + .51E-01EDU \quad (Eq.5)$$

(4.773) \*\*    (-1.814) \*\*    (-2.040) \*\*    (-5.890) \*\*    (2.725) \*\*    (4.390) \*\*

\*The values in the brackets are T- test value

\*Pseudo R square = 0.385, Log Likelihood Function = -853

\*\* Significant at 95% level of confidence

The findings on the consumer surplus estimation is shown in Table 1. The consumer surplus is estimated using the coefficient of the travel cost variable using the formula shown below.

$$CS \text{ per visit/group} = - 1/ b_{tc}$$

Later, the consumer surplus average CS value per person/ trip/year is determined by dividing the CS per visit/group with the average visit/ average number of people in a group which is 3.48. The adjustment is made based on the suggestion by Chakraborty and Keith (2000) who divided the CS per visit with the average visit in a study to determine the demand and economic value of Mountain Biking in Moab, Utah. Later the consumer surplus per visit/person/year is multiplied with the total number of international visitor arrivals to KKG in 2012 (126, 982) to obtain the total consumer surplus value or economic value of the park.

**Table 1:** Consumer Surplus (CS) Estimation for ITCM

<b>Kilim (Hour) model</b>	<b>Monetary Value</b>
Average CS value per person/ trip/year	€216/RM 864
Total CS/Economic value of the park	€27 million/RM 108 million

Note: \* Exchange rate (1.0EUR: 4.0MYR) in January 2012

## CONCLUSION

The travel cost adjustment for international multiple destination visitors has resulted in the development of two demand models which is based on the satisfaction attained and number of hours spent in the park. This is because the failure to adjust the travel cost incurred by the multiple destination visitors would overestimate the consumer surplus or benefit obtained by the visitor. Therefore, it would not be able to identify the specific travel cost or value allotted by the visitors specifically on the park. The present study proposes the management the value derived from the estimation of the KKG based on hour's model instead of the satisfaction model. This is because the estimation of the model showed time cost variable as significant. This implies that the estimation result have incorporated the effect of opportunity cost of time on the number of visits to the park. Thus, it is redeemed consistent with the assumptions of travel cost method whereby the travel cost incurred by the visitors comprises both the monetary and time cost.

Finding on the monetary value of the park will alert the community regarding the importance of conserving the natural resources available at the park. Besides, these findings will help in justifying the utilization of park land for rural tourism development purposes that indirectly ensures the continued existence of the resources available at the site instead of utilizing it for

any other form of alternative development that will eventually lead towards the damage and destruction of the natural resources available at KKGP. For example, the limestone available in the park can be used as building material, cement, or mortar used in the manufacture of ceramics, as cheap fillers used as fillers in some plastics and in the construction of roads. Furthermore, the findings can be useful for Langkawi Development Authority (LADA) to efficiently manage the resources available in the park.

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# **INTERNATIONAL TOURIST SATISFACTION TOWARDS TOURISM ACTIVITIES AND FACILITIES: A CASE STUDY IN MAMUTIK ISLAND, KOTA KINABALU, SABAH, MALAYSIA**

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## **Abstract**

The main objective of this study is to identify international tourist satisfaction towards tourism activities and tourist facilities in Mamutik Island, Kota Kinabalu, Sabah. Mamutik Island is located in the Tunku Abdul Rahman Marine Park and it can be reached in 20 minutes by boat from Jesselton Point, Kota Kinabalu City. The main tourist activities of Mamutik Island are scuba diving, snorkelling, swimming and marine lives observing. There are various tourist services and facilities provided by the Island management such as jetty, toilet, picnic and barbeque area, sun bathing kits and stalls. However, study on international tourist satisfaction towards these activities and facilities on this island were limited. Therefore, a survey method through questionnaire was applied in this study. There were two sets of questionnaires used for data collection in English and Mandarin languages. A total number of 150 international tourists were surveyed in this study. The findings indicate that majority of the international tourists are satisfied with the tourist activities and facilities of the island. However, there are certain aspects that should be considered by the management in order to increase the level of international tourist satisfaction such as to increase number of toilet and facilities, interesting tourist activities and provide scuba diving equipment at reasonable prices. Thus, this study is significant to indicate how the distinctiveness of tourist activities and quality of facilities can ensure international tourist loyalty to revisit tourist destinations in Sabah.

Keywords: Tourist satisfaction, International tourist, Tourist activities and facilities, Mamutik Island.

## **INTRODUCTION**

Tourism can be regarded as a main economic sector in the world (Al-Ababneh, 2013) providing multiple benefits including social and environmental benefits (Hussin & Kunjuraman, 2014). United Nations World Tourism Organization (UNWTO) estimates that international tourist arrivals will reach 1.8 billion by 2030 (UNWTO, 2011). This is why every country including developing countries including Malaysia pay attention on the development of tourism in order to increase the arrivals of international tourist into the country. This can be proved by the number of tourist arrivals in the country which has increased by 25.03 million, registering a total expenditure of MY60.6 billion (USD 46.26) in 2012 differing from the previous year which only recorded a turnover of 24.71 million tourist arrivals and total expenditure of 58.3 billion (Tourism Malaysia, 2014). In order to achieve the UNWTO's vision, tourist satisfaction issues in tourism industry must be taken into serious consideration where the number of empirical studies on tourist satisfaction in tourism industry is very limited (Al-Ababneh, 2013; Hussin & Kunjuraman, 2014) and less empirically documented (Salleh et al., 2011).

This paper provides empirical findings on international tourist satisfaction towards tourism activities and facilities provided by the management of Mamutik Island. Mamutik Island was chosen as a case study in this research and international tourist satisfaction issue is the main

focus of this study. Additionally, this paper will conclude by providing some recommendations to the stakeholders in Mamutik Island tourism destination for management improvement. Service quality in the Mamutik Island should be sought in order to identify barriers of tourist satisfaction with the service provided by the management. Empirical study on the service quality in island tourism in Malaysia is very limited and Mamutik Island should be given attention. Thus, this paper aims to bridge the gap by identifying the international tourist satisfaction towards tourism activities and facilities in Mamutik Island. This study is significant because the tourism industry in Mamutik Island is growing and has the potential to increase the state economy as well as the country economy. Also, this study is significant to indicate how the distinctiveness of tourist activities and quality of facilities can ensure international tourist loyalty to revisit tourist destinations in Sabah.

## **LITERATURE REVIEW**

### ***Tourist Satisfaction***

Tourist satisfaction in the tourism industry is an important element that should be examined in order to ensure the economy is sustained. According to Sapari, Shuib and Ramachandran (2013), satisfaction is an important issue in tourism business because it can determine the success and failures of the business organization. Based on previous literature, there are many definitions of satisfaction. In terms of hotel management setting, Mazumder and Hasan (2014) suggested that ‘customer satisfaction can be a driving force for organizations, which are gearing up to survive in the competitive market’ (p. 109). Bigne, Sanchez and Sanchez (2001) defined satisfaction as a reaction and the outcome of the choice made based on an individual’s emotion and inner-being. On top of that, the reactions also refer to the focal point that is usually represented by an object that satisfies the users in a particular destination. These reactions also relate to specific moments considered special which are the pre-buying, post-buying and the after effects of using a product or service. Meanwhile, in tourism industry many tourism researchers come up with their own definitions which they refer to their geographical setting. Abdullah et al. (2013) adopted Bake and Crompton definition of satisfaction and identified two important elements of satisfaction such as ‘what is the expectation’ and ‘experience of the tourist in the destination’. Moreover, Hussin and Kunjuraman (2014) defined satisfaction as the good feeling when the tourists’ demands were fulfilled in the destination.

### **Previous literature**

In the tourism studies, research regarding tourist satisfaction is widely undertaken by the tourism researchers all around the world as they believe satisfaction issue is something unique and should be sought after. Researchers in the field of tourism try to identify and explain the factors that affect the choice of destination as well as the satisfaction of tourist after the trips. Researches regarding tourist satisfaction are intensively conducted by the Malaysian tourism researchers (Salleh et al. 2011; Rosniza Aznie et al., 2012; Abdullah et al., 2013; Sapari et al., 2013; Jussem et al., 2013; Hussin & Kunjuraman, 2014) as well as outside of Malaysia (Al-Ababneh, 2013; John & Damiannah, 2003; Kozak, 2000; Weiermair, 2000; Tidichumrernporn et al., 2010; Lin, 2014).

In Malaysia, for example, a research conducted by Salleh et al., (2011) analyses tourist satisfaction and loyalty towards Kapas Island Marine Park tourist destination. The satisfaction among the tourists was measured using means that is comparing between the expected mean and actual/perception mean of tourist satisfaction. Their research shows that all tourists are satisfied with all service qualities provided as indicated by the value of perception mean of 3.72-4.87 which is higher than the average perception value of 2.5.

Meanwhile, the loyalties of the tourist were recorded higher as 78 and 85 per cent of the tourists are willing to revisit and encourage other people to visit the study area. Other studies regarding the island tourism in Malaysia were also carried out by Abdullah et al., (2013) and Rosniza et al., (2012) who focused on tourism activities in Langkawi Island. Rosniza Aznie et al., (2012) studied on tourist perceptions of tourism services in Langkawi Geopark which aims to analyse the perceptions and satisfaction level of tourists with regard to the access services provided by the local and indigenous travel agencies. The findings showed that the price offered by travel agencies made the tourists displeasure. To overcome this problem, the researchers suggested that the price adjustment is among the necessary measure to ensure that tourists are satisfied in using those services. In the same vein, Abdullah et al., (2013) conducted research regarding the service facilities in Langkawi Island and the main objective was to assess the level of satisfaction among the tourists towards the of provision of facilities at three passenger jetty terminals at Kuala Perlis, Kuala Kedah and Penang Island. The result of the study showed that the level of overall satisfaction among the tourists towards providing facilities at jetty terminals to Langkawi Island stands at being less than satisfactory. Also, the results indicate that the level of tourist satisfaction on these provided facilities at the jetty terminals do not influence the tourists making repeat visits to Langkawi Island. From the review above, it could be said that services provided by the management of those islands influence the tourist satisfaction.

In Sabah and Sarawak for example studies on tourist satisfaction were also carried out by the researchers namely Hussin & Kunjuraman (2014) and Jussem et al.. (2013). In Sabah, Hussin and Kunjuraman (2014) studied domestic tourist satisfaction with the quality of the homestay services in Mesilou Village, Kundasang, Sabah and the results indicate that all the domestic tourists were satisfied with the services, facilities, and safety of the homestay programme as indicated by the satisfaction mean value of 4.193-4.4157. On the other hand, Jussem et al., (2013) undertook a research regarding relationship with the service quality and tourist satisfaction in Greater Satang Island in Sarawak. The study investigates service quality provided at a Greater Satang Island and tourist satisfaction using SERVQUAL model. The results revealed that majority of the respondents were satisfied with the five dimensions identified. Lastly, the study provided some suggestions for the management of the island for further improvements.

## **RESEARCH METHOD**

This study was conducted in Mamutik Island located at Kota Kinabalu, the capital city of Sabah. Mamutik Island is one of the islands categorised under the Tunku Abdul Rahman Marine Park, a state famous tourist destination. Beside Mamutik Island under the Tunku Abdul Rahman Marine Park management, there are other nature islands such as Gaya Island, Sapi Island, Manukan Island and Suluk Island. The tourista can easily access this island within 20 minutes by riding boat which is provided by the management of island tourism located at Jesseltown Point, Kota Kinabalu, and Sabah. Mamutik Island is being focused by the tourists regardless of different countries because of the natural resources are highly rich which attracts many tourists to visit (Island of Malaysian, 2012). There are few tourism activities which are famous and become the main attraction to the tourist such as snorkelling, scuba diving, swimming, beach volleyball and jet-ski. Other than that, Mamutik Island is also rich with natural corals as one of the tourist attractions in the island. Aquatic lives in the island are also preserved and tourists do not forget to watch species like Scorpion Fish, Blue-Spotted Ray, Cuttle Fish, Mantis Shrimps, and Hawksbill Turtle to name a few (Sabah Tourism Board, 2013). Mamutik Island is also occupied with facilities and services such as jetty, rooms, toilets, picnic areas, chatting tables and chairs, barbeque area, electricity and

water supply. Those facilities can determine the higher level of tourist satisfaction and they feel pleasure in the island during their stay.

The questionnaire method was employed in this survey to explore the level of satisfaction of the tourist visiting to the island. This study is only focusing on international tourists who visit Mamutik Island during the day of the survey. The questionnaires were made up in three languages such as Malay, English and Mandarin languages. The questionnaires consist of three parts, and they are: (1) respondents' background; (2) international tourist satisfaction towards tourism activities provided in Mamutik Island; and (3) international tourist satisfaction towards the facilities in Mamutik Island. Using 5-point Likert-type scales, the items of the questionnaire was developed based on employed validated scales from the existing literature. Elmore and Beggs, (1975) suggested that a five-point scale is as good as any, and that an increase from five to seven or nine points on rating scale does not improve the reliability of the ratings. Moreover, 5-point Likert-type scales is quite popular in previous literature (Tidtichumrernporn et al., 2010; Al-Ababneh, 2013; Jussem et al., 2013; Hussin & Kunjuraman, 2014). A total number of 200 questionnaires were distributed to tourists at Mamutik Island and the study yielded 150 usable questionnaires which were processed and analysed by using the statistical software package of SPSS version 18. A total number of 150 international tourists were surveyed using a direct administered approach in this study. Field observation is also performed by the researchers throughout the fieldwork at the site in order to gain better understanding regarding the tourist behaviour. Data analysis adopted descriptive analysis such as percentage, mean and frequency to analyse the raw data.

## FINDINGS AND DISCUSSION

Demographic and travelling profile of the study respondents

**Table 1:** Characteristics of respondents (N= 150)

	%		%
<i>Gender</i>		<i>Marital status</i>	
Male	36	Single	14.7
Female	64	Married	77.3
		Widowed	6
<i>Age group</i>		Others ( <i>husband and wives deceased</i> )	2
15-24 years	17.3		
25-34 years	22.7	<i>Education attainment</i>	
35-44 years	22	No school	7
45-54 years	28	Primary school	5.30
55 and above	10	Secondary school	20.70
<i>Nationality</i>		College/university	54.70
China	44	Other (skill institute)	18.70
Korea	38.7		
Britain	7.3	<i>Mode of travel</i>	
USA	6.7	Husband and wife	13.3
Others (Philippines, Australia, Germany, Sweden & Russia)	3.3	Family members	72.0
		Friends and colleagues	12
		Siblings	2.7
<i>Motive of travel to Mamutik Island</i>		<i>Revisit intention</i>	
Vacation	45.3	Yes	96.7
Natural attraction	29.3	No	3.3
	15.3		



Beriadah bersama keluarga	6	<i>Recommendation</i>	
Honey moon	4		Yes
Self relaxation			No
			89.3
			10.7

Source: Fieldwork, 2013

A total number of international tourists participated in this study was 150 as shown in Table 1. Most tourists (64%) were females. As for the age group classification, majority of tourists (28%) age between 45-54 years. In terms of nationality, most of the tourists (44%) came from China. It proved that, the majority of tourists (54.70%) have good education attainment which is college/university level. Regarding the mode of travel to the island, about 72% travelled with family members followed by 13.3% who are husband and wife. Lastly, about 45.3% of tourist visited Mamutik Island with the motive of vacation and followed by natural attraction of the island constituting 29.3%.

### International tourists' satisfaction towards tourism activities provided in Mamutik Island

**Table 2:** Overall results on International tourists' satisfaction towards tourism activities

Types of tourism activities	No	Country	N	Level of Satisfaction	Mean	Overall
<i>Snorkelling</i>	1	China	66	Satisfied	3.88	44.0%
	2	US	10	Satisfied	4.00	6.7%
	3	Korea	58	Satisfied	3.79	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others (Philippines, Australia, Germany, Sweden & Russia)	5	Satisfied	3.80	3.3%
<i>Scuba diving</i>	1	China	66	Neutral	3.12	44.0%
	2	US	10	Neutral	3.20	6.7%
	3	Korea	58	Neutral	3.24	38.7%
	4	British	11	Neutral	3.18	7.3%
	5	Others (Philippines, Australia, Germany, Sweden & Russia)	5	Neutral	3.20	3.3%
<i>Swimming</i>	1	China	66	Satisfied	3.73	44.0%
	2	US	10	Satisfied	4.00	6.7%
	3	Korea	58	Satisfied	3.76	38.7%
	4	British	11	Satisfied	3.55	7.3%
	5	Others (Philippines, Australia, Germany, Sweden & Russia)	5	Satisfied	3.60	3.3%

		Russia)				
<i>Beach Volleyball</i>	1	China	66	Neutral	3.00	44.0%
	2	US	10	Neutral	3.00	6.7%
	3	Korea	58	Neutral	3.00	38.7%
	4	British	11	Neutral	3.00	7.3%
	5	Others (Philippines, Australia, Germany. Sweden & Russia)	5	Neutral	3.00	3.3%
<i>Jet-Ski</i>	1	China	66	Neutral	3.00	44.0%
	2	US	10	Neutral	3.00	6.7%
	3	Korea	58	Neutral	3.00	38.7%
	4	British	11	Neutral	3.00	7.3%
	5	Others (Philippines, Australia, Germany. Sweden & Russia)	5	Neutral	3.00	3.3%

Source: Fieldwork, 2013

Table 2 shows the findings of international tourist satisfaction towards tourism activities provided by the management of Mamutik Island. There are five popular tourism activities currently in practise such as snorkelling, scuba diving, swimming, beach volleyball and jet-ski. The results show that international tourists were satisfied with several tourism activities such as snorkelling and swimming as indicated by the mean value ranges between 3.41- 4.20. In terms of the order it can be categorised that snorkelling (3.894) is the most satisfied tourism activities in Mamutik Island followed by swimming (3.728). Meanwhile, tourism activities such as volleyball and jet-ski are those activities recorded as ‘neutral’ by the respondents. This is because those activities are not very interesting and enjoyable by the tourists who visited there. Moreover, the study observed that most of the tourists spent their time in snorkelling and swimming activities rather than scuba diving, jet-skiing and playing beach volleyball.

### **International tourist satisfaction towards facilities provided in Mamutik Island**

**Table 3:** Overall results International tourist satisfaction towards facilities

<b>Types of facilities</b>	<b>No</b>	<b>Country</b>	<b>N</b>	<b>Level of Satisfaction</b>	<b>Mean</b>	<b>Overall</b>
<i>Jetty facility</i>	1	China	66	Satisfied	3.55	44.0%
	2	US	10	Satisfied	3.60	6.7%
	3	Korea	58	Satisfied	3.55	38.7%
	4	British	11	Neutral	3.18	7.3%
	5	Others (Philippines, Australia, Germany.	5	Satisfied	3.60	3.3%

		Sweden & Russia)				
<i>Tourist information centre</i>	1	China	66	Satisfied	3.82	44.0%
	2	US	10	Satisfied	4.00	6.7%
	3	Korea	58	Satisfied	3.62	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others ((Philippines, Australia, Germany. Sweden & Russia)	5	Satisfied	4.00	3.3%
<i>Staff hospitality and tourist invigilator</i>	1	China	66	Satisfied	4.05	44.0%
	2	US	10	Satisfied	4.10	6.7%
	3	Korea	58	Satisfied	3.93	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others ((Philippines, Australia, Germany. Sweden & Russia)	5	Satisfied	3.80	3.3%
<i>Well-prepared Tourism activity equipment</i>	1	China	66	Satisfied	3.64	44.0%
	2	US	10	Satisfied	4.10	6.7%
	3	Korea	58	Satisfied	3.55	38.7%
	4	British	11	Satisfied	4.09	7.3%
	5	Others ((Philippines, Australia, Germany. Sweden & Russia)	5	Satisfied	3.40	3.3%
<i>Relaxing rooms</i>	1	China	66	Satisfied	4.11	44.0%
	2	US	10	Satisfied	4.00	6.7%
	3	Korea	58	Satisfied	3.93	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others ((Philippines, Australia, Germany. Sweden & Russia)	5	Satisfied	4.00	3.3%
<i>Public toilets</i>	1	China	66	Dissatisfied	2.08	44.0%
	2	US	10	Very dissatisfied	1.80	6.7%
	3	Korea	58	Neutral	3.05	38.7%
	4	British	11	Dissatisfied	1.91	7.3%
	5	Others ((Philippines,	5	Neutral	3.00	3.3%

		Australia, Germany. Sweden & Russia)				
<i>Telecommunications facilities</i>	1	China	66	Neutral	3.00	44.0%
	2	US	10	Neutral	3.00	6.7%
	3	Korea	58	Neutral	2.62	38.7%
	4	British	11	Neutral	3.00	7.3%
	5	Others (Philippines, Australia, Germany. Sweden & Russia)	5	Neutral	3.20	3.3%
<i>Boat services</i>	1	China	66	Satisfied	3.97	44.0%
	2	US	10	Satisfied	4.10	6.7%
	3	Korea	58	Satisfied	3.93	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others (Philippines, Australia, Germany. Sweden & Russia)	5	Satisfied	4.00	3.3%
<i>Food prices</i>	1	China	66	Satisfied	3.97	44.0%
	2	US	10	Satisfied	3.70	6.7%
	3	Korea	58	Satisfied	3.91	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others (Philippines, Australia, Germany. Sweden & Russia)	5	Satisfied	3.80	3.3%
<i>Safety procedures</i>	1	China	66	Satisfied	4.00	44.0%
	2	US	10	Satisfied	4.00	6.7%
	3	Korea	58	Satisfied	4.12	38.7%
	4	British	11	Satisfied	4.00	7.3%
	5	Others (Philippines, Australia, Germany. Sweden & Russia)	5	Most Satisfied	4.40	3.3%

Source: Fieldwork, 2013

Table 3 indicates the types of facilities provided by the Mamutik Island management with the hope that international tourists will be satisfied with those facilities. Tourism facilities are significant of tourist satisfaction (Al-Ababneh, 2013) as they feel comfortable and enjoy their

vacation in specific tourism destination. Island tourism highly relies on facilities like jetty where tourists can reach easily and safely to their destinations. Hence, majority of the respondents were satisfied with the jetty facility at the island which recorded mean value ranges between 3.41-3.60. This is a good sign where the jetty facility is one of the elements that could serve to tourist satisfaction. The finding also shows international tourists who came from U.S., British, Philippines, Russia, Australia, Sweden and Germany were satisfied with the information centre facility at the island which recorded mean value of ranges between 3.62- 4.00. Lastly, almost the majority of the international tourists have less satisfaction on toilet facilities at the island. For example, respondents were not satisfied with the toilet facilities as indicated by the mean values namely China (2.08), US (1.80), and British (1.91) because the toilets are not clean, bad smelly, less managed and the small number of toilets among the reasons of dissatisfaction.

The overall findings revealed that majority of the respondents were satisfied with the tourism activities provided by the management of the island and this should be systematically handle in order to attract more tourist to the island. Even though the study results also indicate that tourism activities such as scuba diving, beach volleyball and jet-ski were not in the favour of international tourists because of certain reasons namely health consciousness, expensive price, not entertaining and also risks implementation. In terms of the island facilities, international tourists were satisfied with the facilities provided by the management except on toilets facilities. Majority of the respondents have less satisfaction and feel displeasure on toilets facilities in the island and this refine other previous study such as Salleh et al., (2011) and Hussin and Kunjuraman (2014). Thus, toilet issue is an important issue that should be taken into consideration by the management. International tourists were also satisfied with the jetty facility at the island and this finding is not in line with the previous study by Abdullah et al., (2013) where their studies indicated that tourist having less satisfaction on the jetty facility in Langkawi Island.

### **RECOMMENDATIONS FOR MAMUTIK ISLAND**

Based on the survey, it is recommended that the management of the island should look into the factors that help visitors to decide on their service quality. The findings revealed that tourism facilities such as telecommunications and toilets facilities recorded a least mean value and these affected their level of satisfaction in the island. These facilities should be improved in order to satisfy the tourists and their expectation during their visit. Telecommunications facilities was also recorded 'neutral' by the respondents in Mamutik Island thus this should be given more attention by the management. Moreover, it is also recommended that the tourism activities such as scuba diving, beach volleyball and jet-ski should be paid serious attention by the management because the results show that majority of the respondents were not sure about the activities in the island. Thus, stakeholders in Mamutik Island must do some demonstration and promotional activities in order to make international tourists understand and try these activities in the future. It is noted that, 10.7% of the respondents do not want to recommend the tourism in Mamutik Island to their people as they feel this is not a good idea and experience. This issue should be taken into consideration by the management and if not it could damage the image of the destination.

### **CONCLUSION AND IMPLICATION FOR FUTURE RESEARCH**

From this research, majority of the respondents have good satisfaction towards tourism activities and facilities in the island except beach volleyball and jet-ski activities as well as telecommunications and toilet facilities. Better quality of services provided by the management will influence the revisit intention of the tourist and this could ensure the tourist being loyal to the tourist destination. Thus, these finding has major implication for owners of

the island. If they aim to attract more tourists, then providing better service and increase promotional activities are necessary and winning among the recommended strategies. They also need to emphasize the importance of quality improvement in order to better serve the ever-increasing expectations from the tourists regardless domestic and international tourists. On the other hand, based on the data majority of the international tourists came from China and Korea and this is because they prefer marine tourism and Sabah is the best place for this. Also, the study observed that the arrivals of international tourists from China and Korea are increasing and this is the good sign to boost our country economy as well as the tourism industries especially in Sabah. Thus, serious proactive strategies should be identified in order to sustain their satisfaction in tourism activities in Sabah and relevant stakeholders must play a role in this regard.

Future research could look into the satisfaction of domestic tourist towards tourism activities and facilities provided in the island as this research is only focusing on the international tourists. Moreover, future researchers could use SERVQUAL instrument as a study instrument which was developed by Parasuraman, Zeithaml and Berry (1985) as the measurement of the satisfaction of the tourist. It is also recommended that future research could be conducted using Service Perception Questionnaire in order to investigate the expectation of service of tourists before they arrive on the island, and to contrast it against what they actually get when they arrive on the island.

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# TOURISM-LED AGRICULTURE SECTOR GROWTH: EMPIRICAL EVIDENCE FOR MALAYSIA

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## Abstract

This paper aims to examine the causal relationship between tourist arrivals and agriculture sector in Malaysia by using data from 1980 to 2012. The Johansen co-integrating test is employed and the results show that the variables (tourist arrival, export and agriculture sector) coalesced with the agriculture sector to achieve the steady state equilibrium in the long run. The vector error correction model is used and the results confirm that there is a long run relationship among the variables. The Granger causality test shows that tourist arrival can expand agriculture sector while the agriculture sector improvement can contribute to tourist demand. Therefore, the government should increase the investment in tourism sector in order to enhance the agriculture.

Keywords: *Tourist Arrivals, Agriculture Sector, Granger Causality*

## INTRODUCTION

We as a society surely want a better lifestyle, we should be aware of economic growth. Economists familiarize themselves with the term of economic growth and why it is so important. However, they fail to enlighten people. As the economic growth intensifies, the poor can bail out of the poverty and their life will be much better. That is the reason why it matters. Economists have various ideas of achieving a desirable economic growth through their research. Growth refers to the increase in the production of goods and services in a country. Thus, producing goods and services entails employing people. Export was found to be a determinant of economic growth (Mehrara & Firouzjaee, 2011; Abdulai & Jaquet, 2002; Al-Yousif, 1999). Foreign direct investment can inevitably boost economic growth (Rahlan, 2006; Shaari et al., 2012; Mun et al., 2008).

In addition, tourism sector also can help intensify economic growth. The issue of tourism-led economic growth has attracted numerous researchers to examine the relationship between tourism sector and economic growth (Lee & Kwoon, 1995; Balaguer & Cantavella-Jorda, 2002; Lanza, et.al., 2003; Durbarry, 2004; Oh, 2005; Kim et.al., 2006; Lee & Chang, 2008; Katircioglu, 2009; Nissan et al. 2011; Lee and Brahmasurene (2013) Tourism-led economic growth is an epoch making discovery. If there is a relationship running from tourism to economic growth, then tourism-led economic growth is practical but if the results indicate a different directional relationship, then increasing economic growth is good to expand tourism industry (Oh, 2005). Becken and Lennox (2012) stated that higher oil prices can negatively affect tourism. Chatziantoniou et al (2013) added that oil prices can affect the tourism sector and then economic growth.

Various economic activities can be generated by having an increase in the number of tourist in the country. The expansion of this sector can directly results in higher revenue,

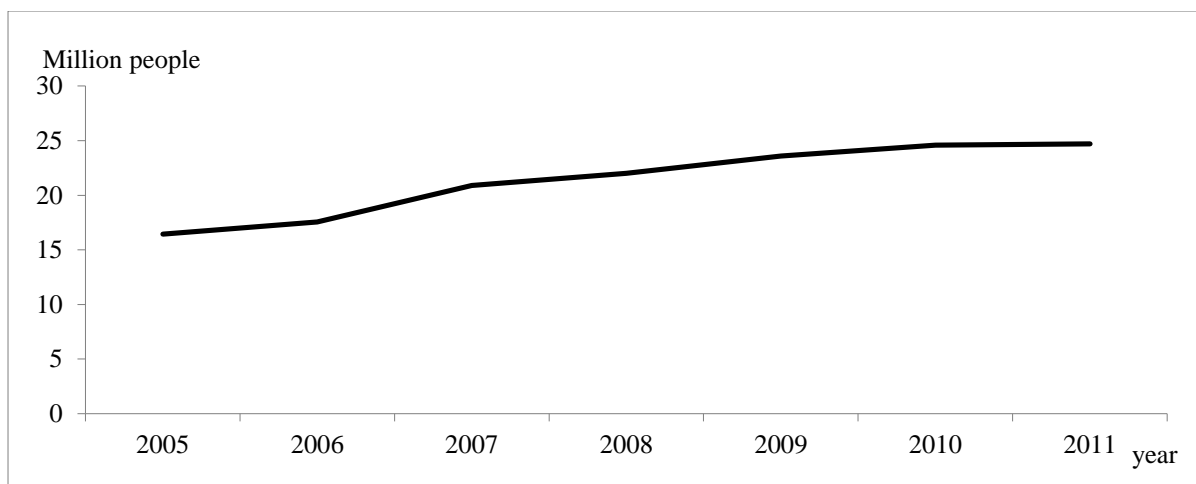


employment, private sector and infrastructure development (Gee, 1999). Thus, local people avail themselves of new job opportunities. The development of tourism can have a positive effect on employment. The employment can increase as much as tourism demand in the country (Holloway, 1994). The growth of tourism can also improve balance of payments and encourage more tourism-promoted government policies. The increasing number of tourist arrivals will spend more money in the destinations and thus increasing economic growth in the country. However Webster and Ivanov (2013) argued that in the reality, in competitive destinations can cause high tourism-related leakages. The increase in the number of tourists might not cause the economic growth to increase as a significant portion of visitors' spending probably on imports.

None of the previous studies were interested in addressing tourism-led agriculture sector growth. Agriculture is the cultivation of animals and plants and it will be transformed into foods for human to sustain their life. Therefore, agriculture is very important to tourists. An increase in the number of tourist arrival can cause the demand for agriculture sector to increase. Agriculture sector can be expanded as an increase in tourist arrivals. If the results show that tourist arrivals is connected with agriculture, tourism led agriculture sector is practical. If the results show the opposite directional causality, suggesting that increase in government expenditure to agriculture sector is necessary to expand tourism sector. Therefore this study is to examine the causal relationship between tourist arrival and agriculture sector in Malaysia

### **Tourism Sector in Malaysia**

The tourism industry exhibited a steady increase before the financial crisis. During the 1983s, the Tourist Development Corporation of Malaysia (TDC) organized campaigns locally and abroad to encourage more tourists into Malaysian country. However the campaign seemed to attract a few number of tourists. Then, the launch of the visit Malaysia Year (VMY) campaign in 1990 was a successful move as 53.6% growth of tourist arrivals and 60.3% growth of total receipt compared to the year before was recorded. In the following year, a downturn in worldwide travel had an impact on the tourism sector. As a result, the number of tourist arrivals declined. The second campaign was done in 1994 and it has showed an increased in the number of tourist arrivals by 10.7%, the growth rate. Malaysia experienced a decrease in tourist arrivals in 1996 due to cholera outbreak in Sabah. The following year, the same trend has been exhibited due to severe dengue fever in Penang, Cocksackie B viral epidemic that killed more than 40 children in Sarawak, and the haze disaster. Malaysia Airlines incurred a loss as there was flight cancellation due to haze disaster. The financial crisis in 1997- 1998 caused devaluation of currencies and brought major implication on inbound travel, partly due to the higher purchasing power in devalued countries compared to those unaffected countries. In 1998, Malaysia hosted the Commonwealth, and in 1999, Sepang Formula One (Malaysian Grand Prix) was organized. As a result, tourist arrival increased substantially. Figure 1 shows the number of tourist arrival in Malaysia from 2005 until 2011. In 2005, the number of tourist arrival in Malaysia was 16,430,000 people and increased to 17,550,000 people in 2006. The number of tourist arrival in 2007 was 20,900,000 people and increased again to 22,000,000 people in 2008. The number of tourist arrival increased again from year to year and reached 24,700,000 people in 2011.



**Figure 1:** The Number of Tourist Arrival in Malaysia from 2005 to 2011

Sources: [www.tourism.gov.my](http://www.tourism.gov.my)

## LITERATURE REVIEW

Several studies have been done on numerous countries by using panel data such as Nissan et al. (2011), Seetanah (2011), Lee and Brahmairene (2013), Chou (2013) and Lee and Chang (2008). These studies examine the relationship between tourism and economic growth. The studies have interest in different types of countries and economies and different period of time. Nissan et al. (2011) investigated the relationship between tourism activity and economic growth for the period of 2000 to 2005 in 11 countries including Denmark, Finland, France, Germany, Italy, Japan, The Netherlands, Spain, Sweden, the UK and the USA. The results indicated that tourism has a positive impact on economic growth and entrepreneurship. Prices and income have an effect on tourism. Seetanah (2011) supported from the results of 19 island economies from 1990 to 2007. The study employed the GMM method in the analysis.

Lee and Chang (2008) also used the panel data but from OECD and non OECD countries. Data from 1990 to 2002 were collected. New heterogenous panel co-integration technique was employed and there is one co-integrated relationship between economic growth and tourism development. In addition, tourism development has a bigger impact on economic growth in non OECD compared with OECD countries. The panel causality test showed that in the long run there is unidirectional relationship running from tourism to economic growth in OECD countries. However the same tests revealed that there is bidirectional relationship in non OECD countries. Chou (2013) also examined the causal relationship between tourism spending and economic growth but in 10 transition countries. Data from 1988 to 2011 were collected. The study employed the same approach and the results showed the consistency of direction of causality from Bulgaria, Romania and Slovenia. The economic growth is dependent on tourism spending in Cyprus, Latvia and Slovakia. In Czech Republic and Poland, economic growth can increase the demand for tourism in both regions, while there is a feedback effect in Estonia and Hungary.

Another panel analysis done by Lee and Brahmairene (2013) to investigate the effects of tourism on economic growth and CO<sub>2</sub> emissions in European countries from 1988 to 2009. The results showed that there is a long run relationship among all the variables used. Furthermore, tourism, CO<sub>2</sub> emission and foreign direct investment have a positive effect on economic growth. However, economic growth can cause CO<sub>2</sub> emission to increase. Tourism and FDI has an adverse impact on CO<sub>2</sub> emission.

Chen and Chiou-Wei (2008) agreed that tourism is a determinant of economic as the the findings confirmed from Taiwan and South Korea. The study used EGARCH-M model with uncertainty factors was employed to examine the relationship between the two variables. Jalil et al. (2013) also obtained the same results of positive relationship between tourism and economic growth with a different approach which was Autoregressive Distributed Lag (ARDL) models. The data from 1972 to 2011 were collected. The results revealed that economic growth is dependent on tourism. Thus, enhancing tourism sector can escalate economic growth in Pakistan

Various models have been applied in the case of a single country such as Wald test Granger causality and error correction model by Lashkarizadeh et al (2012), Engle and Granger, Vector Autoregression (VAR) by Oh (2003); ARDL modeling approach and Bounds test for cointegration by Katircioglu (2009); Input-output analysis by Arslanturk (2012). The results were mixed. Lashkarizadeh et al (2012) investigated the relationship between tourism industry and economic growth by employing Wald test Granger causality test and error correction model. Data from 1980 to 2009 were collected. The results explained that tourism industry has an effect on economic growth with feedback.

An investigation on the connection between tourism growth and economic growth for the Korean economy by Oh (2003), using Engle and Granger two-stage approach and a bivariate Vector Autoregression (VAR) model. The results of co-integration test showed that there is no long-run relationship between two series. Then, the result of Granger causality test suggested that tourism growth is dependent on economic growth while the tourism growth does not contribute to the economic growth.

Katircioglu (2009) used annual data from 1960 to 2006 in Turkey and found no co-integration between international tourism and economic growth in that country. Arslanturk et al (2011) studied the relationship between tourism receipt and economic growth also in Turkey. The study employed Granger causality based on Vector Error Correction Model (VECM), the same result of no relationship between the series. Atan and Arslanturk (2012) extended the study on the tourism but with different approach which is input-output analysis. The results were different as the study found a significant effect of tourism on economic growth in Turkey.

## **METHODOLOGY**

This study use the annual time series data from 1980 to 2012. The data are collected from the World Bank and Malaysian official website of tourism. The equation (3.1) below has been developed, using the appropriate variables.

$$lgA_{it} = \alpha + \beta_1 lgT_{it} + \beta_2 lgX_{it} + \varepsilon \quad (3.1)$$

Where lgA represents log of agriculture sector, i is country, t is the year, lgT is log of tourist arrivals, lgX is log of export and  $\varepsilon$  is an error.

### **Unit Root Test**

The unit root tests are carried out before the cointegration and granger causality test. The unit root test is to see the stationary of variables in level and first difference (Asteriou & Hall, 2007; Seddighietal, 2000). The hypothesis for the unit root tests are as follows:

H0 :  $\delta = 0$  (have a unit root test / not stationary)

H1 :  $\delta \neq 0$  (no unit root test / stationary)

To test the unit root, the Augmented Dickey-Fuller (ADF) is used for this method, ADF unit root test method is as follows.

$$\Delta Y_t = \alpha_0 + \sum_{i=1}^a \phi_i Y_{t-1} + \sum_{j=1}^b \theta_j \Delta Y_{t-1} + \varepsilon_t \quad (3.2)$$

Without constant and trend:

$$\Delta \ln Y_t = \delta \ln Y_{t-1} + \mu_t \quad (3.3)$$

With constant:

$$\Delta Y_t = \alpha + \delta Y_{t-1} + \mu_t \quad (3.4)$$

Constant and trend:

$$\Delta \ln Y_t = \alpha + \beta T + \delta \ln Y_{t-1} + \mu_t \quad (3.5)$$

Where  $\Delta$  is the first difference,  $\varepsilon_t$  and  $\mu_t$  is a stationary random error. Based on the hypothesis of the unit root test, if the t-statistic obtained is greater than the critical value, then hypothesis  $H_0$  is not be rejected (the variable is not stationary and has a unit root). But if the t-statistic is less than the critical value, then there is no unit root and the variables is stationary ( $H_0$  hypothesis is rejected).

### Co-Integration Test

After performing the unit root test, co-integration tests are performed to examine the long run relationship among all the variables. In the long run co-integration test, there are two main models developed by Engle and Granger (1987), and also developed by Johansen (1988) and Johansen and Juselius (1990). Co-integration test for this hypothesis is as follows:

$$H_0 : \delta=0 \text{ (not stationary for } \hat{\mu}_t \text{ or not cointegration if } t_\delta > \tau)$$

$$H_1 : \delta < 0 \text{ (stationary for } \hat{\mu}_t \text{ or cointegration if } t_\delta < \tau)$$

Whereas  $\hat{\mu}_t$  is the error and  $\tau$  is the critical value. If the value of the t statistic is less than the critical t, then  $H_0$  is accepted (the variables are not cointegrated). If the value of t statistic is greater than the critical t, then  $H_0$  is rejected (Asteriou & Hall, 2007; Seddighi et al, 2000). In this study, the co-integration method introduced by Johansen is used. The linear regression equation for this co-integration is as follows:

$$Y_t = \beta_1 + \beta_2 X_t + \mu_t \quad (3.6)$$

And the residual equation is:

$$\hat{\mu}_t = Y_t - \hat{\beta}_1 - \hat{\beta}_2 X_t \quad (3.7)$$

### Vector Error Correction Model

The test for Vector Error Correction Model (VECM) is conducted to confirm the long run relationship among the variables. A part from that, the test is also to investigate the effect of tourism arrival, money supply, and government expenditure on service sector in the short term. The equation for the VECM test is:

$$\Delta Y_t = a_0 + b_1 \Delta X_t - \pi \widehat{\mu_{t-1}} + Y_t \quad (3.8)$$

Where  $b_1$  is the multiplier effect of the variables in the short term and there is an immediate impact on the dependent variable of  $Y_t$  (as  $X_t$  changes,  $Y_t$  will also change).

### Granger Causality Test

Causality test in this study is to see the Granger cause relationship between two variables. Granger (1969) introduced this causality test to see the reaction between two variables. Sims has further expanded this model to be a model of alternative causes in 1972 (Asteriou & Hall, 2007; Seddighietal, 2000). The hypothesis for the Granger cause model is as follows:

$$H_0 : \sum_{i=1}^n \beta_i = 0 \text{ or } X_t \text{ does not Granger cause } Y_t$$

$$H_1 : \sum_{i=1}^n \beta_i \neq 0 \text{ or } X_t \text{ Granger cause } Y_t$$

If the variable X has Granger cause relationship with Y and Y also has the Granger cause with X, suggesting that the past of X help anticipate Y in the future. Similarly, the last value of Y also assists in the expected future value of X. The regression formula for two way causality tests (involving variables X and Y) is as follows:

$$Y_t = \sum_{i=1}^p \sigma_i Y_{t-i} + \sum_{j=1}^q \beta_j X_{t-j} + \mu_{1t} \quad (3.9)$$

$$X_t = \sum_{i=1}^p \gamma_i Y_{t-i} + \sum_{j=1}^q \delta_j X_{t-j} + \mu_{2t} \quad (3.10)$$

And the formula to calculate the F test (F-statistic) is as follows:

$$F = \frac{[RSS_R - RSS_u]/m}{RSS_u/(n-k)} \quad (3.11)$$

Whereas n is the number of distribution and k is the number of variables. To determine the critical value of F, the formula  $F_{m,n-k}$  (where the value of k is equal to  $m+n+1$ ) is used and the table of distribution F should be referred. If the F-statistic is greater than the F-critical, then  $H_0$  is rejected (it can be concluded that X, has Granger cause with Y and vice versa).

### FINDINGS

Table 1 shows the results of unit root tests based on the ADF. The results show that all the variables of tourist arrival, agriculture sector and export are non-stationary in level with constant and constant with trend. But in the first difference test, the results for all variables show that they are significant, suggesting that all the variables are stationary. The null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, Johansen co-integration can be performed.

The main focus of this paper is to examine the effects of tourist arrival on agriculture sector. To test the long-term equilibrium relationship among the variables, the co-integration test was applied in this study. The optimal lag selection was conducted based on the Akaike information criterion (AIC). The lag length for the Johansen co-integration test minimizes the AIC. Lag 1 was selected. Johansen co-integration is then applied.

The results are shown in table 3 that one co-integrating equation exists at 5%. Therefore, a long-term equilibrium relationship exists among tourist arrival, agriculture sector, and export. The *t*-trace statistic value is 34.78775, which is higher than the critical value (trace) of 29.79707 at 5% significance level. This trace statistic shows that the variables have a long-term relationship at a 5% significance level. For the Max–Eigen statistic, the result shows that the relationship among the variables in the long term is at a five percent significance level. The Max–Eigen statistic at 25.15222 is higher than the critical value (Eigen) at 21.13162 at a 5% level.

Table 4 indicates VECM test. The findings reveal that the value of lagged error-correction terms ( $ECT_{i-1}$ ) is negative and statistically significant when tourist arrival is dependent variable. Therefore, it can confirm that the long run relationship among export, agriculture sector and tourist arrival.

Table 5 presents the Granger causality relationship among export, tourist arrival and agriculture sector in Malaysia. The results indicate that agriculture sector Granger cause tourist arrival with feedback. Export is not connected with agriculture sector and vice versa. Agriculture sector does not contribute to export and export also does not Granger cause agriculture sector.

## CONCLUSION

This paper is to examine the effects of tourist arrival on the agriculture sector in Malaysia. At first we perform unit root test and all variables are non-stationary in level and stationary in first difference. The Johansen co-integrating test explains that the variables, namely, tourist arrival, export and agriculture sector coalesced to achieve the steady state equilibrium in the long run. The vector error correction model confirms that there is a long run relationship among the variables. The Granger causality test shows that tourist arrival can enhance agriculture sector while the agriculture sector improvement can attract tourist demand to increase. This paper can help formulate policies to increase the agriculture sector as the tourist arrival plays an important role in determining the agriculture. The government should increase the investment in tourism sector in order to escalate the agriculture and thus agriculture sector will attract more tourists to arrive in Malaysia.

**Table 1:** Unit Root Test

Variables	Intercept		Intercept & Trend	
	level	First difference	level	First difference
<b>lgA</b>	-0.5415 (0.8699)	-5.3705** ( 0.0001)	-1.6935 ( 0.7308)	-5.2797** (0.0009)
<b>lgT</b>	-0.6553 (0.8439)	-5.3044** (0.0001)	-2.8835 (0.1808)	-5.2121** (0.0010)
<b>lgX</b>	-2.1116 (0.2416)	-4.2583** (0.0022)	0.2784 (0.9976)	-5.2461** (0.0009)

Note: \*, and \*\* denote statistical significance level at 1%, and 5% respectively

**Table 3: Co-integration Test**

Hypothesized no. of CE(s)	Max-Eigen statistic	0.05 critical value	Trace statistic	0.05 critical value
r=0*	25.15222	21.13162	34.78775	29.79707
r≤1	6.287609	14.26460	9.635529	15.49471
r≤2	3.347919	3.841466	3.347919	3.841466

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

**Table 4: Vector Error Correction Model**

Dependent Variables	$\Delta \lg T$	$\Delta \lg X$	$\Delta \lg A$
ECM(-1)	-1.210514*	0.013222	0.138844
$\Delta \lg T(-1)$	-	0.027806	-0.027454
$\Delta \lg X(-1)$	--0.684475	-	0.014198
$\Delta \lg A(-1)$	-0.248196	-1.067727	-
Constant	0.068242	0.027489	0.054241

**Table 5: Granger Causality**

Null Hypothesis:	Obs	F-Statistic
lgX does not Granger Cause lgT	32	2.83115
lgT does not Granger Cause lgX		0.45495
lgA does not Granger Cause lgT	32	3.69680**
lgT does not Granger Cause lgA		50488**
lgA does not Granger Cause lgX		1.80479
lgX does not Granger Cause lgA	32	0.85094

Note: \*, and \*\* denote statistical significance level at 1%, and 5% respectively

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# OBSERVATIONS OF AN ACCIDENTAL TOURIST

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## Abstract

This paper is based on the personal observations and insights of the author as he travelled extensively in India, Sri Lanka and Timor-Leste over the last five years as a consultant in the transport sector. This has allowed him time to travel extensively and visit innumerable sites of natural or historic significance. It has also challenged him to question the often conflicting issues associated with community development and preservation of the natural and built environment. There is often conflict between what the tourist/traveler expects from his trip and the aspirations of the local community. How can these be balanced? How can historical monuments be preserved and protected in the local community? Are wildlife reserves for conservation or tourism? In this context the Supreme Court of India has been clear: Tiger Reserves are to preserve tigers and anything that is contrary to that goal needs to be addressed. Should restrictions be placed on the number of visitors to a natural or historic site in a day to prevent over use? The issues are innumerable. In many cases the local community has addressed many of the issues either formally or informally. Examples are given in the paper in both wildlife preservation and management of historic sites. Many of the questions remain unresolved or, at best, result in compromise. That, in fact, is the nature of life.

*Keywords: Natural resources, Community development, Sustainability, Heritage preservation, Community participation*

## INTRODUCTION

Western tourists travel to developing countries to experience an exotic culture and lifestyle, view the wildlife and investigate historic monuments. Often, but not always, showing greater respect for the environment and historic monuments than the resident population. In many ways they would probably prefer development to stand still so that they can have their experiences unsullied by modern culture. At the same time they are soon able to return to their middle class homes in their western homeland or a middle class enclave in a developing country. The “exotic” people can then go back to their mundane and “simple” life. Governments, which are always in need of foreign exchange, are keen to promote (or is it to “exploit”?) such tourism.

Over the last five years the author has had the opportunity to travel the highways and byways of India, Sri Lanka and Timor-Leste in his role as an international infrastructure consultant and inveterate photographer. This has provided the opportunity to visit out of the way places in what Australians would call “off the beaten track”. These travels have provided the opportunity to talk to local drivers and guides and, through them, members of local communities. The author is however reserved in such situations, not wanting to disturb the residents except to give a wave or smile to say “hello” or “thank you” and rarely takes photographs of people (even of his own family!).

Such travels have also given the opportunity to ponder on community development. Innumerable questions have gone through the author's mind. How do you balance the "exotic" or undeveloped environment with the needs of the population? How to balance development with the need to preserve the natural and archaeological/historic heritage? Are wildlife reserves to preserve animals or to provide wildlife viewing opportunities, or both? Can people maintain their culture and at the same time experience economic development? Can one show respect and even awe for a culture and its buildings whilst at the same time maintaining one's own culture and beliefs? The list keeps flowing through the mind. Clearly, the list could be endless and would be different for each individual.

This paper seeks to explore some of these issues together with some practical solutions that have been observed during the travels. It must be emphasized that this paper has been written from the perspective of a westerner, an Australian. People from different societies have different views and aspirations which need to be appreciated and accepted. This is a personal journey. For an alternative theoretical perspective the reader might consult Vedeld and Kjosavik (2012).

### **CULTURE AND LIFESTYLE**

The desire is often to see the "real" people in their "natural" environment. The un-posed photograph in Figure 1 was taken recently in Timor-Leste. Unfortunately the statistics behind the smiling faces are not as appealing. Only around 70% of the population has an improved drinking water source; with around 40% having improved sanitation facilities (World Health Organization, 2014a). Malaria is endemic (World Health Organization, 2014b). At the same time roadside stalls in much of the country sell brand name carbonated drinks and biscuits. Clearly the carbonated drinks are in case a thirsty tourist comes by!

**Figure 1:** Happy, smiling children in Timor-Leste



Change is inevitable. Development must occur to improve the quality of life and improve access to the full range of services such as education and health. How can society benefit without destroying the culture? Is it possible to develop indigenous tourist facilities rather than importing a resort and its staff from other areas of the country or overseas? Should there be tight development control over such facilities to ensure that the local community benefits?

Com, a village, on the north coast of Timor-Leste is a case in point. During the United Nations administration it was a weekend getaway for western staff of the various agencies so

tourist facilities were developed such as a resort hotel and a number of homestays. The homestays appear to have been developed by local entrepreneurs. During a visit in November 2014 the resort hotel was closed and all of the homestays were empty. At this stage road access from the capital Dili, over 200 km west is only fair, providing limited access. The lifestyle of the population has changed forever but the long-term benefits at this stage appear to be limited.

With the end of the conflict in Sri Lanka tourists was encouraged to return to the Northern and Eastern Provinces. Facilities were improved. Unfortunately in this case many of the local businesses are impacted by the number of military bases with the armed forces establishing stores and canteens to provide services to the public. They are often staffed by military personnel as well giving little benefit to the resident populations.

### **ARCHAEOLOGICAL/HISTORIC SITES**

If one accepts that archaeological/historic sites are worthy of preservation, the question becomes one of how much effort and funding should be spent on their preservation? The task is formidable. For instance India has more than 3,650 ancient monuments, archaeological sites and remains of national importance (Archaeological Survey of India, 2015a). This does not include the many monuments of state significance nor those sites that are being preserved by private owners or trusts. Other sites, such as the Golden Temple at Amritsar, are still performing their original function as places of worship or residences but are often open to the public.

Many of the sites visited by the author over the last five years in India have been at isolated locations, largely unknown to the general public and hence rarely visited. These sites are clearly preserved for their intrinsic value rather than tourism potential. Such an approach is to be applauded. Clearly, funding for many of these sites will be minimal with preservation rather than restoration the only option.

There are a number of low cost initiatives that could be considered for the “minor” sites such as better signposting in both English and the local language. This is particularly important in multi-language countries where English is often the “connecting” language and, other than the mother tongue, is the only text with which they are familiar. Sites should be provided with an explanatory panel which describes the significance of the monument. Care should be taken to ensure that the information is factually correct and based on the latest research.

Local communities specifically, and the broader population in general, need to be aware of their historic heritage and the significance of local monuments in their midst. Local people should be encouraged to be stewards of their historical monuments and provide information and, if requested to be able to guiding services. It is easy to miss key aspects of temple decoration. If the tourist shows a real interest and empathy quite often it is the ground workers or cleaners at sites in India who can point out aspects that make a visit to what appears to be an ordinary monument exceptional without a word being spoken. The author responds by giving the person a donation for their services. Is such a donation appropriate?

Whilst in no way criticizing people carrying out their own religious practices it is also important that places of worship also be seen in the context of their history and architecture. Clearly they should remain places of active worship. At the same time action should be taken to preserve the structure and its decoration from over exuberant worshippers and tourists.

In some cases it is becoming necessary to limit the number of visitors in a day. For instance, it has been reported that the “Archaeological Survey of India (ASI) is planning to restrict the number of tourists allowed entry to the Taj Mahal in a day to avoid damage to the 17th century marble monument” (Dev, 2014). Should such a system apply at other sites? How can you ensure fairness in ticket allocation?

## **NATIONAL PARKS AND WILDLIFE SANCTUARIES**

### **General**

This section will focus on the protection of tigers and birds in India. There is a clear conflict here. Are the animals and birds being protected for their own preservation or for the benefit of tourists or both?

### **Tigers**

The Indian Supreme Court has made it quite clear that Tiger reserves are for the preservation of the Tiger (BBC News India). Whether or not there is a place for tourists is controversial but the current situation is that tourists are allowed subject to strict entry to core areas of tiger reserves (BBC News India). Worldwide there are between 2,500 and 3,500 tigers of which between 1,500 and 1,900 are in India (National Tiger Conservation Authority, 2014). The 2014 Tiger Census will show the number of Tigers in India is 2,226 a very significant increase over 2010, (National Tiger Conservation Authority, in press).

One of India’s tigers is shown in Figure 2. The tiger was within 1 km of the highway and one of two seen that morning. Tourists had to utilize National Park vehicles and the passengers were very well behaved and keen on taking as many photographs as silently as possible. The focus of the whole safari became one of locating tigers, all other wildlife was essentially ignored. Is there a need for this fixation? If you do not see the wild animal you set out to see should you get your money back? If you want perfect photographs go to the zoo!



**Figure 2:** Tiger in Bandipur National Park, India

The major debate at Bandipur National Park is the closing of the gates overnight to protect both the wildlife and the travelling public. This has drawn criticism as one major National Highway and one State Highway pass through the park. The National Highway, in particular carries significant freight and passenger traffic to Kerala. The Karnataka Government is firm in its resolve to protect the wildlife.

Because of its strong management the park “supports a very high density of Elephant population with significant number of adult tuskers” and “is one of the richest wildlife areas in India, being particularly noted for its intact assemblage of seven large ungulate species (muntjac [barking deer], chital [spotted deer], sambar, chousingha [four-horned antelope], gaur [Indian bison], wild pig and elephant) and three large predatory carnivores – tiger, leopard and dholes [Asiatic wild dog]” with a very high ratio of predator and prey species (Bandipur Tiger Reserve, 2015).

Clearly at Bandipur management is focusing to good effect on the preservation and protection of animals in preference to wildlife tourism.

In Yala National Park in Sri Lanka it is the leopard and elephants that are the center of attention rather than the great diversity of wildlife in the park. Yala also appears to be well managed with only two of five blocks open to the public (Yala National Park, 2015).

### **Birds**

Kokrebellur Bird Sanctuary is in a village of the same name near Mandya southwest of Bangalore in India. It is the nesting site of Painted Storks (*Mycteria leucocephala*) and globally threatened Spotbilled Pelicans (*Pelecanus philippensis*). It is one of the only five known nesting areas world-wide of the Spotbilled Pelican (Gadgil, 2004 p. 17). Whilst this is a sanctuary it is not a forest sanctuary but rather ficus and tamarind trees within the boundaries of the village (see Figure 3).



**Figure 3:** Spotbilled Pelican in Tamarind Tree in Kokrebellur

The State of the Environment Report and Action Plan, 2014 noted that “[t]his locality is a wonderful example of symbiosis of humans and birds. The villagers protecting the birds and in turn benefiting from the “guano” (bird droppings) rich in phosphorus and potassium that accumulates under the nesting trees that is used as manure.” (Gadgil, 2004 p. 17). Villagers are also compensated for economic benefits foregone and the protection afforded to the birds.

The Report suggested a holistic action plan to sustain the nesting of birds in decades to come, sustain the centuries old cooperation of the villagers and provide good facilities and information for visitors. The plan included compensation for villagers (p. 17 – 18). As of early 2014 no facilities or information had been provided for tourists with the fate of the other recommendations unknown.

Unfortunately, in spite of the glowing comments in the report, there are significant issues developing. Bird life is being affected by extensive illegal sand-mining in the nearby Shimsha River and the use of pesticides on the local rice paddy fields. It is conceivable that the village protectors of the nesting trees may also be part of the problem by also participating in illegal sand mining and spraying pesticide on crops. If this is in deed the case, there needs to be an adjustment upwards in compensation to the villagers and an extensive education program so that the habitat and the nearby feeding grounds are protected. The birds and humans will then be able to continue to live in harmony.

## **CONCLUSION**

This paper has by necessity and design provided a brief insight into some of the problems and potential solutions observed during the author's recent travels. The more he travels, camera in hand, the more he questions. In the end can there be a perfect solution or are we always faced with a compromise as we seek to ensure the sustainability and development of communities and the conservation of the environment?

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# **INNOVATION WITHIN THE SARAWAK HOMESTAY PROGRAMME: THE PERSPECTIVE OF DAYAK'S HOMESTAY ENTREPRENEURS**

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## **Abstract**

The purpose of this study is to identify the specific innovation characteristics of the Dayak homestay operators (entrepreneurs) in Sarawak and the extent to which such characteristics have influenced their performance in the industry. The study employs a quantitative research method utilizing primary data gathered from survey questionnaires. An active member of Dayak homestay operators has participated in the study. The respondents were identified through the Ministry of Tourism, Sarawak via Sarawak Tourism Board (STB). Results obtained from the study were validated using an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) prior to examining their relationship. The findings indicate that innovation constructs were strongly, positively and significantly related to the Dayak homestay entrepreneur's performance. A positive and significant effect emerged when product innovation is being adopted to the cultural differences. In addition, a link has been established between the principal innovative knowledge and the new market's potential. The outcome also suggests that there is a significant relationship between the strategic leverage and the communities (participants) in building a strong customer relationship. Theoretically, this study has filled a gap within the perspective of Dayak entrepreneurship, especially on how the homestay tourism innovation components have influenced the Dayak homestay entrepreneur's business performance. Given the abrupt environment of the industry, the findings derived from this study suggest that innovation characteristics are important within the Dayak Homestay business industry if they were to enhance their competitiveness. However, the population of the study has disallowed the findings to be generalized. Future studies should use a bigger representation of the sector, while considering a longitudinal approach.

Keywords – Tourism, Community based tourism, Innovation, Entrepreneurship, and Entrepreneur

## **INTRODUCTION**

Business innovation can come in many forms, but most of these, shared three common elements - creativity, a problem-solving skills and a new way of thinking (Moscardo, 2008) with capability to accept, adapt (Rubalcaba, Michel, Sundbo, Brown, & Reynoso, 2012) and capitalize on change (Hall & Williams, 2008). Joseph Schumpeter (1883-1950) the leading theoretician of innovation has introduced innovation into entrepreneurship study, especially in the creation of new products or services and argued that innovation concerns with "carrying out new combinations" by a dynamic "entrepreneurs" (cited in Decelle, 2004). Yet, normal criticism in any industry is that businesses appear to have lacked innovativeness.

The importance of the tourism sector in the economy is well recognized by relevant parties and it has been categorized as an extremely competitive sector (Sundbo, Orfila- Sintes, & Sorensen, 2007). In fact, several authors have acknowledged that to survive and grow in the market, tourism firms need to be innovative (Keller, 2006; Weiermair, 2006; Sundbo et al.,

2007) while recognizing that innovation is an important element in tourism business.

The growth of the tourism industry has been phenomenal, however, the formula of success, is yet to be fully defined. The performance could be varied from one to another, depending on the linkages, integration and collaboration of various components within the industry.

The tourism industry has grown significantly over the years and continues to be one of the main contributors to the Malaysian economic sector. In 2014, Malaysia received 25.72 million in terms of tourist arrival (Malaysia Tourism Promotion Board, 2014) and it is the second largest industry in Malaysia with RM158.2 billion or 16.1% of total Gross Domestic Product contributions (World Travel & Tourism Council, 2014). In fact, Malaysia is amongst the top most visited countries in the world (Mohebi & Rahim, 2010).

In Malaysia, tourism sector in Sarawak is constantly showing a positive trend and it continues to experience greater booming with an overall income generated in 2013 of RM2,151,363.20, an increase by 33.47% as compared to RM1,611,914.03 in 2012 (Ministry of Tourism, Sarawak, 2014). Within the sector, the homestay programmes among the Dayak's community have also grown over the years.

Given this, this study will focus on the Sarawak's Dayak homestay programme. The programme has been announced officially by the Tourism Ministry as a tourism product in 1995 (Bhuiyan, Siwar, Ismail & Islam, 2012). Currently, there are 437 registered operators in the State (Ministry of Tourism, Sarawak, 2014). This suggests that the State's homestay tourism sector appears to be a lucrative income generator for the community and the programme managed to attract a total of 17,441 visitors in Sarawak in 2013 as compared to 14,310 in 2012 (Sarawak Tourism Ministry, 2014). The trend continues to be in a positive direction with a total earnings of RM379,780.00 in the first four months of 2014, attracting around 1,194 visitors. (Ministry of Tourism Sarawak, 2014).

A homestay programme cannot be classified as a lodging facility. The Homestay program provides tourists with the multi ethnic life condition foster with cultural experiences and economic well beings of the local people (Bhuiya et al., 2012). It gives tourists the opportunity to stay with a chosen family, interact and experience the daily life of their homestay family and learn the culture and lifestyle of the rural community. Each homestay programme offers different types of activities, depending on the culture, economic activity as well as location. However, the more significant entrepreneurial value derived from a homestay programmes that have active participation of the local people and community.

To support the programme, in 2014 the State government, has channeled an estimated RM11,301,000.00 to do upgrading works at five homestays namely – Homestay Kampung Pueh Sematan, Homestay Kampung Benuk Padawan, Homestay Annah Rais Padawan, Homestay Rumah Nyuka Sarikei and Homestay Rumah Michael Ancho Bawang Assan Sibul (Ministry of Tourism Sarawak, 2014).

Within the perspective of homestay businesses, a number of scholars have studied the small rural tourism industry in Malaysia and discussed the potentials of the homestay programme (Lo, Mohamad, Songan, & Yeo, 2012; Razzaq, Hadi, Mustafa, Hamzah, Khalifah, & Mohamad, 2011; Ibrahim & Razzaq, 2009; Amran, 1997). Nevertheless, most of these studies discussed on the community's participation, including the economic, social and environmental impacts derived from the activity. However, a research on the role of

innovation within the homestay programme is still limited (Razzaq et al., 2011). Notably, to translate the homestay tourism programme to an utmost potential level, its operators, villagers, coordinators must work together and be more innovative in their approaches.

## **LITERATURE REVIEW**

Due to dynamic business environment, organizations are finding more difficult to compete. Deregulation, increasing competition and rapid changing in technologies have changed the way a business has operated. According to Higgins (1996) innovation is the way to be competitive, keep on growing and remains at the leading edge of any industry (Cottam, Ensor, & Band, 2001; Davis & Moe, 1997). Several empirical studies (Matsuno, Mentzer, & Ozsomer, 2002; Hult, Hurley, & Knight, 2004) have revealed a positive relationship between innovation and business performance and eventually enhanced firm's competitiveness (Panayides, 2006; Rosenbusch et al., 2011).

However, Rosenbusch, Brinckmann and Bausch (2011) analyzed the relationship between innovation and business performance but failed to obtain a conclusive result. In addition, other scholars found insignificant relationship (Birley & Westhead, 1990; Heunks, 1998) while others found a negative relationship (McGee, Dowling, & Megginson, 1995; Guisado-Gonzalez, Guisado-Tato, & Sandoval-Perez, 2013).

Notably, the tourism industry is highly dynamic and exposed to both global and local competition (Weiermair, 2006) and constantly gone through a transformation (Sundbo et al., 2007). Hence, to survive tourism firms need to be innovative, otherwise they may become obsolete (Tidd & Bessant, 2009). However, the industry has limited knowledge on innovation and its relationship with firm performance (Hjalager, 2010; Aldebert, Erramilli, & Dev, 2011; Nagy, 2012).

As discussed in previous literature, there are several innovative features can be applied in the tourism sector. According to Sinclair (2003), innovation can be in terms of product (experience), human capital, and marketing. It is a mutually dependent in a supply chain – logistic and environment (Shaw & Williams, 2004), visitor management (Bessant, & Davies, 2007), local community involvement (Hall & William, 2008, vonHippel & Katz, 2002) and marketing (Tether, 2004).

Notably, innovative tourism is very much influenced by customer orientation and it plays a fundamental role in the tourism innovation perspective (Weiermair, 2006, Otto & Ritchie, 1996; Sundbo, 2007). Within the same line of industry, the homestay tourism sector in particular requires the entrepreneurs/operators to be even more innovative in their approaches (Razzaq et al., 2011; Ibrahim & Razzaq, 2009).

The idea of the homestay programme in Malaysia can be traced back to the early 1970s after it was pioneered by a local lady by the name of Mak Long when she provided a simple and humble accommodation to visitors at her *kampong* house at Kampung Cherating Lama in Pahang (Amran, 1997). In Sarawak, the Dayak homestay programme mostly based on cultural, handicraft making, local cuisine and nature. Yet, the unique and major attracting factor could be the longhouse lifestyle itself. In fact, the programme is considered as a community based entrepreneurship initiatives (Agarwal et al., 2003) while as cited in Mascardo (2008), others argued that it is associated with social impacts and greater opportunities for local community to be involved apart from acting as an agent for social-cultural and economic development, especially on rural community development (Lo et al.,

2012, Ibrahim & Razzaq, 2009). On the contrary, Mascardo (2008) also argued that community-based tourism is not, however, universally hailed as positive options for the development of rural regions.

Within the homestay sector, innovation is a consequence of the main components of the product, participant, and principal (Sinclair, 2003; Ibrahim & Razzaq, 2009). In fact, the product innovation has been identified as an important component built on the basis that tourist visitation to various homestay destinations is based on the product's distinctive attractions. Within the homestay business, the innovation includes attraction such as natural habitat, history and distinguished architecture, art & crafts, music and cultural activities, traditional food, and agricultural related activities (Ibrahim & Razzaq, 2009). According to Razzaq et al., (2011) these components are the main attractions for tourists.

Participants from the local is another key factor (Sinclair, 2003 and Razzaq et al., 2011). The programme requires a commitment and participation from the local community, the village's committees and the people who stay within the area. The local community involvement is critical to the entire homestay programme. Past researchers posited that most studies on rural tourism have focused on the environment, social, and cultural aspects (Kuvan & Akan, 2005) which required intensive participation of their stakeholders (participants) (Brooker, Joppe, Davidson, & Marles, 2011).

The willingness of someone, namely principal to be directly involved in the program is important (Sinclair, 2003). The principal could be an individual or a group that shares the same aspiration regarding the homestay project. The principal is often someone who has high initiatives to improve himself/herself and the community. The quality owned by the principal includes leadership, personality, integrity, knowledge, and networking are the heart and soul to ensure the success of the homestay project (Razzaq et al, 2011). In fact, Schumpeter as cited in Brooker argued that innovative individual should be someone who is visionary, and having an entrepreneurial outlook manifested by their urge to introduce new products, services, processes, or marketing concepts (Brooker et al., 2011).

Since tourism sector is mainly a service sector (Sundbo et al., 2007), the characteristics of innovation is mostly focused primarily on newness of the market (Hjalager, 2010; Chandy & Tellis, 2000), ability to act in a proactive manner (Bessant, & Davies, 2007), reactive and repositioning (Guisado-Gonzalez, Guisado-Tato, & Sandoval-Perez, 2013), strategic or creative manner (Nagy, 2012), natural/original/unique features (Brooker et al., 2011; Sundbo et al., 2007), and effective marketing strategies (Brooker et al., 2011).

## **METHODOLOGY**

The study employs a quantitative technique by exploring the extent to which innovation influences the Dayak homestay tourism business performance by way of a survey undertaken in 2014. The primary source of data for this study is through a survey questionnaire participated by active member of Dayak homestay operators. The respondents were identified through the Ministry of Tourism, Sarawak via Sarawak Tourism Board (STB). These respondents are directly involved in the activity, hold responsibilities and have information on any novelties initiative or improvements introduced in the last 3 years of the programme. This enables the study to observe the trends of the Dayak homestay innovation behavior concerning the relationship and the performance. The technique used can provide an excellent foundation for this study, since the questions were standardized and allowed the respondents to remain anonymous (Leedy & Ormrod, 2001). Prior to testing the relationship between the

variables using regression techniques, the data were analyzed using (SPSS) Version 21. As suggested by Pelto and Pelto (1978), the results obtained from quantitative method needed to be validated and exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed by using AMOS Graphic 21. The data also tested for reliability, check the consistency of the items by employing the Oblimin rotated technique. Subsequently, the internal consistency was established using reliability analysis as suggested by Churchill (1979) with Cronbach's Alpha procedure (see also Nunanly, 1978). In order to determine the goodness of fit of the sample data, CFA was performed in the subsequent steps. The evaluation was based on the model fit criteria using the Chi-square ( $X^2$ ), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), Tucker-Lewis Index (TLI) and root mean square error of approximation (RMSEA) as per VanVoorhis and Morgan (2007), and Tabachnick and Fidell (2008). Table 1 depicts the summary of reliability test based on Cronbach's Alpha. The constructs appear to have high reliability.

**Table 1:** A Summary of Kaiser-Mayer-Olkin (KMO), Barlett's Test of Sphericity and Cronbach's Alpha for Innovation Factors and Entrepreneur Performance.

Constructs	KMO	Barlett's Test of Sphericity			Cronbach's Alpha
		Chi-square	df.	Sig.	
<b>Product</b>	0.612	311.081	16	0.000	0.712
<b>Participant</b>	0.731	461.012	20	0.000	0.705
<b>Principal</b>	0.701	301.224	15	0.000	0.698
<b>Entrepreneur performance</b>	0.803	491.337	17	0.000	0.701

To ensure the validity of the constructs, a simple of EFA on innovation (product) characteristics with the initial test for equality of variances and Chi-square means values of 28.801 with 6 degrees of freedom ( $p < 0.000$ ) and RMSEA of 0.051 were carried out. In addition, the statistical test for goodness-of-fit were  $CMIN/df = 2.0127$ ,  $GFI = 0.713$ ,  $AFGI = 0.662$ ,  $CFI = 0.751$  and  $TLI = 0.811$  were determined. Based on these results, it appears the model is good and met the minimum required index's (Byrne, 2004).

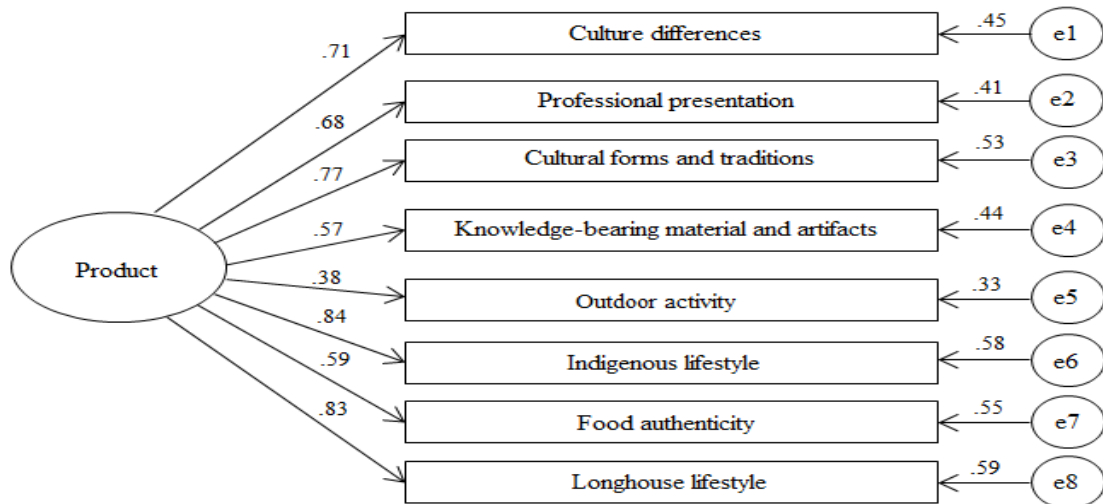
Next was to examine the tenability of the model under configural invariance measurement (CIM). The Chi-square result was 31.411 with 7 degrees of freedom ( $p < 0.0000$ ) and RMSEA of 0.043. The statistical result of the test of faith are  $CMIN/DF = 2.146$ ,  $GFI = 0.708$ ,  $AFGI = 0.910$ ,  $CFI = 0.917$  and  $TLI = 0.901$  respectively. It was suggested the model was good. According to the test in the metric invariance measurement (MIM), the results for Chi-square was 30.233 with 7 degrees of freedom ( $p < 0.000$ ) and RMSEA of 0.041. For goodness-of-fit, the data maintained as the CIM result with  $CMIN/df = 2.066$ ,  $GFI = 0.805$ ,  $AFGI = 0.922$ ,  $CFI = 0.923$  and  $TLI = 0.911$ ). This matric invariance was supported.

Based on the MIM results, a scalar invariance measurement (SIM) was imposed where intercepts of the invariance factor loading were constrained to be equal. The results seem to have no changes in Chi-square, degree of freedom and probability respectively. At the same time, values of 0.902 and 0.914 were obtained from the relative fit index (RFI) and incremental fit index (IFI) respectively and same as RMSEA 0.041. Consistent score was also obtained for  $CFI = 0.902$  and  $TLI = 0.911$  respectively.

**Table 2:** Model of Fit

<i>Test</i>	<i>Chi-square</i>	<i>Df</i>	<i>P</i>	<i>CMIN/df</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
<b>MM</b>	28.801	6.00 0	0.00 0	2.012	0.713	0.662	0.75 1	0.81 1	0.051
<b>CIM</b>	31.411	7.00 0	0.00 0	2.146	0.708	0.910	0.91 7	0.90 1	0.043
<b>MIM</b>	30.233	7.00 0	0.00 0	2.066	0.805	0.922	0.92 3	0.91 1	0.041
<b>SIM</b>	33.226	6.00 0	0.00 0	2.006	0.902 (RFI)	0.914 (IFI)	0.90 2	0.91 1	0.041

**Diagram 1:** Scalar Invariance for Innovation – Product



Based on the finalized model derived from EFA and CFA procedures, an investigation to assess the relationship between innovation and entrepreneur performance was carried out through a series of linear regression analysis.

Several assumptions were noted and addressed accordingly. They included: outliers and residuals, influential cases, multicollinearity, homoscedasticity, independence errors (Dublin-Watson test), normally distributed errors, and linearity (Tabachnick & Fidell, 2008; Field, 2005). Then analyses such as multiple  $R^2$ , F ratio, adjusted  $R^2$  and the overall proportion of variance accounted for significance of regression coefficients, unstandardized (B) weights, standardized ( $\beta$ ) weights, prediction equation, and correlations were carried out.

## FINDINGS

*Product innovation* - was regressed against entrepreneur performance, R was significantly different from zero, indicating that there was an association between these two variables,  $F(201) = 65.411$ ,  $p < 0.001$ , and  $R^2$  at .603. This suggested that 60.3% of the variation in entrepreneur performance can be explained by having product innovation in the model. Therefore, product innovation positively and significantly associated with entrepreneur

performance ( $\beta$ ) .323,  $p < .001$ . *Participant innovation* – then was regressed against entrepreneur performance, R was significantly different from zero, indicating that there was an association between these two variables,  $F(613) = 66.416$ ,  $p < 0.001$ , and  $R^2$  at .598. This suggested that 59.8% of the variation in entrepreneur performance can be explained by having participant innovation in the model. Therefore, participant innovation positively and significantly associated with entrepreneur performance ( $\beta$ ) .301,  $p < .001$ . Lastly *principal innovation* - was regressed against entrepreneur performance, R was significantly different from zero, indicating that there was an association between these two variables,  $F(702) = 71.007$ ,  $p < 0.001$ , and  $R^2$  at .579. This suggested that 57.9% of the variation in entrepreneur performance can be explained by having principal innovation in the model. Therefore, the principal innovation positively and significantly associated with DE performance ( $\beta$ ) .368,  $p < .001$ . Table 3 below depicts the summary findings of the study.

**Table 3: Summary Findings**

Description	Model	Regression Analysis
Product innovation will positively associate with entrepreneur performance	Product innovation ↓ Entrepreneur performance	Supported
Participant innovation will positively associate with entrepreneur performance	Participant innovation ↓ Entrepreneur performance	Supported
Principal innovation will positively associate with entrepreneur performance	Principal innovation ↓ Entrepreneur performance	Supported

## DISCUSSION

*Product innovation* - improvements on existing product and the ability to adopt it to the cultural differences would be a key to a growing segment of homestay market and can also serve as the basis to influence the entrepreneur's performance. Professional presentation of the Dayak cultural forms and traditions through the knowledge-bearing material and artifacts described as indigenous also cited amongst the source of success of the programme. Maximizing on indigenous lifestyle tends to receive the most positive response from visitors. In addition, the appeal or authenticity of the Dayak cultural practices and lifestyle appears the best statement supported by the operator's performance. These findings concur with that of Brooker et al., (2011) and Sundbo et al., (2007).

*Participant* - homestay tourism on the ground also driven by the participants or the community themselves who will connect the homestay programme with nature and cultural resources which will enrich the experiences of most tourists. In fact, such idea is in support of Bessant and Davies (2007); (Guisado-Gonzalez, et al., 2013 and (Nagy, 2012) where emphasis on customer relationships, proactiveness and creativity is one of the key criteria to be successful in the service industry.

*Principal* - involvement of the principal or key person in every stage of the homestay programme ensures the greater possibility that the homestay tourism would be on the community's terms and developed at phases and characters endorsed by the surrounding community. Leveraging their wider own network of contacts by introducing *kampung's* products, related cultural services, including other form of village lifestyles that are new to tourists has further advanced the development and progress of the sector within the overall

tourism industry particularly in Sarawak. Hence, the ability of the principal to target their market and to come up with a flexible fee structure is another critical component similar to Brooker et al., (2011).

## CONCLUSION, LIMITATION AND FUTURE RESEARCH

This paper has enhanced our understanding regarding the role of innovation within the Dayak homestay programme and to the extent it influences the performance of their homestay programme in Sarawak. This study has revealed a series of innovation characteristics, namely: product, participant and principal applied by these entrepreneurs in search of promoting the homestay programme. Continuous observation and application of these characteristics will likely enhance the success of the Dayak Homestay programme. On the other hand, the study draws only on the homestay programme organized by the Dayak communities, with limited number of participants led to the limitation of the study. Hence, the outcomes of the study cannot be generalized. Future studies should use a bigger representation of the sector, while considering a longitudinal approach.

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# TOURISM CARRYING CAPACITY ASSESSMENT FOR PERHENTIAN ISLAND.

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## Abstarct

This paper presents a part of a funded research which aims to improve a recently developed environmental accounting framework through incorporating Tourism Carrying Capacity (TCC) assessment as a means of depreciation method for natural assets. This paper, however only highlights on the TCC components (physical-ecological, sociocultural and political-economic) within the study. The study is significant for capturing information which is important for policy maker to plan sustainable tourism practices. Primary data were collected from Perhentian Island which involved 256 domestic tourists, 407 international tourists and 285 local residents. Meanwhile, secondary data were taken from available reports of various local and state agencies.

Keywords: *Islands Tourism, Tourism Carrying Capacity, Tourism Impact, Tourism Management.*

## INTRODUCTION

Tourism Carrying Capacity (abbreviated as TCC onwards) is a notion that assesses and determines tourism site's capability to accommodate tourists' interactions within its physical-ecological, socio-cultural and political-economic components. These three dimensional assessments involved its natural environment, host community and visitors to the site. In a way, it focuses on the relationship between tourism and the local society/culture, the effects on local production systems and the economy of the island, quality of life along with the demand and impacts on resources such as water and energy, the management waste and etc. (Coccosis, Mexa, Collovini, Parpairis, & Konstandoglu, 2001). Simply put, the main idea is to find thresholds or limits that should not be crossed over to ensure the sustainability of the site.

As a result, various methods, parameters and interpretations of TCC assessment have been put forward and many more have been applied to tourism sites all over the world. For example, (Cifuentes, 1992) offers mathematical equations to calculate physical carrying capacity (PCC), Efficient Carrying Capacity (ECC) and Real Carrying Capacity (RCC). While Paziienza (2004) employs multidimensional model to compute TCC, Castellani, Sala, and Pitea (2007) on the other hand evaluate tourism site's sustainability by means of the Driver-Pressure-State-Impact-Responses (DPSIR) model. Other than introducing alternative methods for TCC assessments, there are also clarification on indicators to be used and those who propose additional parameters to be studied within TCC. Coccosis and Mexa (2004) emphasized that TCC should be conceptualized from policy analysis perspective requires a multidimensional approach inclusive of environmental, social political and economic aspects for measuring and implementing TCC. Indicators for carrying capacity assessment is clustered in four thematic set of parameters (spatial, infrastructure, natural resources, socio-economic & cultural) by Scoullos (2004), elements that effecting TCC. This study presents

TCC parameters for Perhentian Island as suggested by (Scoullos, 2004) and (Coccosis & Mexa, 2004; Mexa, 2004).

### **METHODOLOGY**

Data collections were conducted at the islands at a separate period by observing Off-peak and Peak seasons. Sampling were include 6 days of off-peak and 4 days of peak period at two separate dates; 27<sup>th</sup> – 30<sup>th</sup> May 2013 and 25<sup>th</sup> – 30<sup>th</sup> August 2013. Two researchers and ten field assistants were involved in data collection.

#### **Tourists**

Questionnaires were distributed along several popular beaches at both islands in Perhentian Island. Field assistants were hired and trained to assist respondents in answering open ended questions in regards to their expenditure on the island. The questionnaires were prepared in Malay Language and English. Part A consist of background data whereas; Part B in regards to nature of visiting. Part C involved questions on spending according to 5 types of expenditure. Finally, Part D, are concern with satisfaction and perceptions of tourists on tourism activities and facility provided on the island.

#### **Local community**

The questionnaire was prepared in Malay Language and distributed by research assistants to local residents within the vicinity of Kuala Besut and Perhentian Island. They were chosen as samples due to direct exposure from tourism activities. The questionnaires are adapted form survey questionnaire by Scoullos (2004), consisting three sections; section A: General Information about respondent, section B: benefits of tourism to the environment, and section C: Contributions of tourism industry to the island. Likert's Scale of five is used to indicate respondent opinions for questions in section B and section C with scale one as "strongly do not agree" and five being "strongly agree". A pilot study was conducted prior the actual survey to verified the validity of the questionnaire used ( $\alpha= 0.796$ ; N of items 36). The result of the survey was analysed using SPSS Version 21.0.

#### **Secondary data**

The following are reports and agencies involves in secondary data gathering:

- a. Kuala Besut Municipal Council
- b. Solid waste disposal contractor
- c. Garis Panduan Perancangan, Pembangunan Fizikal Pulau-Pulau dan Taman Laut, Jabatan Perancangan Bandar dan Desa Semenanjung Malaysia (2012)
- d. Rancangan Tempatan Besut 2008-2020 (Majlis Daerah Besut, 2009b)
- e. Rancangan Kawasan Khas Kuala Besut 2008-2015 (Majlis Daerah Besut, 2009a)
- f. Rancangan Struktur Terengganu - 2020 (Kerajaan Negeri Terengganu, 2006)
- g. Kajian Pelan Pembangunan Pulau-Pulau Semenanjung Malaysia (Jabatan Perancangan Bandar dan Desa Semenanjung Malaysia, 1996)

## FINDINGS

### Physical-ecological dimension

Even though there are several other parameters proposed by Scoullos (2004), this paper only illustrates those which are available. Therefore, this paper only highlights on two parameters which are Spatial and Infrastructure and technology (please refer to Table 1). For spatial parameters, only four items could be assessed for Perhentian Island. Overall, the parameter's assessment indicates that there are still prospect for development of new resorts or chalets provided that it fell under 'the environmental-friendly resorts'. Moreover, even though there are conditions in which undersupply of beds during the month of May, June and August or overbooked, other months indicates oversupplies. Therefore, it is best if the marketing tourism strategy for Perhentian Island involved all year round promotions. Other than that, the current beach capacity is beyond the comfort range that were specified in previous studies (as mentioned in Table 1). Overall, the physical-ecological component indicates a manageable condition.

**Table 1:** Physical-ecological dimension for Carrying Capacity Assessment

Parameters	Item	Current Capacity	Optimum/Standard Capacity
Spatial	Tourists per Ha	3731 tourists/Ha	±2921 beds at one time Demand > Supply during months of May, June and August
	Bed per Ha	17 beds/Ha @ 7 beds/acre	Coastlines – not specified Hills – 5 rooms/acre ( <i>Garis Panduan Pembangunan Fizikal Pulau-Pulau Taman Laut</i> , 2012)
	Total Land Area (Ha)	1392.1 Ha	-
	Tourist per meter of coastline front	Long Beach: 16.8 – 905m <sup>2</sup> Teluk Pauh: 34.4 – 1860m <sup>2</sup>	<b>10m<sup>2</sup></b> (WTO 1988, in Rajan, Varghese, & Pradeepkumar, 2013) <b>6.3 - 25m<sup>2</sup></b> (De Ruyck, Soares, & McLachlan, 1997) <b>13.5 - 111.7m<sup>2</sup></b> (da Silva, 2002) <b>5 - 10m<sup>2</sup></b> (Zacarias, Williams, & Newton, 2011)
Infrastructure and technology	Length of road per passenger and per car	No roads on the island	Not applicable
	Percentage of hotel services by biological sewage treatment plant.	Most of local accommodation operators using traditional septic tank.	Complaints from tourists in regard to sewage systems where there are supposed to be a central sewage system for the whole island to reduce negative impact on the ecology of the island.

Existing capacity of solid waste collection and disposable systems (in Kg)	1,462 tons (2013). <i>Estimation uses the straight line of</i> $Y = 1.5867X + 49.939$ ; $R^2 = 0.8662$ . (M. Rafee & Owee, 2007)	Within capacity - through interview with local contractor that manages solid waste disposal on the island. All solid waste were disposed at Kuala Besut Landfill and not on the island
Communication networks	Broadband and mobile phone services for certain service provider only in certain areas. Stable landline.	Complaints from tourists due available services for certain mobile phone and broadband service provider.
Number of boats	230 boats (Approx.) with 4 operational jetty	Within capacity according to Kuala Besut District Council authorities and no complaints from tourists regarding boat services.

Social carrying capacity examines the hosts-tourists relationship along with tolerance of local community towards other tourism activities on the island. In this paper, it is assessed from two perspectives namely the local residents and tourists in regards to positive and negative social impact (host community) and tourists' experience, satisfaction and island's crowdedness.

Table 2, indicates favourable results where the positive social impact is within the high impact scale while, negative social impact has a lower mean score which signify moderate negative social impact. Quite an optimistic results were also projected from the perspective of tourists, where it indicates great experience and satisfactory tourism services. However, for crowdedness parameter, tourists perceived that both infrastructures and visitors were moderately congesting the island with infrastructure having the lower mean score.

Socio-cultural dimension (parameters as outlined by Coccosis and Mexa)

**Table 2:** Social-cultural Parameters for Carrying Capacity Assessment

	<b>Parameters</b>	<b>Items</b>	<b>Indicator (based on mean score of samples)</b>
Host community	Positive Social Impact		
	1.00 – 2.33: Low impact		High Impact
	2.33 – 3.67: Moderate impact		(Mean 4.19)
	3.67 – 5.00: High impact		
	Negative Social Impact		
	1.00 – 2.33: Low impact		Moderate Impact
	2.33 – 3.67: Moderate impact		(Mean 2.56)
	3.67 – 5.00: High impact		
Tourists	Experience (trip worthiness)		
	1.00 – 2.33: Not coming back		Definitely coming back
	2.33 – 3.67: Might be coming back		(Mean 4.00)
	3.67 – 5.00: Definitely coming back		
	Services Satisfaction		
	1.00 – 2.33: Unsatisfied		Satisfied
	2.33 – 3.67: Satisfied		(Mean 3.36)
	3.67 – 5.00: Very satisfied		
	Crowdedness	Visitors	Crowded
	1.00 – 2.33: Not crowded		(Mean 3.03)
2.33 – 3.67: Crowded	Infrastructure	Crowded	
3.67 – 5.00 Overcrowded		(Mean 2.63)	

Political-economics (parameters as outlined by Coccosis and Mexa, 2004 & Scoullou, 2004)

This component mostly reveals the economics consequences of tourism activities. The estimation of tourism receipts (refer to Table 3) and other financial information were calculated through spending behaviour analysis which utilizes the Chi-squared Automatic Interaction Detection (CHAID) procedures using data gathered based on tourists expenditure occurred on the island. The output yield from this procedure is a decision tree model that distinguishes variables that could be used to predict tourist spending behaviour. There are several stages involved in analysing the data; (1) determining spending range; (2) generating decision tree model for spender and non-spender category; and (3) generating decision tree model for spender category according to spending range determined earlier. All three stages were conducted for each tourism product divisions (accommodation, food & beverages, transportation, recreational & entertainment and retail). Estimation for parameter no.3 were computed by dividing total tourism receipts with number of tourists for 2013 which were

140131. Benchmarking for this component were not performed due to none-existence of studies employing the same methods of estimation.

**Table 3:** Political-economics Parameters for Carrying Capacity Assessment

<b>Political-economics parameters</b>	
<b>Parameters</b>	<b>Current Capacity</b>
1 Tourism receipts	RM33,119,524.8 – RM109,009,524.4
2 Ratio of tourisms to permanent inhabitants in peak periods throughout the year	1 local :110 tourists (2013 data)
3 Average daily expenditure per capita in situ (for tourists)	RM236.35 – RM777.91(per tourist)
4 Distributions of tourists in expenditure “classes	(i) Accommodations (daily): <RM120 – 79.6%; RM120-240 – 15% & >RM240 – 5.4% (ii) Food & beverages (daily): <RM91 – 82.8%; RM91-180 – 13.7% & >RM180 – 3.5% (iii) Transportations (per trip): <RM500 – 81%; RM501-1000 – 15.4% & >RM1000 – 3.6% (iv) Recreation (daily): RM0 – 18.4%; RM1- 55 – 65.1%; RM56-110 – 14.5% & >RM110 – 2% (v) Retail (per trip): RM0 – 43.2%; RM1-145 – 37%; RM145-290 – 15.7% & >RM290 – 4.1%
5 Distribution of tourists in group of countries of origin	Asia (excl. Malaysia) – 6.0% Europe – 53.8% Malaysia – 35.8% Other continents – 4.4%
6 Length of stay	4.21 nights ( <i>2.27 for local and 5.11 for international tourists</i> )

### Conclusions

The study indicates that TCC in Pulau Perhentian can be considered as manageable, but policy makers have to be cautious about the increasing number of visitors to the Islands. Even though, the increasing number of visitors is a good sign for economy, but it also may cause more damages to the social and the environment. This would led to a decline for the tourism industries in a long run. Some initiatives should be included to ensure sustainability of the islands such as (1) to build better infrastructures that may increase sustainability such as better sewage systems; (2) to spread number of visitors all year round; (3) thorough physical-ecological carrying capacity assessment to be conducted in the future and has to be documented properly as reference; and (4) advocating enforcement in regards to Marine Park regulations to sustain TCC components of the islands. It is hoped that the findings of the study were able to assist authorities concerned in regards to tourism planning and development towards the path of sustainability



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# THE CHOICES OF CORPORATE DIVERSIFICATION OF HOTEL FIRMS

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## Abstract

The unstable environment of hotel industry driven by the fluctuation of tourism demand has motivated this study to look into the best diversification strategy for firm performance betterment. 42 hotel firms are investigated across 4 Asian economies, including China, Hong Kong, Malaysia and Singapore, from year 2001 to 2012. Our results suggest that unrelated industrial diversification is the only alternative to improve hotel firm performance. Also, the effect of unrelated industrial diversification on firm performance is significantly and positively moderated in the circumstance of a crisis period. Unrelated international diversification instead has a significant negative effect towards firm performance. Summarizing from the results obtained, this study is able to conclude the best choice of diversification strategy for hotel firms.

Keywords: diversification; performance; crisis; tourism; hotel; Asian

JEL Classifications: G3, L1, L8

## INTRODUCTION

The strategies of industrial and international diversification are favored in majority of the corporation. Industrial diversification strategy is especially popular in Asian hotel firms, including China, Hong Kong, Malaysia and Singapore, of which our sample of this study shows that all of the hotel firms in these economies diversify their businesses to the other industries. More than 50 percent of the firms expand their businesses to the other economies. The statistics show that hotel firms have high tendency to adopt diversification strategy, especially in industrial diversification. The most possible reason of this scenario is that the hotel industry players attempt to exploit the premium of diversification from the perspective of risk minimization, and it is believed that the premium of diversification could outweigh the cost of diversification in the industry. It may be due to the highly unstable environment of the hotel industry, of which the performance of the hotel industry is likely to be driven by the fluctuation of tourism demand. In fact, tourism demand is highly volatile, as it is susceptible to a wide range of factors such as relative price, tourists' income, exchange rate, as well as the unexpected external crises such as natural disasters, terrorism/war, disease outbreaks and economic/financial downturn. The fluctuation of tourism demand enhances the risk of the hotel firms in sustaining its' firm performance, driving the environment of the industry to be highly unstable relative to the other industries such as manufacturing, technology and plantation. Due to the unstable environment, it is able to justify why diversification strategy is popular in the hotel industry. It leads to the worthiness of research on diversification strategy in the context of hotel industry.

This study hence investigates the relationship between firm performance and related/unrelated diversification, from both perspectives of industrial and international diversification. The present study focuses on hotel industry-specific sample in Asia, including China, Hong Kong, Malaysia and Singapore. To the best of our knowledge, this study is the

first to investigate both industrial and international diversification in the context of hotel industry, given the effects of industrial and international diversification could be mutually influenced (Fauver et al., 2004; Bausch and Krist. 2007) . Even, by specifically focusing on hotel industry, this study is able to make use of the correlation of hotel businesses with tourism demand when defining related industrial diversification of the hotel firms. We categorize the diversified segments related to tourism activities, i.e. restaurant, travel agency and airline industries under related industrial diversification. It is significant to take this into account because the performance of these tourism-related industrial segments could be driven by the fluctuation of tourism demand simultaneously. Even, the cost of establishing market synergy between industry-related divisions is relatively less, of which transferring the core capabilities between tourism-related diversified segments is more efficient and easier, for the tourism-related businesses could be mutually supported. It is said that related diversification could have greater benefits from the economy of scale. However, the performance of tourism-related industrial segments could be suffered from declining simultaneously once a crisis strikes the tourism industry. Therefore, considering the tourism related industries when defining related industrial diversification of the hotel firms would enhance the body of the existing literature on whether hotel firms should diversify its businesses into tourism related or unrelated industrial segments for better firm performance. The results of this study should be different from the findings of Park and Jang (2013; 2012) which focus on the sample of restaurant industry, for Park and Jang (2013; 2012) only consider food-related industries when defining related industrial diversification, without considering the tourism-based environment surrounding restaurant industry.

Even, this study is the first to measure related and unrelated international diversification in the context of hospitality research. Related international diversification refers to the diversification of the hotel businesses to the other geographic markets nearby to the focal country. In this study, related international diversification is defined as the expansion of the businesses to the economies within the same geographical region of the focal country. For instance, a Malaysian hotel firm diversifies its businesses to the Singapore market which is still in the region of Asia. In this case, the diversification is referred to related international diversification. Categorization of related and unrelated international diversification is important as unrelated international diversification requires higher cost of adaptation for there would be a great variation between the culture, climate as well as the market regulation from the focal market. The efficiency of resource allocation in the internal capital market and internal labor market may be lower with respect to unrelated international diversification. However, for hotel industry which is susceptible to a wide range of crisis such as disease outbreaks, war/terrorism, economic downturn and natural disasters, unrelated international diversification may show greater advantage as the negative effect of a crisis usually would be spread to the nearby countries faster than countries farther away from the focal country. Therefore, this study takes the initiative to examine the effects of related and unrelated international diversification on firm performance in the context of hotel industry, even particularly in the crisis period.

The study makes several contributions to the existing literature. First, this study emphasizes on the relationship between related/unrelated industrial, as well as international diversification and firm performance of the Asian hotel industry. Both aspects of diversification are tested simultaneously in this study, given Fauver et al. (2004) document that the effects of industrial and international diversification could hardly be tested separately as its' effects are mutually supported. We find that unrelated industrial diversification has significant positive effect towards firm performance, in the context of hotel industry. In

contrast, related industrial diversification has significant negative effect towards firm performance. The results demonstrate that hotel firms should diversify into non-tourism related industry segments, in order to minimize the risks attributed to the fluctuation of tourism demand. The effect of related international diversification is found not statistically significant; unrelated international diversification is found significantly and negatively related to firm performance. Furthermore, we find that only the effect of unrelated industrial diversification is significantly and positively moderated during a crisis period. It implies that adopting unrelated industrial diversification is an alternative to sustain the firm performance during a crisis period. Even, it is found that diversification in both perspectives, i.e. unrelated industrial diversification and related international diversification could have greater positive impact towards firm performance during a crisis period.

## **LITERATURE REVIEW**

### **Industrial Diversification and International Diversification**

From theoretical points of view, internationalization theory promotes diversification by arguing that diversified firms can organize the activities internally between each division in order to develop and exploit firm-specific advantages in knowledge and products for better firm performance. Khanna and Palepu (1999) document that international diversification enables the firms to be more efficient in allocating resources in the internal capital market. Adopting greater international diversification could even improve a firm's intangible assets, so that to create an important value for the firm (Dunning and Rugman, e1985). Also, the risk and cost of international diversification could be minimized by intelligently internalizing/transferring the value of foreign assets to the firm of the home country (Caves, 1971). In contrast, Davis et al. (1992) document the disadvantages of adopting international diversification upon the difficulties of establishing market synergies between each businesses division. Even, international diversification exposes the firms with a wider range of uncertainties either from the perspectives of the regulations in various markets, the cultural diversity in organizations as well as diverse natural environments (Buckley and Strange, 2011). It causes high internal transaction costs for information and coordination.

With respect to industrial diversification, Rumelt (1974; 1982) documents that the benefits of internalization are only limited to related-industry diversification, of which the core capabilities (e.g. product line knowledge, skills and experience) can only be transferred efficiently to the correlated diversified segments. Even, firms diversifying into related industries require lesser costs; instead, firms diversifying into unrelated industries require a substantial cost to adapt to the new and the unfamiliar business environment. Comparatively, it is said that related industrial diversification has greater benefits from the perspective of economies of scope and scale. In opposite, the internal market efficiency hypothesis (Lewellen, 1971; Scherer, 1980) argues that, due to the heterogeneity of investment options, the firms' resource could only be efficiently allocated to the unrelated diversified segments, rather than related diversified segments. Unrelated industrial diversification also enables the firms to enjoy the low cost of accessing to the other external funds in the firms' portfolio of diversification (Meyer et al., 1992). As unrelated industrial diversification promotes cheaper cost of capital and optimal investment, Hill and Snell (1988) demonstrate that the benefits of adopting unrelated industrial diversification are greater than related industrial diversification strategy.

However, empirical findings on related/unrelated industrial diversification somehow contradict to the theoretical point of view. Lubatkin and Rogers (1989), Palepu (1985) and

Helfat and Eisenhardt (2004) show that related industrial diversification outperforms unrelated industrial diversification. However, Bass et al. (1977), Chatterjee (1986) and Ravenscraft (1983) find no significant evidences showing that related industrial diversification outperforms unrelated industrial diversification. It demonstrates that neither empirical evidences support the theoretical point of view upon the advantages of unrelated industrial diversification. With respect to risk premium, there are inconsistent findings for related and unrelated diversification from the empirical point of view. On the one hand, Amit and Livnat (1988) demonstrate that unrelated industrial diversification contains lower risk. On the other hand, Bettis and Hall (1982) and Montgomery and Singh (1984) find the opposite that unrelated diversification drives the firms to higher risk exposure. Lubatkin and O'Neill (1987), however, find that related industrial diversification has lower risk compared to unrelated industrial diversification.

Bodnar et al. (1999) provide an insight that the research on corporate diversification should take into account of both dimensions of diversification, i.e. industrial and international diversification, so that to avoid bias results on the effect of a single dimension of diversification towards a firm. Consistently, Hitt et al. (1997) also provide empirical evidences showing that industrial diversification may influence the effect of international diversification on firm value. Hence, the present literature review would only focus on the findings of the previous studies which emphasize on both dimensions of corporate diversification. However, the literature demonstrates inconsistent findings on the cost and premium of industrial and international diversification. Bodnar et al. (1999) demonstrate that international diversification is positively related to firm value, while industrial diversification is negatively related to firm value, using a sample of the U.S. firms. In contrast, Denis et al. (2002) and Fauver et al. (2004) find that both of the industrial and international diversifications are negatively related to the value of the U.S firms.

In general, the inconsistency of the effect of diversification on firm performance may be due to the negligence of the market structure (Christensen and Montgomery, 1981). Park and Jang (2012) document that the lack of focus on the industry-specific effect towards the diversification strategies, as well as the negligence of the relatedness of the diversified segments with the firms' core businesses would constitute to a biased result obtained. Bettis and Hall (1982) also provide the notion that industry-specific factor could significantly influence the diversification strategies of a firm, from the perspective of risk reduction. By specifically focusing on restaurant industry, Park and Jang (2012) is able to account for the nature of the restaurant industry, as well as the nature of the other diversified segment which is highly correlated to the restaurant industry, for instance the food-production segment. It is argued that they are correlated in terms of high volume, low profits and low growth in sales. Nonetheless, to-date, limited studies are found focusing on the issue of related and unrelated diversification in the context of hotel industry.

## **METHODOLOGY**

This study focuses on hotel firms based on Nace Rev. 2 code (hotel and similar accommodation). We focus on the hotel firms from four economies in Asia, namely China, Hong Kong, Malaysia and Singapore. The selected economies have the top tourism receipts in the year 2011. A total of 42 hotel firms is selected in our sample. The financial data for each firm is obtained from Datastream, a division of Thomson Reuter database, across the year 2001-2011. The data on firms' industrial and international diversification is obtained from Osiris, a Bureau van Dijk database. The data is re-arranged in panel, resulting in a total of 462 observations in the analysis sample. Firm fixed effect is applied in the panel

regression, to avoid bias results obtained due to the endogeneity problem which has been addressed in firm-level finance studies.

Model 1 is the baseline model to show the relationship between firm performance and the control variables.

$$ROA_{it} = \alpha_{it} + \beta_1 FirmSize_{it} + \beta_2 Leverage_{it} + \beta_3 TobinQ_{it} + \beta_4 Dividend_{it} + \beta_5 DCrisis_{it} + \{Firm\_Effect\} + \varepsilon_{it} \quad (1)$$

where  $ROA_{it}$  is the return of assets, a proxy for firm performance.  $FirmSize$  is the proxy for firm size, measured by the natural logarithm of total assets,  $Leverage$  is the proxy for firm leverage, is measured by the ratio of total debt to total capital, Tobin Q is the proxy for firm growth opportunity, is measured by the ratio of the sum of the equity market value and liabilities book value to the sum of equity book value and liabilities book value.  $DCrisis$  is the dummy variable for three crisis events, i.e. 2001 U.S. 911 attacks, 2003 SARS outbreaks, 2008 Financial downturn and 2009 H1N1 disease outbreaks, takes the value of 1 for the year of crisis, and 0 otherwise. The signs for  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  are expected to be positive, while the sign for  $\beta_5$  is expected to be negative.

$$ROA_{it} = \alpha_{it} + \beta_1 FirmSize_{it} + \beta_2 Leverage_{it} + \beta_3 TobinQ_{it} + \beta_4 Dividend_{it} + \beta_5 DCrisis_{it} + \beta_6 relatedIndustrialDiversification_{it} + \beta_7 UnrelatedIndustrialDiversification_{it} + \beta_8 relatedInternationalDiversification_{it} + \beta_9 UnrelatedInternationalDiversification_{it} + \{Firm\_Effect\} + \varepsilon_{it} \quad (2)$$

Model 2 is further constructed by incorporating the diversification variables in the equation, so that to examine the relationship between industrial/international diversification and firm performance. Following Bodnar et al. (1999), this study incorporates two aspects of diversification variables, i.e. industrial and international diversification variables in a model. Instead of using dummy variables to proxy for industrial and international diversification, we also measure the degree of diversification using entropy measurement, invented by Boltzmann (1896), and later is introduced by Jacquemin and Berry (1979) in the diversification research. The formula for entropy measure is shown in the following.

$$Entropy\ Diversification\ Index = \sum_{i=1}^N P_i \times \ln(1/P_i)$$

where  $P$  is the ratio of the firm's total sales within  $i$  th industry/geographical segment, and  $N$  is the number of the diversified segments. The higher value of the entropy diversification index, the greater the degree of diversification. The use of entropy measure enables us to further calculate the degree of diversification from two perspectives of industrial and international diversification, i.e. related and unrelated diversification. As the performance of hotel industry is closely related to tourism demand, we consider all of the diversified tourism related industrial segments (e.g. restaurants, travel agency, airlines or recreational service provider) of a firm as the related industrial diversification, otherwise, it is considered as unrelated industrial diversification.

Note that entropy diversification index takes into account the sizes of each diversified segments (represented by the amount of sales) when measuring the degree of diversification. It means that the measure does not only consider the number of diversification segments, but it also takes into account of the concentration of each division. Hence, we need not set any limit to filter out the diversified segments which have small amount of sales, for these segments could also contribute to reveal the information about the degree of diversification.

As shown in model 3, interaction terms are incorporated, through the multiplication of the diversification variable and the crisis dummy variable. If the interaction terms are found statistically significant, it implies that the effect of diversification on firm performance is significantly moderated during a crisis period. In other words, it may give us the notion that the performance of the firms adopting a diversification strategy has significant difference with the performance of the firms without adopting the diversification strategy, during a crisis period.

$$ROA_{it} = \alpha_{it} + \beta_1 FirmSize_{it} + \beta_2 Leverage_{it} + \beta_3 TobinQ_{it} + \beta_4 Dividend_{it} + \beta_5 DCrisis_{it} + \beta_6 relatedIndustrialDiversification_{it} + \beta_7 UnrelatedIndustrialDiversification_{it} + \beta_8 relatedInternationalDiversification_{it} + \beta_9 UnrelatedInternationalDiversification_{it} + \{DiversificationVariables * DCrisis\} + \{Firm\_Effect\} + \varepsilon_{it} \quad (3)$$

## RESULTS

**Table 1.0** Descriptive Statistics

Variable	Obs	Mea n	Media n	Std. Dev.	Min	Max
Return on assets	496	4.07	3.42	7.27	- 25.67	102.8 9
Total assets (million)	500	1.47	0.39	3.79	0.02	36.80
Leverage	500	0.60	0.34	1.58	- 14.43	19.48
Tobin Q	482	1.37	1.02	1.27	0.18	10.85
Dividend	495	0.01	0.00	0.02	0.00	0.17
Dummy of crisis	504	0.33	0.00	0.47	0.00	1.00
Dummy of Industrial Diversification	486	0.97	1.00	0.18	0.00	1.00
Dummy of International Diversification	413	0.54	1.00	0.50	0.00	1.00
Related Industrial Diversification	486	0.30	0.27	0.27	0.00	1.20
Unrelated Industrial Diversification	462	0.50	0.39	0.35	0.00	1.60
Related International Diversification	408	0.24	0.03	0.31	0.00	1.29
Unrelated International Diversification	413.0	0.06	0.00	0.14	0.00	0.66

Table 1.0 presents the descriptive statistics of the variables used in the regression models. The mean of the return on assets has positive value, indicating that the overall firm performance of Asian hotel industry is growing. This may be due to the growing of Asian tourism demand in the recent years. Consistently, Tobin Q has a positive mean value of 1.36. It demonstrates that Asian hotel firms has positive prospect for future growth opportunity. Leverage has a positive mean value of 0.62, with the minimum and maximum value are about -14 and 19 respectively. The entropy index of unrelated industrial diversification shows the highest mean value, followed by related industrial diversification, related international diversification and unrelated international diversification. It gives us the notion that hotel firms tend to diversify its' businesses across various industrial segments, rather than expand its' businesses to the other geographical markets.

Table 2.0 presents the regression results on the relationship between firm performance and related/unrelated industrial and international diversification. The signs of the control variables in the baseline results are consistent with our expectation, of which firm size,

leverage, Tobin Q and dividend per share are found positively related to firm performance. However, only the effects of firm size and Tobin Q are found statistically significant. Dummy variable of crisis is shown to have significant negative impact towards firm performance. This is consistent with the findings of Chen et al. (2005) and Chen et al. (2007), indicating that hotel firm performance is significantly influenced by the decline of tourism demand caused by the crisis. Further analysis shows that dummy variable for industrial diversification has significant positive influence towards firm performance. In contrast, international diversification does not show significant influence towards hotel firm performance. The results give us the notion that industrial diversification is more influential towards firm performance betterment, rather than international diversification, in the context of hotel industry. This may imply that the premium of international diversification is offset by its cost. This could be logic in practice, for the nature of hotel businesses which are service-based, of which aligning the businesses to fulfill local culture, lifestyle, taboos, etc. is relatively vital, and hence, requires higher cost of adaptation for international diversification (Buckley and Strange, 2011). The high cost of the diversification cancel off the premium of diversification, and it explains why international diversification does not have significant positive influence towards firm performance.

Further analysis reveals that the positive effect of industrial diversification is predominantly driven by unrelated industrial diversification. The result demonstrates that greater degree of unrelated industrial diversification is better for hotel firm performance. In opposite, related industrial diversification is shown to have a significant negative impact towards firm performance. The findings are different from Bae et al. (2011) showing that unrelated industrial diversification reduces firm value while related industrial diversification does not significantly influence firm value. This may be due to the different sample used in their study with ours, and it shows the importance of conducting in-depth research on diversification in specific industry as the individual industry-specific factors could have different implications towards the effect of diversification. In the context of hotel/tourism industry which is filled with a wide range of uncertainties, the premium of risk minimization from unrelated industrial diversification is more significant to influence firm performance.

With respect to international diversification, diversifying the business to the geographical markets father away from the focal country, or the geographical markets which are not located within the same geographical region with the focal country, reduces firm performance significantly. Nevertheless, the effect of related international diversification is found not statistical significant. Again, this consolidates the previous justification that the cost of adaptation should not be neglected when making decision on adopting either related or unrelated international diversification strategies, in the context of hotel industry. Even, expanding the business to the other geographical market could hardly control upon the quality of the services provided, and it increases the risk of getting bad word-of-mouth from the customers towards the reputation of the company brand. Hence, the results provide the empirical evidences that the strategy of international diversification is not a good choice for hotel firms.

Table 3.0 shows the effects of the interaction terms between crisis and diversification variables. It reveals that the effect of unrelated industrial diversification on firm performance is positively and significantly moderated during a crisis period. The result ascertains that unrelated industrial diversification is able to minimize the loss of the firms during the crisis period, for the earnings of the other unrelated industry segments may compensate the loss from the hotel business in the crisis period. Related and unrelated international



diversifications are not significantly moderated during a crisis period. Note that the crisis events used in this study are globally affected crisis, where the negative impact of the crisis is widespread to the global. In this case, it is logic from our results showing that related and unrelated international diversifications are not effective to cope with the crisis. Even, the globalization of tourism market is so complex that small scale crisis is one part of the world can have significant impact on the other parts of the world (Maditinos and Vassiliadis, 2008). It implies that the strategy of unrelated international diversification is not effective to cope with crisis.

**Table 2.0** Regression Results on the Relationship between Firm Performance and Diversification

	<i>Baseline</i>	<i>Diversification</i>	
Firm Size	0.0111* (0.0528)	0.0076 (0.2265)	0.0054 (0.3859)
Leverage	0.0002 (0.8160)	-0.0005 (0.6953)	-0.0011 (0.6380)
Tobin Q	0.0281** (0.0472)	0.0361** (0.0336)	0.0123*** (0.0017)
Dividend	0.3620 (0.2022)	0.4646* (0.0749)	0.5632** (0.0245)
DCrisis	-0.0208*** (0.0001)	-0.0195*** (0.0002)	-0.0214*** (0.0001)
Dummy <sub>Industrial Diversification</sub>		0.0575* (0.0584)	
Dummy <sub>International Diversification</sub>		0.0200 (0.4313)	
Related Industrial Diversification			-0.0522** (0.0478)
Unrelated Industrial Diversification			0.0240** (0.0147)
Related International Diversification			0.0115 (0.5627)
Unrelated International Diversification			-0.0650*** (0.0054)
Constant	-0.1393* (0.0695)	-0.1674* (0.0832)	-0.0389 (0.6529)
Firm effect	Yes	Yes	Yes
Observations	478	404	378
Adjusted R2	0.1494	0.1652	0.1008

**Table 3.0** Moderating Effect of Crisis on the Relationship between Firm Performance and Diversification

	(1)	(2)
Firm Size	0.0057 (0.3535)	0.0059 (0.3563)
Leverage	-0.0012 (0.6402)	-0.0012 (0.6233)
Tobin Q	0.0118*** (0.0025)	0.0123*** (0.0015)
Dividend	0.5444** (0.0272)	0.5503** (0.0279)
DCrisis	-0.0335*** (0.0007)	-0.0200*** (0.0092)
Related Industrial Diversification	-0.0487* (0.0834)	-0.0529** (0.0422)
Unrelated Industrial Diversification	0.0157 (0.1251)	0.0251** (0.0107)
Related International Diversification	0.0102 (0.6103)	0.0158 (0.4220)
Unrelated International Diversification	-0.0626** (0.0122)	-0.0762*** (0.0009)
DCrisis* Related Industrial Diversification	-0.0127 (0.5371)	
DCrisis* Unrelated Industrial Diversification	0.0294*** (0.0074)	
DCrisis* Related International Diversification		-0.0164 (0.3447)
DCrisis* Unrelated International Diversification		0.0534 (0.1116)
Constant	-0.038 (0.6538)	-0.0458 (0.6087)
Firm effect	Yes	Yes
Observations	378	378
Adjusted R2	0.1057	0.0998

## CONCLUSIONS AND IMPLICATIONS

What is the best choice of diversification strategy for hotel firms? This study takes the initiative to investigate both aspects of diversification, i.e. industrial and international diversification on firm performance. By focusing on hotel-specific sample, this study is able to categorize the diversified industry segments of each firm into tourism-related and tourism-unrelated industrial diversification. The business division in different geographical markets locating in the Asian and non-Asian regions are categorized under related and unrelated international diversification respectively. To the best of our knowledge, none of the studies provide empirical evidences on whether related and unrelated industrial/international diversification is able to enhance hotel firm performance. The research gap has hindered to conclude upon the best diversification strategy for hotel firm performance betterment. Hotel firms from four economies in Asia are selected in this study, including China, Hong Kong, Malaysia and Singapore, across the years from 2001 to 2011. Besides of using dummy

variables to represent for the diversification, this study takes into account of the degree of diversification by using the measure of entropy index of diversification,

Our findings imply that hotel industry players should focus on reducing the risk of the unstable environment embedded in the industry when making decision on diversification. It indicates that the highly unstable environment of the hotel industry is a critical factor towards firm performance betterment. Hotel industry players should make an attempt to exploit the premium of diversification upon risk minimization, rather than focusing on the diversification strategy for establishing the market synergy within the business environment. Herein, the findings provide a reference to the hotel firms to diversify its business into the other industrial segments, and the nature of the diversified industrial segment should not correlate to the tourism-related activities. Also, hotel industry players are not encouraged to expand the business to the other geographical markets, especially to the markets father away from the region. It is said that higher cost of adaptation is needed in order to adapt the business to the cultural and organization diversity, rules and regulation, climate change, etc. of the other countries.

Hotel industry is susceptible to a wide range of crisis, such as natural disasters, disease outbreaks, war/terrorism and economic/financial downturn. Although the crisis does not occur frequently, and the impact of the crisis may be transitory, it could magnify the weaknesses of the firms upon the ability to protect the shareholders' value from declining significantly during a crisis period. Whether diversification could mitigate the negative impact of crisis striking hotel industry is worthy of research. This study is able to fill the research gap by investigating whether the relationship between various types of diversification and firm performance could be moderated during the crisis period. Our findings show consistency that the premium of unrelated industrial diversification to a hotel firm performance could further aid to sustain firm performance from declining when a crisis is striking the tourism industry. Hence, our findings suggest that unrelated industrial diversification is the main key to sustain hotel firm performance in long run, even to confide the investors to input more investment capital into the hotel industry for future growth opportunities without having to worry about the crash of the tourism market during a crisis period.

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# THE IMPACT OF COFFEE SHOP'S DESIGN FACTORS ON USERS: GEORGETOWN – PENANG AS A CASE STUDY

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## Abstract

Nowadays, coffee shops have become the society logo. The Georgetown core zone area contains various coffee shops design styles. The zone is viewed as one of the most significant heritage areas in the universe, it draws different types of tourists. Users of these coffee shops vary in term of nationality, age, and determinations. This study will focus on sample coffee shops that carrying the identity of place elements. The impacts of the interior design principles of coffee shops on users' comfortability depend on materials and design principles. There are many studies about coffee shops in general, but few focused on the relation between the design and users' psychological and physiological needs, especially in Georgetown. The effective design principles on the users' behaviour in Georgetown is not clear and comprehensive to understand the meaning of the user-second skin relationship. The aim of the study is finding the effective factors that used in the interior design of coffee shops to achieve uses' second skin needs, which depend on physiological and psychological needs. The study is a mixed mode using questionnaire, behavioral mapping and observation. The answers of the questionnaire were compared with a graphical analysis for the selected coffee shops, to discover the suitable interior design principles. The answers demonstrate that factors of a posture, repetition, and other important factors has a substantial result on the users' behavior. This attracts users as tourists to discover the history of heritage area by communicating users with the traditional environment.

Keywords: *coffee shop design, interior design, users psychic skin, users convertibility, Georgetown*

## INTRODUCTION

The relation between users and interior space created by the physical environment of space, which is considered one of the main effective factors on the users' behaviour and comfortability. To achieve the ideal situation of adopting user with space is to create the right surroundings and suitable physical environment to emerge the attraction and belonging to space. The attraction's interior space is the fundamental in forming the attraction's identity of place (Bonn, Joseph- Mathews, DAI, Hayes, & Cave, 2007). The identity of place is a result of the representation of the physical element of design. Each space carries a special characteristic, leading to distinguish between spaces according to the physical element and surroundings. This increased the value of place. Quality of place value is going to cross the quality of life while attached to place aesthetics and interior design exemplified in urban and architectural preservation to achieve users' needs (Chang & Teo, 2009). Design of places should respond to the users' needs and the importance of neighborhood to create a better place, a third space as described by (Oldenburg, 1999). Interior space is varied, and the user's needs are different according to these places. The identity of interior space follows the two types of factors, function and identity of place which is linked with the third space theory and interior space follow the identity of that place which consist of architectural style, social impacts and function of the place. There are different variables that affect the interior design

like building type, place of interior space, and interior design purposes (Hassan H. A., 2007). Interior design environment depends on the idea and the context, which is attracting users to involve with a space. Users' psychological, physiological, and emotional needs should be matched with the physical environment. The variety of user types is depend on the space types and functions. George Town core zone is an increasingly diverse and mix culture place, and heritage site, which made it a target point to the large number and variety types of visitors. The variety of user types faced the harmonic composition of this place. The place amenities provide wide area of leisure, relaxing, and enjoyment with this place and streets (Khoo, 2007). The coffee shop is one of the necessary urban elements to attract visitors and spending time with the new physical environment for tourist (local and international), and to feel the originality of space for visitors. Coffee shops in George town are located in different locations, the most famous coffee shops are located in spacious buildings. Shophouse building is a unique and heritage architecture style. Shapes have been creatively adapted to new uses like hotel, restaurant, coffee shop and more, which representing the history of place by physical environment, architectural and functional identity (Biere & Smith, 2006) (Chang & Teo, 2009). Physical environment of space in heritage area has to respond to very complex and various psychological and physiological needs of the mix-users. Developing of the relationship between users and place lead to improve the feeling of space and make users attached to space and involving the interplay of emotion, knowledge, beliefs, and behaviours of users with places (Proshansky, Fabian, & Kaminoof, 1983).

This study is a trail for finding the most affective, physical element of interior design on the users' adoption with a space. Coffee shop in the George Town heritage area is a case study to exam the effective factors of physical environment on users' adaptation with a space. To reach the destination of this study, the element of physical environment, and the psychological and physiological users' needs were reviewed according to the related previous studies.

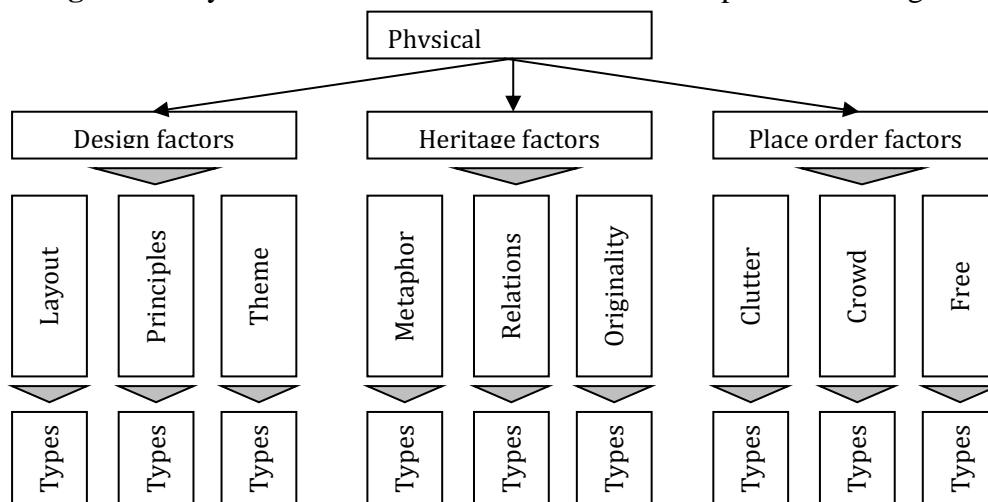
## **LITERATURES**

### **Physical Environment Elements**

Due to the availability of studies on physical environment and users' needs in interior space within heritage area, this review will focus on physical, environmental studies that is related to the effective element of the physical environment. Physical environment of interior space within heritage surroundings. The attraction process for users depends on the value of physical environment, it must respond to the psychological, physiological, and emotional needs of users. The results of this process is to engage the visitors to be user of space. The element of physical environment plays an important role in attraction circle. The relation between design, image and users' perception is a fundamental to create the individual attractions, which create the final impression about the place. Generating mental images on the users' mind depends on strategy of designing and managing the physical environment with architecture style, interior design, especially in a heritage, environment (Bonn, Joseph-Mathews, DAI, Hayes, & Cave, 2007). Caan (2011) identified atmospherics as the effort element of the physical environment that affects users' behavior. Interior design creates space for specific function, users, and purposes. The element of design affects the users as one impression, but each has a specific factor for specific reaction (Caan, 2011). Layout of design contains different variables like colour theme, flexibility, and architecture elements and forms, and properties of the physical environment. All these elements were mentioned as the effective physical environment element in interior design atmosphere by variety researchers. Some of these elements have been tested in detail to identify the affected element on users' behaviour. Clutter of place leads to negative impression and adaptation with the place, it

linked to the physical factors like the layout and design which others factors directly related to this factor (Smith & Burns, 1996) (Ching & Binggeli, 2012). The physiological needs of users in interior space is very necessary in the consideration of the interior design process. Ambiance of interior design deals with the physical environment and affect the sensory process of the users. Physiological needs are interacting with design factors (Caan, 2011). Using principles of interior design in general and coffee shop design in particular is affecting the users' behavior and attraction of playing on physiological needs with the physical environment. Scale, repetition, proportion, and shape transformation principles are considered from divine principles in architecture and interior design, were used to generate creative design (Ching & Binggeli, 2012). Layout of space is an effective element in the interior design process, especially in the heritage area (Bonn, Joseph- Mathews, DAI, Hayes, & Cave, 2007). Coffee shops in heritage place have a unique spiritual, because of the creative adaptation to space. Most of coffee shops within the heritage area were as a result of newly use and redesign of space, it adapted perfectly to fill the layout with new form and original soul (Waxman, 2006). The language of design should address the users' needs by presenting the originality of the place, even the place has been changed or redesigned. The place should have an especial theme in order to establish a individuality frame for the design (Perolini, 2011). From previous, physical factors can identified as the following figure, ( figure 1).

**Figure 1:** Physical environment factors of coffee shop within heritage area.



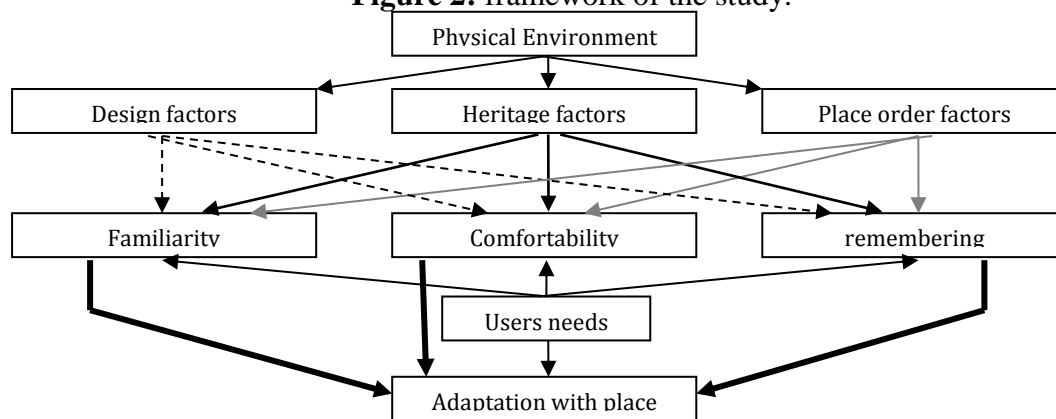
#### Users' Skins Elements

All types of designs, buildings, and interior spaces, in general and furniture, space facilities, and creating ambiance in details are existing to serve human activities and comfortability. Achieving user's needs must be the first priority and purpose in the designing process and managing interior spaces, because its' tangent with users directly. Thus, reflected in the space efficiency and the performance of others. A priority for the user to be a place comfortable and enjoyable, functional and efficient. A successful interior design is a design that affects the value of remembering, which create a positive mental image in the user's mind (Hassan H. A., 2007). Researchers identified the relation between users' feelings and outside environment, which create the impacts of culture and physical environment. These factors affect the user by playing on the value of achieving physiological, psychological and emotional needs of users (Caan, 2011). The psychological effects on users' behaviors and performances considered the serious factor, which is linked to the physical factors and the physical environment value. It affects users' second skin function, which is created by the effects of surrounding in addition to the physiological and psychological needs. All these



affect, resist and sense by the second skin, which encapsulate users bodily interior and works as a second skin function to understand, realize, and evaluate the interior space (Hancock, 2012). Scholars like Waxman (2006) noted the relationships between users and place. Feeling of "belonging to space" reflects the value of attracting and adaptation with places. Understanding the strategy of creating spaces provides an important framework for understanding the way users form relationships with places (Waxman, 2006). Stokes and Shumaker (1982) defined the connotation of place attachment, depending on surrounding environment, physical amenities, individual and household characteristics, and social factors as important components (Stokols & Shumaker, 1982). Users should feel familiar about the place, especially in coffee shop interior space to adapt to places. As the previous studies, adaptation, familiarity, comfortability. The framework for this paper as following figure (figure 2).

**Figure 2:** framework of the study.



### George Town's coffee shops

Today, George Town is the commercial, heritage, and tourism center for Penang state and northern region of Malaysia. George town contains different types of building and amenities, which became a target point for millions of local and international tourists. (Khuo, 2007). The architecture style of George Town is a unique style, it formed from variety architecture elements and the impacts of mix-culture create the architectural framework for George Town. During the 19th Century, the Malayan bungalow emerges, which is a mixture of European and local characteristics. Timber posts and thatched roofs, the shophouses and temples built by the Chinese immigrants. The Indian temples built by the Indians. This mix of cultural influences has created an architecture that is unique in its eclecticism and adaptation to local climate and values. The building types in George Town are as follows: (Traditional Malay houses; The Malayan bungalows; Shophouses and townhouses; Mosques; Churches; Chinese temples; Hindu temples; Administrative buildings from the periods of Portuguese, Dutch and British; Commerce buildings; God owns; Water villages (clan jetty). (Penang, 2013).

Most of these buildings, especially the shophouses are adapted to new used like restaurant, coffee shop, gallery, museum, and workshop. Coffee shops in George town have variety styles and themes, Baba-Nyonya, Indian, traditional Malay, eastern and western styles (Khuo, 2007). The coffee shop style in affected by the surrounding styles in George Town, it is a mixture of European, Malay and Chinese style with adaptation to the tropical ambience. Coffee shops within shophouse are a unique functional and architectural type were built in rows of blocks and the design produced a very compact housing type. Walls are an important element in the design of the shopehouses, it has a flexibility term to adapt with the new used and function (Hassan & Yahaya, 2012). This special character of coffee shops and

shophouses in George Town provide a fundamental platform for heritage tourism. Visitors in Penang and George Town are varied. According to the last survey, 54.6% of the visitors were international visitors and 45.4% for domestic. 48.7% of the visitors were attracted for heritage site (Sustainable Tourism Research Cluster, 2014).

### PRACTICAL STUDY

This study is a trail for finding the impacts of physical environment on users' adaptation with coffee shops within a heritage shophouse building in George Town. Adopting on the literatures, questionnaire, behavioural mapping, and observation. The case study examined and compared with a graphical analysis for the selected coffee shop. The case study is a coffee shop located on Monterey Street (Western Oriental) (figure 3), which is part of the two story shophouse that was renovated in 2002. The coffee shop is attached to the hotel. It is designed to show the past experiences of life (Hassan & Yahaya, 2012). The interior design reflects the mix- culture of George Town, the relationship between inside and outside have high contact value, positions. The arrangement of furniture is in special order and variety, which reflects a free movement and flexibility. This coffee shop has an original theme, although it is a renovated building. Simplicity is a first impression of interior space but it has deep meanings.

**Figure 3:** Western Oriental shophouse.



Observation technique was used for three days in total 36 hours to discover a behavioral map of visitors. Questionnaire formed ( opened and closed end) adoption on variables that found from previous studies (figure 1), to find the effective physical environment factors on users' needs. Responded samples are 103 samples collected during three days. The population of the study is from different nations and ages, but most of them international and not originally from George Town. Scheme for coffee shop were printed to mention the movement of visitors to selecting and discovering the interior space.

### RESULTS AND ANALYSIS

Results from questionnaire for 103 samples shows the variety of visitors and purposes of visiting the George Town site during the night and day life, as shown in Table 1.

**Table 1:** general information results from the questionnaire.

Gender		type		Purposes		
Male	Female	International	Domestic	Business	Tourist	Scientific

				George town	Penang	Malaysia	worker	Business man	Leisure	Heritage	heritage	Social & culture
Coffee shop	62	41	38.6	19	24.1	18.3	8	10	30.2	28.5	12.3	11
total	103		38.6%	61.4%			18%		58.7%		23.3%	

Respondents of the questionnaires compared with observation and coffee shop graphical analysis indicated the effectiveness of physical factors, which is design factors (design theme, layout with position of sitting factors, using repetition and hierarchy, and scale as principles of interior design). For the heritage factors, the effective factors are as follows; relation between outside and inside 25.2%; metaphor 40.5% and originality 34.3%. The effective element of space order factors is 76% for normal clutter that normally accepted by users, 64.7% for more crowd and 89.2% for free movement in space. Each factor affects the users' needs in especial area. Users feel familiarity more with space, with free movement area and flexible furniture. The design factors affect the comfortability of users and reduce the feeling of place strangeness. The architectural element that was used especially, if metaphor form historical element, printed the image of space in the users' mental image store. The physical factor is the important factors to the adaptation of the users with interior design and as a results attracting users to the heritage place like George Town.

## CONCLUSIONS

George Town heritage area contained a variety of amenities, building styles, and mix- design styles, which attracted a variety of uses for leisure, education, and business purposes. Shophouse is the necessary element for George Town typology, which is designed to reflect the mixture of culture and the harmony of architecture styles in one zone. Redesign, new design and new used for this type of building should follow a clear strategy to reflect the right meanings. Coffee shops in George town are the target point for the visitors in all their types, not all coffee shops in general, but all coffee shops that carried and achieved the users' physiological and emotional needs, which are considered as encapsulate for user's bodily interior and work as a second skin function.

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# **TOURISM INFORMATION DISCOVERY IN A COLLABORATIVE TOURIST GENERATED CONTENT BY USING NATURAL LANGUAGE PROCESSING AND ONTOLOGY.**

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## **Abstract**

Social media applications such as Facebook, Flickr and YouTube have become a new repository for tourists to share interesting information about their journey to the rest of the world. Another tourist who shares the same interest may engage in the journey by providing feedbacks such as feeling and also suggestions, and these activities gradually will enrich the initial information. These collaborative activities generate dynamic tourist generated content that may contain fruitful information to the tourism industry. Information such as events, locations and activities could be identified and structured in order to manage these contents and improve the visibility of that information to the information retrieval. Thus, the interest of this research is to provide an in-depth textual analysis to support tourism information discovery by using natural language processing and ontologies. The natural language processing is used to identify important concepts within the text descriptions by using two tools which are GATE and APP. Three ontologies were applied, which are Malaysian Tourism Ontology, Dbpedia and Geonames. The Malaysian Tourism Ontology is a specific domain ontology that was created based on information from the authorized Tourism Malaysia website. The ontology will replace the absence of a tourism domain expert which is needed for verifying important concepts related to the tourism in Malaysia. These concepts were represented semantically by using Semantic Web language standard. The evaluation shows the use of Natural Language Processing and Ontology has improved the information discovery over that based only on keywords.

*Keywords: Tourism Social Media, Tourism Information Discovery, Natural Language Processing, Ontology*

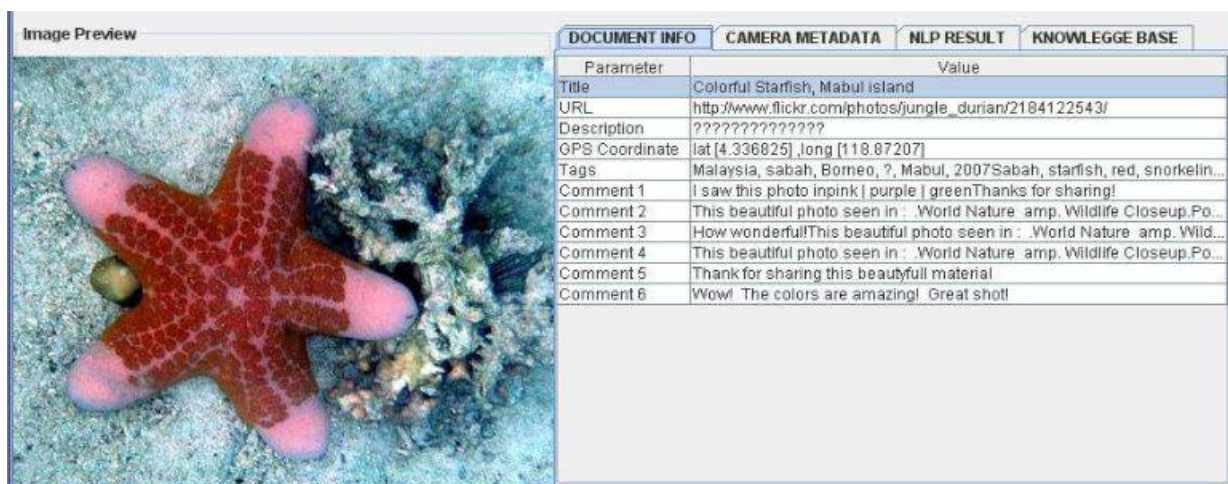
## **INTRODUCTION AND RESEARCH BACKGROUND**

Social Media applications have been widely used by tourists to engage with online communities by sharing their interesting travel experiences. The rapid growth of tourist generated contents are supported by collaborative activities such as posting travel photos on Flickr, videos on Youtube and status update on Facebook. These applications have become important sources of information, especially for potential tourists as real and authentic information were shared and it has increased the transparency between traveler and holiday destination. A study published by the European Travel Commission Digital Portal shows that tourist generated contents have been playing an important role in tourists behavior by influencing their travel planning based on the other people experiences and plans (European Travel Commission Digital Portal (2013)).

Tourism social media research could be characterized into three categories which are exploratory research of social media sites and content, examine the relationship between social media and a supply-oriented for tourism firm marketing perspective (Munar. et al (2013)). This paper will be focusing on the first category, tourism generated content analysis to support information discovery. Shared information were reviewed by another tourists

which share the same interest and they may engage with the journey by providing feedbacks such as feeling and also suggestions, and these activities gradually will enrich the initial information. These collaborative activities generate dynamic tourist generated contents that we believe contain fruitful information to the other potential tourist and tourism industry. Information such as events, locations and activities could be identified and structured in order to manage these contents and improve the visibility of that information to the information retrieval.

The biggest challenge in extracting such information lies within the content itself. The freedom and flexibility in the content creation may affect the quality and reliability of the information shared. Figure 1 shows an example of an entry in Flickr which is extracted into our dataset. Flickr is a photo sharing application that we used to generate our dataset. In general, when users uploaded an image into Flickr, they could provide some initial information to describe the photo such as title, caption/description and tags. Other users may contribute by adding more tags or comments which will gradually increase the length of the entry. Since there are no standard guidelines, the information may contain informal conversation, multi languages, abbreviations and icons. Thus, the crucial point of this research is to provide an in-depth textual analysis methodology to support tourism information discovery within the user generated content.



**Figure 1** : An example of a dataset selected for an analysis

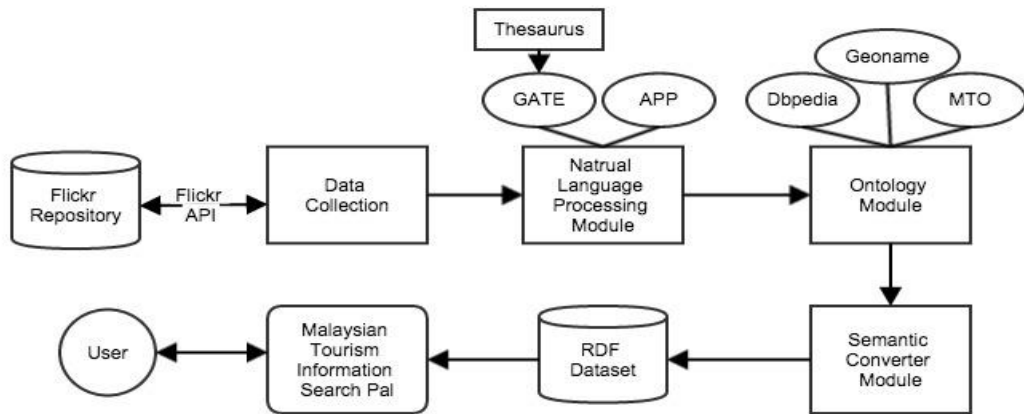
*Note: The description was written in Japanese language therefore it was automatically changed into “??”*

### The Delopment of Tourism Information Discovery

Figure 2 presents the general framework of the Tourism Information Discovery Tool. In general, the processes are divided into three main modules which are Natural Language Processing, Ontologies and Semantic Information Converter. The dataset was collected from Flickr by using Flickr API and it was retrieved based on *Tourism* and *Malaysia* tags. The Dataset contains 500 images with its textual descriptions.



**Figure 2: Malaysian Tourism Information Discovery Framework**



### Natural Language Processing Module

The main objective of the natural language processing (NLP) module is to identify and extract important information related to tourism domain. We have used two NLP tools which are Apple Pie Parser (APP) (Skine (2008)) and General Framework for Text Engineering (GATE) (Cunningham et al. (2002)). APP tool is a lightweight language processing parser which is very useful to analyse user generated content, which is usually poorly structured and incomplete. GATE is a useful to identify name entity such as a person name, location, address time and organization. We have enrich GATE knowledge base by adding tourism thesaurus. The tourism thesaurus contains four lists which are attraction, activity, environment and transportation and each list contains the most common concepts to describe information related to tourism domain identified by the World Tourism Organization (WTO(2005)). Figure 3 shows some example of all of the concepts identified by the NLP module. If the concepts exist in the tourism thesaurus, it will be marked with its classification such as “beach is an environment” and “snorkeling is an activity”.

DOCUMENT INFO	CAMERA METADATA	NLP RESULT	KNOWLEDGE BASE
Concepts Found	Classification	Frequency	Root Word
starfish		2	starfish
borneo		1	borneo
mabul		1	mabul
2007.0 sabah		1	Invalid term
red		1	red
pink		1	pink
sharing		2	share
wildlife closeup		3	Invalid term
1.0		3	Invalid term
wonderful		1	wonder
beautyfull material		1	Invalid term
colors		1	color
beach	Environment	1	beach
nature	Activity	1	nature
snorkeling	Activity	1	snorkel
2007	Date	1	Invalid term
sabah	State	1	sabah
malaysia	Location	1	malaysia
island	Environment	1	island

**Figure 3: Output Example from Natural Language Processing Module**

## Ontology Module

The main objective of Ontology Module is to enrich information by linking isolated concepts that share the same conceptual reference. This activity is usually done by domain experts. Three ontologies were used as a substitute for the domain experts, which are Malaysian Tourism Ontology, DBpedia (Auer et. Al (2007)) and Geoname (Geoname (2015) & Auer et. Al (2007)). Malaysian Tourism Ontology (MTO) is a specific domain ontology that was developed as a replacement for an expert for tourism Malaysia domain. The ontology contains two main roots which are Attractions and Events. Instances for each root are gathered from the Ministry of Malaysia Tourism Portal(2015) and Virtual Malaysia Portal (2015). Dbpedia is a spatial geographical ontology which provides information about locations. DBpedia is an open knowledge ontology which is extracted from Wikipedia(2015). We used DBpedia to expand our information by mapping identified concepts with DBpedia entry. Figure 4 shows the output from Ontology Module.

DOCUMENT INFO	CAMERA METADATA	NLP RESULT	KNOWLEGGE BASE
Concepts	TourOntology	DBpedia	Geonames
borneo	no data	dbpedia:Borneo	no data
mabul	tour:Mabul_island	dbpedia:Mabul	geo:7536133
beach	tour:beach	no data	no data
sabah	no data	dbpedia:Sabah	no data
malaysia	no data	dbpedia:Malaysia	geo:1733045
island	tour:island	no data	no data

Figure 4: Output Example from Ontology Module

## Semantic Converter Module

The main objective in Semantic Converter Module is to translate extracted information from tourist generated content into RDF language, which is one of the standard language for the Semantic Web technology. This RDF language will allow the extracted information to be described and stored semantically which will be useful for information retrieval.

### 3.0 Analysis and Discussion

The evaluation is done by comparing search output from conventional tag based search and our information discovery tool. We have used to cases of documents which are well tagged documents and less well tagged documents. Two type of querying were considered which are tag based search and semantic based search. Table 1 shows the precision and recall values for the queries.

Table 1: Information Retrieval Output

Case	Precision		Recall	
	Tags	Information Discovery Tool	Tags	Information Discovery Tool
1	0.63	0.81	0.40	0.7
2	0.32	0.44	0.20	0.42
Average	0.48	0.63	0.3	0.56



The precision and recall values from the information discovery tool is higher compared to tag based search for both cases. Lack of textual description in Case 2 has resulted a lower value for our tool and tag. The natural language processing and ontology have played an important part in information discovery, thus improving the information searching. The use of knowledge bases has increased the capabilities of our tool to extend identified information with information within the ontologies. For example, the natural language processing has identified the word “*mabul*” and its was linked with MTO under *mabul\_island* entry and also DBpedia under *mabul* entry. User could used any terms such as “mabul”, “mabul island” or “pulau mabul” to query and our tool could identify this query terms by searching under extended knowledge provided by the ontologies. However, conventional tag based search only depends on tag information, thus the information retrieval will fail if the query terms can not be found in the tag list.

## CONCLUSION

In conclusion, tourist generated contents do contain fruitful information to the tourism industry and in this research, we have shown a methodology to extract such information which could be used to improve information searching especially in tourism domain. Nonetheless, this research is only focusing on factual information discovery. Actually there are other interesting information were left out such as information related to emotion and feeling that tourist and other people could engage from or with the journey that were described in the tourism generated content.

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# ESTIMATING INTERNATIONAL TOURISM DEMAND FOR MALAYSIA

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## ABSTRACT

For over a decade tourism industry remains as one of the major contributing sectors of economic growth in Malaysia. Multiculture, abundance of the natural beauty, warm weather and political stability continue to encourage foreign tourists to visit Malaysia. This study attempts to investigate the long-run and short-run relationships between the number of tourist arrivals from Japan, South Korea, Taiwan, the UK, Germany and France to Malaysia and three selected economic variables. This study utilizes monthly time series data for the period from January 1999 to December 2012 and employs cointegration technique based on Vector Error Correction (VEC) model. The determinants that are used in this study are exchange rate, relative price and relative price of the substitute destination country. This study also looks into the impact of the euro crisis and it is found to have a significant effect on the number of tourist arrivals to Malaysia. Generally, exchange rate, relative price and relative price of the substitute destination country also have significant effect on the number of tourist arrivals. The findings provide useful contribution to the construction of tourism policy as to ensure the industry continues to be one of the most important pillars in the economic development in Malaysia.

Keywords: *Tourism demand, Unit Root, Vector Autoregressive, Error Correction Model.*

## INTRODUCTION

Tourism is one of the major contributing sectors for Malaysia's economic growth and has become the second largest foreign exchange earner after manufacturing in Malaysia. Moreover, Malaysia is going to be a higher income country by year 2020 as the government has implemented a government transformation program (GTP) and the economic growth in Malaysia is expected to be good in the year 2014 as well, hence more investors will come to Malaysia. According to the Ministry of Tourism Malaysia, the number of tourist arrivals to Malaysia have increased by 10.02 million from 15.70 million in 2004 to 25.72 million in 2013 and the positive growth placed Malaysia as the 11<sup>th</sup> most visited country of the *United Nations World Tourism Organization* (UNWTO) in 2013 with the highest number of tourist arrivals. The growth in the number of international tourist arrivals also had raised the tourism receipts from RM 29.7 billion in 2005 to 65.4 billion in 2013, with an annual growth rate of about 5.80% averagely and this can be shown in Table 1.

Studies have found that tourism crises from various perspectives such as natural disasters, outbreak diseases, financial crises and terrorism are significantly affecting international tourism demand (Norlida & Redzuan, 2008; Salman, 2010 and Asemota & Bala, 2012). The findings show that the tourism crises negatively affecting the number of tourist arrivals to the destination country. In recent years, the study in tourism-crisis research is very crucial as the number of crisis events has been increased dramatically when comparing to ten years ago (Ooi *et al.*, 2013). The investigation of the impacts of the tourism crises may influence the

policy makers in legislating and also may help them to make wise decision from the past crises events.

**Table 1:** Number of Tourist Arrivals and Tourism Receipts to Malaysia

Year	TA(million)	Receipts(billion)	Year	TA(million)	Receipts(billion)
2004	15.70	29.7	2009	23.65	53.4
2005	16.43	32.0	2010	24.58	56.5
2006	17.55	36.3	2011	24.71	58.3
2007	20.97	46.1	2012	25.03	60.6
2008	22.05	49.6	2013	25.72	65.4

Source : Tourism Malaysia (2014)

Therefore, the main objective of the study is to investigate the long run relationship between the number of tourist arrivals and the selected economic variables such as relative price, substitute relative price of alternative destination country. The study also tends to examine the impact of the euro crisis on the tourism demand in Malaysia. The rest of the paper is organized as follows: comprehensive literature review on tourism demand is presented in Section 2 and model specification and data of the study are described in Section 3. The preliminary analysis and findings of the VAR model are discussed in Section 4 and Section 5 respectively. A thorough discussion is presented in Section 6. Finally, conclusion and policy implications are presented in Section 7.

## LITERATURE REVIEW

Given the growing importance of tourism industry in many countries, there have been a large number of literatures investigating the possible factors affecting the demand of tourism industry. Salman (2010) used cointegration analysis to estimate the long-run relationship of tourist arrivals to Sweden from the US, the UK, Germany, Denmark, Finland and Norway. The study considered the influence of income, price, exchange rate and consumer price index as well as the impact of Chernobyl nuclear accident and 1991 Gulf War on the number of tourist arrivals. While the economic factors have significant effects on the demand, the estimated model did not provide any significant evidence of the impact of the 1986 Chernobyl nuclear accident and the 1991 Gulf War on the international tourism demand.

Narayan (2002) and Katafono and Gounder (2004) have estimated the demand for tourism in Fiji. The latter study found that tourism demand is positively related with income of tourists from major trading partners and is surprisingly positively related to relative prices. While political coups in 1987 and 2000 are expectedly found to be major deterrent, major cyclones did not have significant effects to the tourism demand. Furthermore, a study by Asemota and Bala (2012) found that the Gulf War only showed a negative impact on the number of tourist arrivals from Germany to Japan.

Both Ouerfelli (2008) and Choyakh (2008) have investigated tourism demand in Tunisia by the European tourists. The results show that income of tourists in origin countries is the most significant factor in determining the number of night spent in Tunisian hotels. The studies found that relative price does not play important role in attracting tourists but the tourism demand is negatively affected by prices at competing destinations. Unlike Salman (2010), these studies showed that the tourism demand is vulnerable to the Gulf War 1991, in addition to terrorist attack in the town of Djerba in 2002, and the 1986 economic recession.

## DATA AND METHODOLOGY

The monthly data for the number of international tourist arrivals from Japan, South Korea, Taiwan, Germany, France and the UK are collected from the Ministry of Tourism Malaysia and the data covers the period from January 1999 to December 2012. The model for estimation of the tourism demand can be expressed in log-linear form as follows:

$$\log TA_{jt} = \alpha_0 + \alpha_1 \log EXR_{jt} + \alpha_2 \log RP_{jt} + \alpha_3 \log SRP_{jt} + \alpha_4 EC + \varepsilon_{jt}$$

where  $\alpha_0$  is a constant,  $TA_{jt}$  is the number of tourist arrivals from origin country  $j$  visiting Malaysia during the month  $t$ ,  $EXR_j$  is the exchange rate of Malaysian ringgit against currency of origin country  $j$ ,  $RP_j$  is the tourism price of Malaysia relative to the origin country  $j$ ,  $SRP_j$  is the tourism price of Thailand relative to the origin country  $j$ ,  $EC$  is the dummy variable for the euro crisis. The dummy variable,  $EC$  takes a value of 1 during the year of crisis, and is 0 otherwise.

Prior to estimating the long-run and short-run relationships stationarity of each data series is examined by using the Augmented Dickey-Fuller (ADF) unit root test. The existence of long-run relationship is determined by using Johansen and Juselius (1990) cointegration procedure based on a reparameterization of the Vector Autoregressive (VAR) model into Vector Error Correction (VEC) model. The number of cointegrating vectors is determined based on two Likelihood Ratio (LR) tests, namely the trace test and the maximum eigenvalue test.

## RESULTS

The results of the ADF unit root test generally show the null hypothesis of unit root is not rejected for all series at level indicating the series are non-stationary at level. Meanwhile, the results of the ADF test conducted at first difference show the null hypothesis of unit root is rejected implying that the series are stationary at first difference. Overall, the results show that all the variables are integrated of the same order one or can be treated as I(1) process.

Based on Final Prediction Error (FPE) criterion, the chosen lag length for the VAR model for Japan, South Korea and Germany is 3. Meanwhile, the lag length of 2 is chosen for the case of Taiwan and for the case of France and the UK, the optimal lag length is 1. Cointegration test for the case of Japan, Taiwan and Germany show that there is one cointegrating vector while for the case of France and the UK show two cointegrating vector. In the long-run, the estimated coefficient of exchange rate (EXR) is positive and statistically significant at 10% level for the number of tourist arrivals (TA) from Japan and France. Surprisingly, the estimated coefficients of the EXR for the number of tourist arrivals from South Korea, Taiwan, Germany and the UK are negative. However, the negative relationship is not significant even at 10% level except for the case of the UK whereby the estimated coefficient is statistically significant at 5% level.

The negative estimated coefficient for RP for all countries except for the case of Germany and France, suggest that as relative price level increases, the number of tourist arrivals decreases indicating that the number of tourist arrivals to Malaysia declines as the price in Malaysia increases faster than the increases in the price level at the origin country. The result is consistent with the economic theory. In addition, the estimated coefficient of the substitute relative price (SRP) has a positive sign and is statistically significant at 5% level indicating that the neighbouring country, Thailand is a competing destination country for the number of tourist arrivals from the six selected countries to Malaysia. The result implies that as price level in Thailand increases in larger magnitude than the price level at the origin country, this

would discourage tourists from these five countries to visit to Thailand. However, this scenario would encourage tourists to travel to other Asian countries.

$$\begin{aligned} \text{Japan} & : TA = 5.27 + 1.56 \text{ EXR}^* - 25.16 \text{ RP}^{**} + 21.47 \text{ SRP}^{**} \\ \text{South Korea} & : TA = -1.08 - 1.10 \text{ EXR} - 48.96 \text{ RP}^{**} + 53.66 \text{ SRP}^{**} \\ \text{Taiwan} & : TA = 13.13 - 1.30 \text{ EXR} - 10.43 \text{ RP}^{**} + 6.87 \text{ SRP}^{**} \\ \text{UK} & : TA = 13.34 - 1.84 \text{ EXR}^{**} - 6.23 \text{ RP} + 13.12 \text{ SRP}^{**} \\ \text{Germany} & : TA = 9.47 - 0.67 \text{ EXR} + 13.15 \text{ RP}^{**} + 1.98 \text{ SRP} \\ \text{France} & : TA = 7.22 + 0.55 \text{ EXR} + 3.17 \text{ RP} + 12.36 \text{ SRP}^{**} \end{aligned}$$

Table 2 shows the estimate of the vector error correction model for Japan, Taiwan, South Korea and Germany. Since the optimal lag length of the VAR model for France and the UK is 1, the short-term effect cannot be estimated for that countries. Model 2 takes into account the lag effect of the euro crisis (EC). The estimated coefficients of the error correction term (ECT) are negative and significant at 5% level for the case of Japan, Taiwan and Germany. The magnitude of the ECT that varies from 0.058 for South Korea to 0.477 for Germany indicate that following short term deviation (such as caused by the crisis), it takes between 17 months (for South Korea) to 2 months (for Germany) for the tourism demand to return to the stable state. The instantaneous effect of the euro crisis is found negative for the case of Japan, South Korea and Germany. The estimate for Model 2 also shows that the euro crisis exerts the expected lagging effect and generally, the euro crisis has a large effect at lag 9.

**Table 2** : Estimation of Vector Error Correction Model

Country	Japan		Taiwan		South Korea		Germany	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	-0.035	-0.028	-0.019	-0.026	0.055 **	0.043	0.023	0.029
EXR(-1)	0.175	-0.060	0.794	0.829	0.784	1.161	-0.974	-0.849
EXR(-2)	0.338	0.382			0.191	0.192	-0.484	-0.746
RP(-1)	12.685 **	12.294 **	4.401	4.087	7.107	6.790	-5.349	-6.751
RP(-2)	13.628 **	13.621 **			16.552	17.083 **	3.926	3.472
SRP(-1)	3.656	2.328	-0.964	-0.840	1.656	0.723	-0.683	0.743
SRP(-2)	-9.459 **	-10.249 **			-3.357	-3.644	-1.052	-0.574
ECT(-1)	-0.214 **	-0.232 **	-0.364 **	-0.366 **	-0.058	-0.053	-0.477 **	-0.536 **
EC	-0.001	0.038	0.078	0.011	-0.063	0.060	-0.095 *	-0.053
EC(-1)		-0.089		0.363		0.314		0.075
EC(-2)		0.121		-0.629 *		-0.391		0.065
EC(-3)		0.130		0.319		-0.150		-0.015
EC(-4)		-0.413		0.091		0.111		-0.268
EC(-5)		0.233		-0.014		0.048		0.074
EC(-6)		0.073		-0.030		0.039		-0.059
EC(-7)		0.006		0.217		0.338		0.254
EC(-8)		0.117		-0.018		-0.368		0.059
EC(-9)		-0.217		-0.777 **		-0.477		-0.229
EC(-10)		-0.001		0.547		0.125		0.070
EC(-11)		-0.149		-0.150		0.552		-0.137
EC(-12)		0.137		0.192		-0.270		0.057

Note: \*\* denoted 5% significant level

As expected, the estimated coefficients of exchange rate have a short-term positive impact on tourist arrivals from the selected foreign countries. The result indicates that a depreciation of the local currency, the Ringgit, will lead to the increase in the number of tourist arrivals from the selected foreign countries. Unlike the negative long-run impact on the number of tourist arrivals, the result suggests that relative price has positive short term impact on the selected foreign countries. As relative price level increases, the number of tourist arrivals from the selected foreign countries also increases. The result implies that the increase on price level of

goods and services do not deter the number of foreign tourist to Malaysia. In addition, the estimated coefficient of the substitute relative price has a negative short-term impact on the selected tourist arrivals indicating that the neighbouring country, Thailand behaves as a complementing destination of tourist arrivals to Malaysia.

## **CONCLUSION**

This study investigated the factors for tourism demand in Malaysia for the period from January 1999 to December 2012. The dependent variable used in the study is the number of tourist arrivals from six selected countries. The cointegration technique and error correction model are used to examine the long-run and short-run relationship between the exchange rate, relative price and substitute relative price on the tourist arrivals. The analysis also taken into account for the impact of the euro crisis. Generally, the results showed that not all the impact of the selected variables are consistent with the economic theory, either the short term or long term. As discussed earlier, contradiction to economic theory can be counter-balanced by the various attractions that Malaysia offers as international holiday destinations.

Information of the variables that influence the demand for international tourism is essential to policy makers in planning growth strategies for the tourism industry in Malaysia. Therefore, continuous efforts by the government and tourism authorities are recommended to improve the service quality at tourists spot area and offer an effective promotional strategy to encourage more foreign tourists to Malaysia. Moreover, policy makers and suppliers must closely monitor all tourism service providers such as hotels, restaurants, and transportation companies such as airport taxis and tourist buses to ensure that they do not charge 'unreasonable' prices for their services.

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# IDENTIFYING CROWDING PERCEPTION IN TUNKU ABDUL RAHMAN PARK USING PHOTOGRAPHIC ASSESSMENT TECHNIQUE

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## Abstract

Tourist density and over-crowding is seen as social problems in recreational areas. Visual methods such as photographic assessment technique provide a more realistic representation of crowding levels in an area. Hence, photographic assessment is used to determine tourists crowding perception in Tunku Abdul Rahman Park (TARP). A total of 406 respondents were asked to rate their perception on crowding based on five determinants mainly; crowding observation, preferred crowding, maximum acceptability, expected crowding and negative crowding effect on five different photographs. Descriptive analysis is used to analyse the tourist perception of crowding. Results indicate that tourists to TARP have observed a crowded situation during their visit (mean score= 4.05). This is slightly higher than the expected level of crowding (mean score= 3.91) and majority of the tourists prefer a lower crowding level (mean score= 3.72). The actual level of crowding encountered is higher than their maximum level of acceptability for crowding at the area (mean score= 3.86). The tourists also perceive a negative crowding effect (mean score= 3.91), which resulted to no intention to revisit the islands in the future. From the findings, it can be said that perception of crowding is measurable using the photographic method and it is useful tools in determining a certain use-level in tourist areas.

Keywords— Over-crowding, Crowding assessment, Crowding perception, Photographic assessment

## INTRODUCTION

The crowding perception has a fundamental importance in tourism industries. Definition of crowding perception in a normative concept says that crowding occurs when a certain user density is negative in a visitor's perspective (Vaske et al., 1986; Shelby et al., 1989; Manning 1999). In other words, it is a negative evaluation of certain density or number of encounters with other visitors in a recreational area (Shelby et al 1989). Perception of crowding happens when a visitor to a particular place perceives a situation as crowded (Shelby et al, 1989) and those perceptions are maximized when those individuals have no possibilities to reduce or substitute the stimuli creating a physical overload on their selves (Andereck and Becker, 1993). In other words, higher the crowding perception of the visitors, higher the negative effects on satisfaction and other perceived levels for the visitors (Neuts and Nijkamp, 2012). The determination of crowding perception has gained recent interest among researchers and has been widely studied since early ages. Early research on perception of crowding agreed that the perception is wholly made and influenced by the number of visitors encountered where negative effects are visible on recreational places (Lucas, 1964). However, long term and newer researches agree that this is not wholly true, and on the field of study it is much more complex and various activities such as user motivations, activities, social conditions have also influenced the perception of crowding (Stankey, 1971; Vaske et al., 2002).



Improved knowledge in the issue of crowding have guided new studies to take note of the crowding issue as critical output which may affect the other variables such as satisfaction. The problems of crowding have thus gained importance in recent studies where various methods and types of study have been used in determining crowding perception. Potential places which are affected by crowding are discussed and given importance to be chosen to test the study of crowding perception. One such important place is natural areas where visitors tend to visit for a more new type of tourism. Natural areas are subject to severe human impacts such as crowding, congestion, and environmental pollution (Heberlein, 1977; Sowman, 1987; Arnberger and Mann, 2008). These identified study areas have prompted many studies and thus, a considerable body of literature has emerged on normative evaluations applied to the field of nature parks and outdoor recreation management (Manning, 2007; Shelby and Heberlein, 1986; Vaske et al., 1986). However, small islands, also under the natural parks category have not been given much importance in recent studies. Studies have been scarce and limited for future researches to compare and discuss.

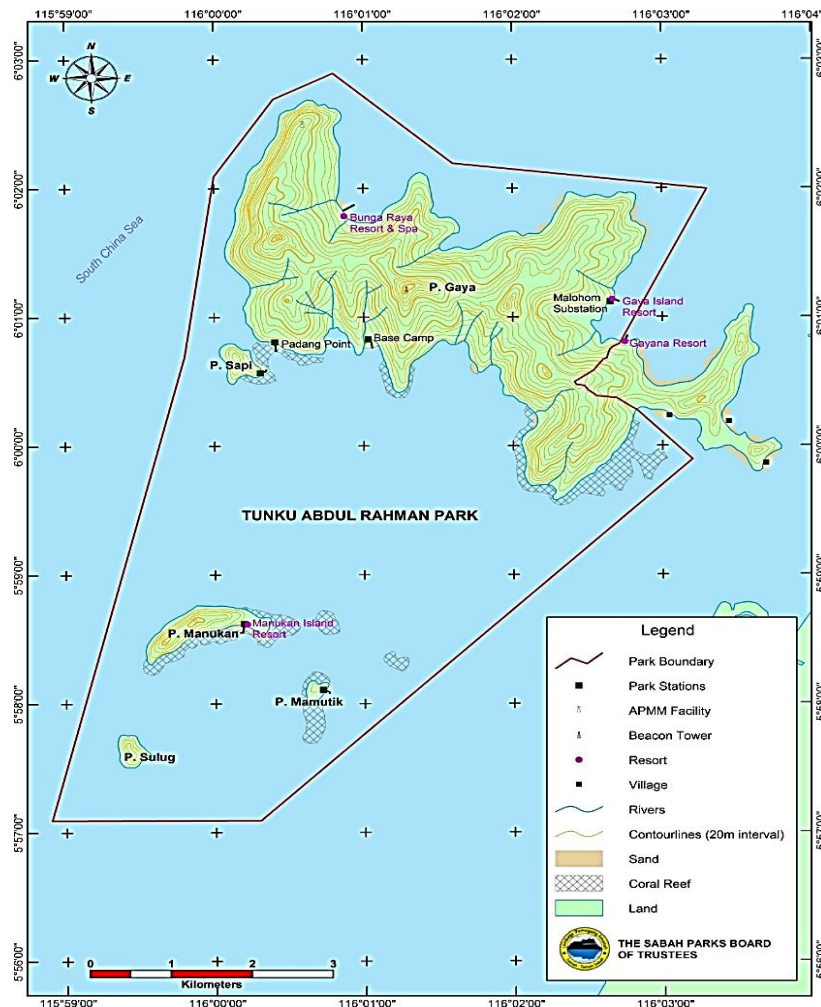
Existing researches have used the conventional method of quantitative study in their research. This type of study has been used mostly in crowding perception study mainly pioneered from the study of Shelby et al, 1989. Relevant amount of studies by particularly Arnberger and Mann, 2008; Shelby et al., 1989; Sowman, 1987; Vaske et al., 1986 and Heberlein, 1977 have all used the quantitative measures in their study which have pointed out crowding as an issue in tourist areas. Even though quantitative method is still in use and widely regarded as the pioneer method, recent studies have adapted a much more convenient way to determine the crowding perception which is the visual method. The idea have been mostly made famous through Manning et al. 1996 study where visual item methods were used in exchange for variables of scales in questionnaires. Several studies have been done in recent times using the visual methods and recognizable studies such as Hall and Roggenbuck, 2002; Kalish And Klaphake, 2007; and most recently Jurado et al, 2009) have shown that image based studies have its own benefits in determining crowding perception. Hence the purpose of this study is mainly to narrow the gap in studies using the quantitative method and the visual method.

The study will identify tourist perception on crowding in TARP and test the visual method as an alternative method in determining perception of crowding. TARP is a National Park located in Kota Kinabalu, Sabah. The study will focus in determining perception of crowding on the islands in the national park using the visual method. The site is chosen because of its recent influx of high number of visitors that increase of nearly 200 % for the year 2003-2013 which is a worrying increase for park managements (Sabah Park tourist arrival data, 2014). The arrivals of high number of tourists have raised awareness in protecting the natural park taking into account of fragile environmental places in the natural park. This study also tends to narrow the gap between conventional methods of determining crowding perception with the visual method. Increasing the number studies using visual method will provide enough comparison for future studies to determine which analysis suit their study better. This is because visual research methods have gained recognition and acceptable in evaluating the minimum social and environmental conditions tourists find acceptable in natural areas. The use of photographic assessment has seen to provide a more realistic representation of particular levels of activity over the conventional or narrative method used in latter studies (Hall and Roggenbuck, 2002; Jurado et al, 2009; Kalish And Klaphake, 2007; Manning, 1999). Hence, photographic method is used on to determining the crowding impact in small islands of TARP in this study.

## METHODOLOGY

TARP (Figure 1) is a state park located in Gaya Bay, 3 kilometers offshore from Kota Kinabalu ([www.sabahparks.org.my](http://www.sabahparks.org.my), 2013). Named after Malaysia's first Prime Minister, Tunku Abdul Rahman, it was gazetted in 1974 as Sabah's second national. The National Park is a cluster of islands comprising Pulau Gaya, Pulau Sapi, Pulau Manukan, Pulau Mamutik and Pulau Sulug. TARP comprises 50 km<sup>2</sup> with two-thirds of the area are sea, and the rest is surrounded by coral reefs and five islands (Aris et al., 2009; Praveena, 2011). The total tourist arrival to the park has increased by about 400% from year 1997 to 2004 (Aris et al., 2009; Praveena, 2011).

**Figure 1: Map of Tunku Abdul Rahman Park**



Source: The Board of Trustees of Sabah Park

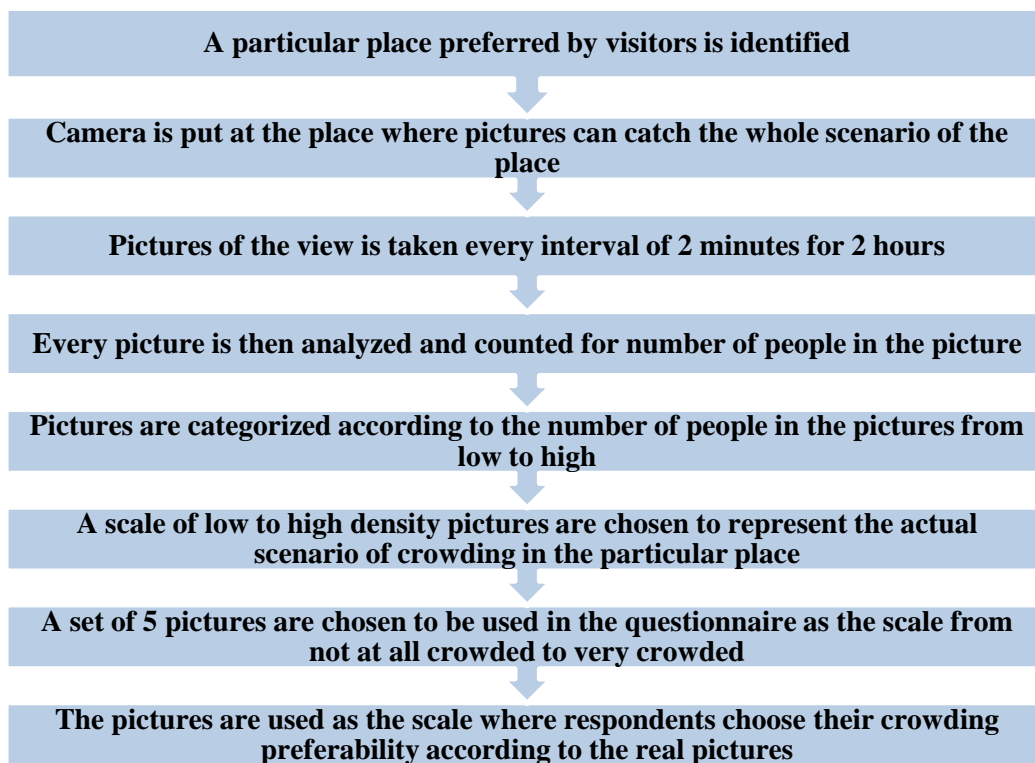
## Visual Assessment Technique

This study revolves around the visual assessment used to determine the crowding perception in TARP. In order to determine crowding perception in TARP, a quantitative survey using photographic technique was carried out in 2014. A total of 407 respondents took part in the study. The criteria of selection are that respondents were chosen conveniently, after they have visited any one of the islands in the territory on TARP. The respondents who have visited the islands must be of 18 years and above. The field survey is conducted by purposive sampling using questionnaires in Jesselton Point (main Jetty to TARP) to returning visitors from the islands. Respondents are approached courteously and the purpose of the survey was

explained to them, together with the affiliation of the enumerators. Each questionnaire took approximately 7 min to be completed.

In this study, five determinants mainly adopted from Jurado et al, 2009 were used to determine tourists perception on crowding in TARP, which are; crowding observation, preferred crowding, and maximum acceptability, expected crowding and negative crowding effect are used- Figure 2 summarizes the process of developing the assessment tools, while Figure 3 is the representative photograph illustrates a full range of crowding conditions. Each photograph represents with scale ranged from 1 (not at all crowded) to 5 (very crowded). The data was transferred to statistical data using the SPSS software. Descriptive analysis was used to get a mean score for overall perception of crowding. Each mean score from the five determinants are compared to get the real idea of the crowding perception in TARP.

**Figure 2:** Process of Developing Assessment Tools



**Figure 3: Survey Instrument**



## RESULT AND DISCUSSION

The findings indicate that tourists to TARP have observed a crowded (mean score; 4.05) situation during their visit. This is because of recent promotions and the influx of visitors in and out of country to visit TARP are a landmark tourist spot in Kota Kinabalu, Sabah. The observation of crowding is slightly higher than the expected level of crowding where tourists expect a moderately crowded environment (mean score; 3.89) and majority of them prefer a moderate crowding level (mean score; 3.72). High level of tourists can tend to disturb visitors on their visit and these Disturbing behavior leads to a higher crowding perception (Neuts and Nijkamp, 2012) which explains the high level of crowding perception in the study.

The actual level of crowding encountered is slightly higher than their maximum level of acceptability for crowding (mean score; 3.86). Visitors encounter a crowded environment when they expect a much more moderately crowded place. Even though visitors understand TARP as a much sought after tourist place, their expected level of crowding is less than what they actually experienced. According to the results, most tourists are seen not to return to the island in future because the negative crowding effect which means the 'level of crowding which could make visitors not to return to the islands' (mean score; 3.91) have been

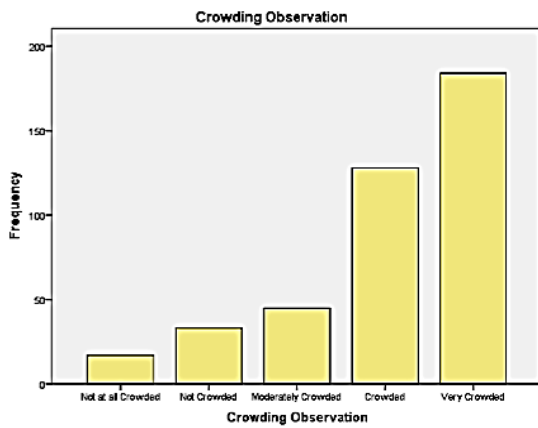
breached. This shows that the effect crowding have on determining revisit status of the visitors. Table below shows the statistical analysis results for each crowding criteria;

**Table 1: Mean Score for Crowding Perception**

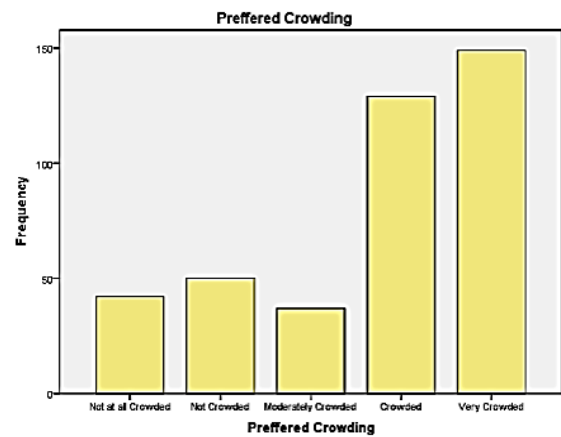
		<b>Crowding Observation</b>	<b>Preferred Crowding</b>	<b>Maximum Acceptability</b>	<b>Expected Crowding</b>	<b>Negative Crowding Effect</b>
<b>N</b>	<b>Valid</b>	407	407	407	407	407
	<b>Missing</b>	0	0	0	0	0
<b>Mean</b>		4.05	3.72	3.86	3.89	3.91
<b>Median</b>		4.00	4.00	4.00	4.00	4.00
<b>Mode</b>		5.00	5.00	5.00	5.00	5.00
<b>Std. Deviation</b>		1.12	1.34	1.19	1.20	1.32

The frequency of each questions are show in the bar charts according to the questions;

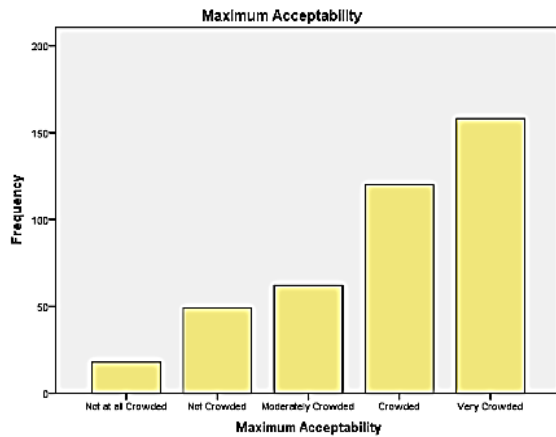
Question 1: Which picture best matches the approximate number of visitors you observed on the island?



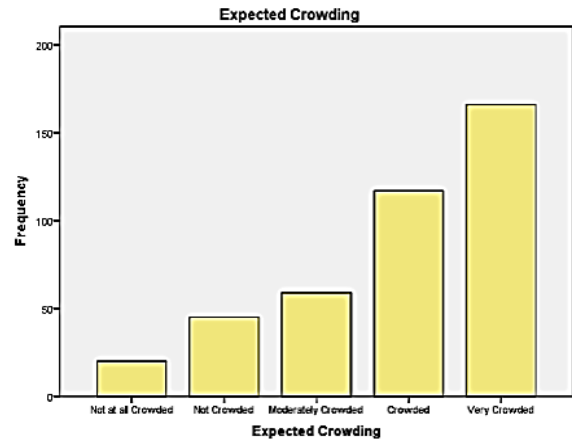
Question 2: Which picture best indicates your preferred number of fellow visitors?



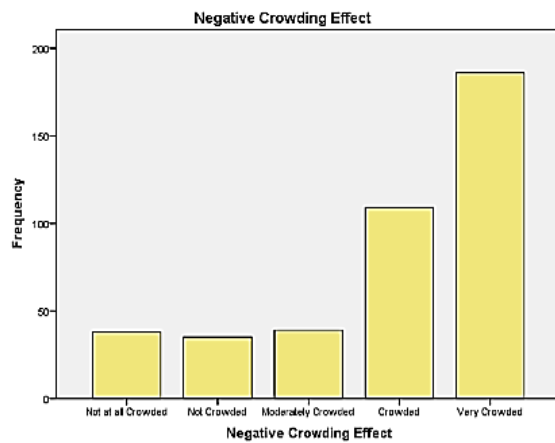
Question 3: Which picture contains the maximum number of visitors which you would personally feel acceptable?



Question 4: Which picture most closely represents the number of visitors you had expected to meet?



Question 5: Which visitor density would be a reason for you to decide not to return to the island?



## CONCLUSION

The findings show that visitors to TARP encounter crowded range of visitors. Kalisch and Klaphake, 2007 in their study using a similar visual method also encountered a similar response from the crowd regarding crowding observation. From the findings, it can be said that perception of crowding is measurable using the photographic method and it is a useful tools in determining a certain use-level in tourist areas similar to the findings of Manning, 1999. The study proves that visual method using photographic assessment technique is very successful in determining the minimum social and environmental condition, especially crowding in small islands. Similar studies have also produced positive results using the visual method (Jurado et al, 2009; Kalish And Klaphake, 2007; Hall and Roggenbuck, 2002; Manning 1996). Its potential to be used in analyzing crowding perception would benefit the management as well as other researchers in identifying tourist perception on crowding in elsewhere. In addition, photographic assessment used to measure salience indicators that can reflects how strongly visitors rate the acceptability of a range of recreation-based resources in small islands and its social impacts. The study hopes more and frequent researches are done in study site to benefit the natural park in long term sustainability and as a tourist destination.

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# ATTRACTIVENESS OF VERNACULAR DESIGN INTO INTERIOR OF CULINARY TOURISM FACILITY IN BANDUNG JAWA BARAT, INDONESIA (CASE STUDY: WARUNG LELA)

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## Abstract

Bandung is famous in many tourism sectors, such as nature, fashion and culinary. Bandung well known by having the variousity of culinary. Based on current observations, many culinary tourism facilities – restaurant in Bandung has a typical interior layout that related to local culture. The characteristic arrangement of interior elements in the restaurant are using various design vernacular and vintage products in the same time, which give a unique phenomenon and reflecting local ethnicity. There is a perspective differences between the traditional society as the creator and user of the vernacular products, with the modern society. The differences is due to cultural factors, that traditional society has mythic culture background, while modern society has ontology culture background. This paper has descriptive interpretative approach, will be focusing on how modern society treats the vernacular design and vintage products in the present time and the arrangement of products in interior of modern-ethnic restaurant – Warung Lela. The summary of applying vernacular design and using vintage products as interior element to attract in tourism purposes is possible to change the meaning of the vernacular design as the supporting elements.

Keywords: *Vernacular Design, Vintage Products, Interior, Culinary Tourism*

## INTRODUCTION

The development of the culinary tourism industry in Bandung has contributed the rising of culinary facilities. The interesting part based on the observations, there is plenty of restaurants that presents the products of vernacular as the interior aesthetic elements and become the tourism attractiveness. The vernacular products as the nostalgic expression is become the issue of the study. The vernacular products such as *gerobok*, *gentong* (barrels), *dulang*, *lesung* (rice mortar), *jubleg*, *tolombong* and even *seeng* become the popular supporting elements.

The products are arranged in such a way as the vernacular element is aesthetically so that conjures up the impression of modern ethnic restaurant space. Structuring the product aesthetic vernacular as elements of interior restaurant in Bandung, turned out to have unintended consequences to changes its function. Figure 1 shows the consistency of vernacular products arrangement in restaurant ‘Warung Lela,’ which create the modern ethnic atmosphere.





**Figure 1.** The Exterior and Interior of Warung Lela  
Source :Personal Documentation, 21 July 2014

Indonesia's traditional society has mythic culture background. The cultural characteristics that depart from themes of religion, traditions, myths and the environment. In the context of cultural, mythic form of vernacular products have physical functions simultaneously as a medium of communication. Vernacular products communicate a pattern to their point of view and the way it thinks towards life. Modern society has a cultural background Indonesia ontological logic operations, and reject anything that is non-material. This way of looking gave rise to differences of behavior typical of modern society in the vernacular products treat.

## RESEARCH METHODOLOGY

A case study become a research strategy and research method is direct observation to collect documentation as research data. The selected case studies are 'Warung Lela,' Ranca Kendal Street, Bandung, West Java. Of nature, this research is descriptive interpretive that has research problem which relate to the arrangement of the product over the function of vernacular in modern interiors ethnic restaurant. The function changes identified by the theoretical framework design that divided into two major functions, namely are the practical function (material) and the representation function (non-material).

Based on this theory, the authors found the relationship patterns over the function of vernacular products previous and present (Table 1), are as follows:

**Table 1:** The Previous and Present Relationship of Vernacular Products

<b>Previous Functions</b>	Practical Function	Practical Function	Representation Function	Representation Function
<b>Present Functions</b>	Practical Function	Communication Function	Practical Function	Representation Function

Source: *Researcher source, 2014*

In the context of traditional society, the function of communication products vernacular closely related to ethical issues, such as wrong size problem completely, good-bad, and matters related to the manners, morals, ahlak derived from religious teachings. Description practical function changes related products vernacular arrangement done by visual theory entity, namely structure, material and operational.

### The Function and Form of the Vernacular Products: In Theory

According to Victor Papanek (1995) in Jamaluddin dissertation entitled 'Symbolic Meaning of Aesthetics Sunda Case Study of Staple Food In Baduy', that the term traditional design appeared first in the repertoire of architecture and known as vernacular architecture.





Vernacular architecture is a masterpiece of architecture that was established by the owner assisted relatives and local builder with the highest level of quality carpentry owned. Vernacular design is a combination of compatibility with the environment, human scale, made the effort to high quality carpentry in certain cases accompanied by great attention to decoration, ornamentation and decoration with simple taste which produces beautiful design. Vernacular design are not self-effacing but balancing and blending with the surroundings nature. In traditional societies, the manufacturer is at once the users and owners.


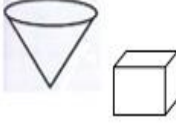

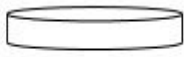



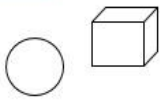
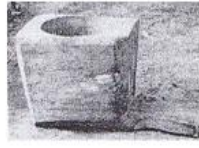

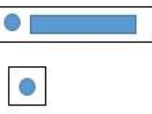
Functions specified in the design process in responding to the needs of particular users. Based on the theoretical framework of design, functionality is divided into two. As follow:

1. Practical function, which is the utility function of the product. The focus on the usefulness
2. Representation Function / Function Communication, which is a function that has a thing to express and communicate the meaning contained therein. With this function a product can be understood and read by its users through form / shape.

In the context of traditional societies, form / shape of the object to be addressed by two things: the container or called 'wadah' as the practical function / material and the content or called 'isi' as the communication function / non-material. The container as physical function product described by the theory of visual vernacular entity, namely structure, material and operational / usefulness (Table 2) are as follows:

**Table 2:** The Concept of 'Container and Content' in the context Traditional Society

Vernacular Products	Practical Function (Matter)			Representation Function (Non Matter)
	Container			Content
	Structure	Material	Operational	Meaning/Ethics
<p><i>Seeng</i></p> 	<p>The shape consist of two cones with different size and orientation as the basic structure. It has slim shape in the middle, turn into wide-brimmed at the top and the bottom with puffed-up at the bottom</p> 	<p>Copper with scaly surface causes by order blow while its made.</p>	<p>Boiling water as well as steaming rice (<i>nyuwang</i>), that's make <i>seeng</i> usually got paired with <i>aseupan</i> (steamer, made by woven bamboo with cone shape)</p>	<p>Triangle (<i>yuwulu</i>) and circle are the basic structure of the cone. In the context of traditional Sundanese society, triangle symbolizing a holy place. Meanwhile the upside down triangle refers to woman's private part, (<i>yoni</i>) symbolizing the human place of birth. It also symbolizing the prosperity. Circle symbolizing strong will and spiritual perfection</p> <p><b>Pamali</b> (forbidden by taboo) :</p> <p><i>Seeng</i> not allow to fall from <i>hantu</i> (even unintentionally). If that so, a person who caused it has to arranges a ritual ceremony so that they can avoidable from danger.</p>
<p><i>Dulang</i></p> 	<p>The shape consist of cone and bar cylinder as the basic structure. <i>Dulang</i> has cone shapes with deep niche in the middle which turn into smaller at the bottom.</p> 	<p><i>Nangka</i> (jackfruit) wood which has a smooth wood texture</p>	<p><i>Ngagisihan</i> and <i>ngakul sanu</i>. <i>Ngagisihan</i> is part of rice cooking process, start from steaming rice use of <i>aseupan</i> inside <i>seeng</i>. <i>Ngakul</i> is aimed at the rice evaporation process getting faster ( getting rid of hot vapor from rice that newly lifted from <i>seeng</i> through <i>aseupan</i>)</p>	<p>Triangle (<i>yuwulu</i>) and circle are the basic structure of the cone. Circle and rectangle are the basic structure of cylinder. In the context of traditional Sundanese society, triangle symbolizing the holy place. Meanwhile the upside down triangle refers to woman's private part (<i>yoni</i>) symbolizing the human place of birth. It also symbolizing the prosperity. Circle symbolizing human's strong will and the spiritual perfection. Rectangle symbolizing cohesive lives so that will creates a perfect behavior in their lives</p> <p><b>Pamali</b> (forbidden by taboo) :</p> <p><i>Awos mah dulang tinande</i> means that woman must complied with her husband's will.</p> <p><i>Nyaah dulang</i> means that the wrong method in loving care the children make them spoil. It refers to someone who lack of education.</p>

<p><u>Boboko</u></p> 	<p>The shape consist of cone and cube as the basic structure. The upper part is round, meanwhile the lower part is cube. It always use a leg called <u>soko</u> for it base.</p> 	<p>Tightly woven bamboo. <u>Soko</u> made from flat wood or bamboo. The woven creates a textural surface.</p>	<p>It used for rice container as well as <u>rising</u> the rice. The process called <u>ngisikan</u>.</p>	<p>Triangle (<u>juwulu</u>) and circle are the basic structure of the cone. In the context of <u>traditional</u> Sundanese society, triangle symbolizing a holy place. Meanwhile the upside down triangle refers to woman's private part (<u>yoni</u>) symbolizing the human place of birth. It also <u>symbolizing</u> the prosperity. Circle <u>symbolizing</u> strong will and spiritual perfection. Rectangle symbolizing cohesive lives so that will creates a perfect behavior in human's lives.</p> <p><u>Pamali</u> (forbidden by taboo) :</p> <p><u>Boboko</u> is forbidden to jumped over, means that we are forbidden to humiliate other people</p>
<p><u>Ayakan/Sair</u></p> 	<p>The shape consist of cylinder that puffed-up at the bottom. It is round and concave. Diameter size around 30-50 cm. The edges use a clipper named <u>wengku</u> as a <u>strengthen</u>.</p> 	<p>Made by woven bamboo. There is a <u>variety</u> in woven tight quality. <u>Ayakan</u> has a clear texture.</p>	<p>Filter and sifter. The tight woven of <u>ayakan</u> used for filtering delicate item such as milk squeezed from coconut. Meanwhile, the loose woven used for filtering seeds so the big ones got separated from the small ones. The other name for <u>ayakan</u> is <u>sair</u>. It uses to catch a small fish in the drained pond.</p>	<p>In the context of traditional Sundanese society, circle symbolizing <u>human's</u> strong will and the spiritual perfection</p> <p><u>Pamali</u> (forbidden by taboo) :</p> <p><u>Covering</u> the rice by <u>ayakan</u> is forbidden, because <u>The Goddess of Rice</u> dislike that attitude.</p>
<p><u>Gentong</u></p> 	<p>The shape consist of circle in different sizes. <u>Gentong</u> has round shape that turn into smaller at the bottom and the top</p> 	<p>It is an earthenware which has smooth texture.</p>	<p>It used for a vessel as well as a rice container. As the vessel, it paired with <u>sawur</u> (a coconut shell scoop with a long woodhandle). As the rice container, it has paired with <u>wugken</u> (rice measuring cup made of a coconut shell)</p>	<p>Sphere is the basic structure of the circle <u>yhat</u> symbolizing human's strong will and the spiritual perfection</p> <p><u>Pamali</u> (forbidden by taboo) that related to the rice issue :</p> <p><u>Ulah sok myoo beas, matak dijual ku mitoha</u> (if you are messing around with rice, you are salable by your parent in law)</p> <p><u>Ari nyiuk beas ulah bari ngomong, matak langlangan</u> Be very cautious to keep silent during taking the rice from the container, because it will finished immediately.</p>
<p><u>Tolombong</u></p> 	<p>The shape consist of circle and cube as the basic structure. The upper part of <u>tolombong</u> is round, meanwhile its lower part is square. It is added with <u>wengku</u> on the top side</p> 	<p>Made of woven bamboo. The woven creates a textural surfaces.</p>	<p>It used for a rice container.</p>	<p>In the context of <u>traditional</u> Sundanese society, circle symbolizing <u>human's</u> strong will and the spiritual perfection. Rectangle symbolizing cohesive lives so that will creates a perfect behavior in their lives</p> <p><u>Pamali</u> (forbidden by taboo) that related to the rice issue :</p> <p><u>Ulah sok myoo beas, matak dijual ku mitoha</u> (if you are messing around with rice, you are salable by your parent in law)</p> <p><u>Ari nyiuk beas ulah bari ngomong, matak langlangan</u> Be very cautious to keep silent during taking the rice from the container, because it will finished immediately.</p>
Production Tools				
<p><u>Lisung/Teblek/Jublek</u></p>  	<p>The shape consist of rectangle/bar cylinder with round or square shallow niche (called <u>amburan</u>). The size about 1.5 – 2m length, about 35 cm width.</p> 	<p>Made of wood that creates a smooth into medium texture at the surface.</p>	<p>It used for rice pestle. The pounder called <u>alu</u>. Those are paired. The <u>amburan</u> produces the white rice.</p>	<p>In the context of <u>traditional</u> Sundanese society, circle symbolizing <u>human's</u> strong will and the spiritual perfection. Rectangle symbolizing cohesive lives so that will creates a perfect behavior in their lives</p> <p><u>Pamali</u> (forbidden by taboo)</p> <p><u>Urang kampung bau lisung</u>, it refers to a villager</p> <p><u>Salisung gardu</u> meaning there is a partners in crime</p> <p><u>Paketrok halu</u>, meaning that the married couple usually have a quarrel.</p> <p>When the <u>alu</u> gets broken <u>while</u> rice pounding on progress, the one who did that has to made the ritual ceremony to get safe from any danger.</p>













## DISCUSSION:

### The Arrangement Of Vernacular Products In Modern-Ethnic Restaurant In Bandung

The traditional society have a very different perspective on the form of an object compared to today's modern society. The result of objects form will reflect autobiography that contains event and time of a traditional society as well as a communication medium on the phenomenon of complex civilizations. That is a form of an object is a logical consequence of the function (both physical function and communication function) contained therein.

In effort to describe the arrangement of the product related transfer functions vernacular as aesthetic elements of modern interiors ethnic restaurant in Bandung, conducted a review below in tabular form, with the case study of 'Warung Lela' in Bandung, West Java, Indonesia, are as follows:

**Table 3:** The Function Changes of Vernacular Products Relating to Interior Decoration of Warung Lela Restaurant

	Area Restaurant				Practical Function		
					Container		
					Visual Entity		
	Entrance ( <i>outdoor</i> )	( <i>indoor</i> )	Dining Area	Cashier Area	Structure	Material	Operational
Structuring of Vernacular Products	Lisung, jubleg, dulang	Gentong, Gerobok	Seeng, jubleg	Tolombong	Lisung : Unchanged Jubleg : Unchanged Dulang : Unchanged Seeng : Unchanged Tolombong : Unchanged Gerobok : Unchanged	Unchanged	Lisung and Jubleg presence without a pounder called <i>gily</i> . The Lisung is positioned horizontally sideways. Jubleg functioning as base of dulang and umbrella container. Dulang functioning as fruit basket, and outdoor placed. Tolombong is added with rope, and hanged on the wall as a book and paper container. Gerobok functioning as a table. Gentong functioning as an object display, as a place to hold particular object in its hole (as a pot). Seeng functioning as an object display. It is lied above the cupboard.
							
							
							
							
					Representation Function		
					Content		
					Meaning		
					Vernacular product has a meaning as a past things, to memorize their origins. Rope is the element that added to tolombong so it can hang occuring that tends to merely on practical needed.		

## SUMMARY

Based on the research phenomena, a fact is discovered the changes of function and meaning of the vernacular products in Warung Lela as one of modern-ethnic restaurant in Bandung, are the changes that tend to focus merely on the matter of their physical function. In the context of urban modern society in Bandung, the container (visual entity) is a main factor in structuring Bandung modern ethnic restaurant interior. This means that the traditional culture

products in urban society's house interior are used in order their primordial attachment needs, to memorize their origins based on environment, state and condition.

The study on the changes in function and meaning of vernacular products in structuring Bandung modern ethnic restaurant interior found the differences between past and present practical functions. The details are as follows:

**Table 4:** The Previous and Present Relationship of Vernacular Products

PAST	PRESENT
Practical Function (Container / Visual Entity) as well as Representational Function (Content / Meaning)	Practical Function (Container / Visual Entity)

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# ASIAN COLONIAL HERITAGE AS DARK TOURISM SITES

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## Abstract

Dark tourism associated with war, genocide, assassination and other tragic events. It became also one of significant tourist destinations. In WW2, Japanese occupation covered almost Southeast Asian area. Such around 4 year is important part of national history for each Southeastern countries. This paper analyzes identity politics by war memory and its representation of Dark Tourism sites.

Keywords: *Dark Tourism, Cultural Heritage, War memorial, Identity Politics*

## INTRODUCTION

What is Dark tourism? Dark Tourism is a kind of niche tourism not mass tourism. Novelli [2005] said niche tourism represents diversity and ways of marking difference in a globalizing world of increasing sameness. Niche tourism approach appears to offer opportunities and a tourism that is more sustainable and more capable of delivering high-spending tourists. On the contrary, mass tourism is a large-scale phenomenon, packaging and selling standardized leisure services at fixed prices to a mass client. Mass tourism has been via tour operators, airlines and international hotel groups. Niche is important or not? Yes, now no one doubt to include explorers and drifters in tourists. A larger number of tourists, also called 'post-tourists', had needs beyond mass tourism category.

### What is Dark Tourism

Dark Tourism (now so called DT) also said Thanatourism is one of Niche Tourism. Lennon and Foley [2000] said tourist tends to interest in death, disaster and atrocity. In these phenomena as DT producer intend to signify a fundamental shift in the way in death, disaster and atrocity are being handled by offering associated tourism product. Moreover, tourist gaze is handling these phenomena as tourist of DT. There are many DT candidate phenomena in post colonial Malaya, too. Especially war and battlefield are main contents of DT. The agony of history becomes a tourism attraction once again. It is also one of software based tourism with sustainability.

### Why do we need Dark Tourism

Why do we need or become a passion with DT? DT is a way to the past from the present, to find danger in the safe. And DT becomes a reality made into virtual reality through the history. Then DT decide tourist gaze by its historical contextualization. Not every tourism products will appeal to every consumer. But there are some people who see the sites for nostalgia and pilgrimage.

### Dark Tourism in Post Colonial Malaya: Sabah

Now I introduce about example of Sabah tourism. kheritagewalk web offer North Borneo War Monument with famous Atkinson clock tower. It is not only urban tourism but also nature tourism in city. In Kinabalu Park, the Malaysia's 1st World Heritage site before

Penang and Malacca, Kundasang War Memorial and Gardens and Ranau Memorial about Australian and British prisoners of war listed must visit places by The leaflet of Sabah Tourism Board on June 2006. And Borneo 1945 Museum Kopitiam in Australian Place is very interested case of DT. Its concept is WW II. But it is a structure of 21C since only 2004. English and Japanese leading guidebooks, for example, Travel Survival Kit and Chikyu no Arukikata introduce this kopitiam as must going place in KK.



**Figure1:**At International Kota Kinabalu Airport (photo by author)

### **Dark Tourism in Post Colonial Malaya: Labuan**

Labuan is small site, so there are few tourism spots. Labuan Tourism Action Council under Ministry of Tourism Malaysia offer 2 DT spots of their 10 tourism icons. They are Japanese Surrender Point and Peace Park are sited at Layang-Layang. They are main tourist spot in Labuan. WW II Memorial is the largest war grave in Malaysia. Near 4,000 soldiers mostly Australians, British and Indian are buried there. Visiting cemetery and memorial tourism have become an important niche in the growth of DT.

### **The case of Post Colonial Malaya: Singapore**

Singapore is one of progressive country to DT. Since 1979, they got to construct the national history by oral history method. But the war memorial informants were old and dead, Singapore government pay attention to war memorial structures especially since 1995. It is the year of 50th anniversary of the end of WW II. Fort Siloso in Sentosa is one of remarkable example. Sentosa is representative theme park in Southeast Asia including with Universal Studio, Casino and so on. After renewal Fort Siloso maintained full English, Chinese and Japanese explanations. I heard some exhibition also moved from Singapore History Museum.

Here was not only local educational site but also international tourism site. It got full function of DT.

### **Functions of Dark Tourism**

What kind of function do DT have? One is local educational tool for Nationalism. It make good use of nation building or Imagined society. For example, Jewish tourists become aware of the darkness of the European death camp to the light of Israeli freedom at Auschwitz. Another function is International subject for tourism. This is the common function as tourism attraction. For example, Japanese tourists become aware of nostalgia to leaving marks of Japanese colonial at Taiwan countryside. Moreover, I refer to Singapore case for understanding these DT functions.

### **Dark Tourism sites as post colonial landscape**

Above mentioned, nostalgia is one reason for DT with pilgrimage. But many tourists were not born during the DT events of war now. Why do they have nostalgia with them? It is a kind of nostalgia without memory as strong marketing issue. Post colonial means beyond colonial not after colonial in this case. Now I cannot find the best example in DT. But I can refer to Boutique hotels since colonial age for your knowing - Raffles Singapore, E&O Penang and Jesselton KK. I mean they are not for neo colonialism to real good old days in the nostalgic memory.

### **The future of my Dark Tourism studies**

The future of my DT studies give 2 tasks now. First, I need to list Dark Tourism sites in post-colonial Malaya completely. Today I cannot mention about Penang case. Of course Dark Tourism sites exist in Penang like War Museum near Bayan Lepas or USM. Second, I am thinking of DT as post-colonial landscape. Who and how gaze it? Especially Japanese tourists, how do they gaze to old Japanese colonials? I have not good idea now, but I will be seeking a case of sharing value with Japanese tourist and locals. I believe it is also one kind of branding Malaysia without Truly Asia gaze.

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# **SAFETY AND SECURITY ISSUES IN THE TOURIST DESTINATION: A REVIEW OF LITERATURE**

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## **Abstract**

Tourism is an increasingly important aspect of modern life for the citizens of the world, due to enhanced mobility for leisure or business purposes. People have always been travelling from one place to another, and such travel has not been entirely secured most of the time, regardless of the period and the transport means. However, in recent years, the tourism industry has been seriously undermined by the growing lack of safety and security such as crime, terrorism, food safety, health issues and natural disasters; this has changed the tourism sector (Breda and Costa, 2006). Peace, safety and security are the primary conditions for the tourism development of a destination (Cavelk, 2006). Safety and security have always been an indispensable condition for travel and tourism. But it is an uncontestable fact that safety and security issues gained a much bigger importance in the last two decades in tourism. Changes in the world during the last two decades were enormous. Due to terrorist acts, local wars, natural disasters, epidemics and pandemics, that we were witnesses to, security has significantly decreased (Kovari, I. 2010). This paper presents key issues and challenges related to safety and security faced in tourist destination based on literature reviews. These reviews are then conceptualized to the context of Sabah. The paper provides the current status of tourist arrivals and highlights the key evidences of threats and insecurity due to the recent events in Sabah. It describes the impacts and perceptions of the insecurity event; and an insightful understanding of the risks, impacts and insecurity of tourist destination. Several suggestions and research venue are recommended in relation to the safety and security at the tourist destination.

*Keywords: Tourism Safety and Security, Tourist Destination, Impacts and Perceptions of Safety and Security, Sabah.*

## **INTRODUCTION**

The travel and tourism industry could not avoid the negative impacts and consequences of these events. Moreover some of these events manifested the vulnerability of tourism both on global and regional levels. Therefore this fact necessitates the research and study of the relationship between security issues and tourism including the creation of a new, up-to-date definition of the notion “safety and security in tourism destination”. Studying problems of safety and security came vital for the tourism and hospitality industry (Kovari, I. 2010). Safety and security are vital to providing quality in tourism. More than any other economic activity, the success or failure of a tourism destination depends on being able to provide a safe and secure environment for visitors/tourists. This was highly evident in the aftermath of the tragic events of September 11, 2001. Safety and security plays in making travel choices. They also demonstrate quite clearly that peace is the best friend of travel and tourism while war and insecurity are among its worst enemies.

## **Safety and Security of Tourist Destination**

Safety and Security have always been an indispensable condition for travel and tourism. But it is an uncontestable fact that safety and security issues gained a much bigger importance in

the last two decades in tourism (Kovari, I. 2010). Safety and security in any tourist destination has become a complex multi-dimensional notion with a wide range of components belonging to it: political security, public safety, health and sanitation, personal data safety, legal protection of tourists, consumer protection, safety in communication, disaster protection, environmental security, getting authentic information, quality assurance of services, etc. (Kovari, I. 2010). Safety and security has undergone a significant change: from a more or less passive factor it is now an active element of tourism, an imperative to act in order to protect tourists and their belongings as well as all the achievements of the industry (Kovari, I. 2010).

### **Safety and Security Issues**

The routine activity theory suggests three elements for a predatory crime to occur; namely a suitable target, a motivated offender and the absence of a capable guardian (Cohen and Felson, 1979). It is argued that a tourist destination fits into this framework. Firstly, tourists are regarded as targets because they tend to carry large amount of cash and are not familiar with those intended places considered as dangerous. Secondly, the offenders are bound to victimize and target tourists. Thirdly, a tourist destination may not have adequate law enforcement agents in place as it may not recognize tourist crime as a problem.

In the case of Sabah as a tourist destination, there is a need to have an in-depth understanding of tourism, safety and security and the actions that should be in place in order to improve the safety and security of the destination and guests. Table 1 shows the demographic profile of international visitors in Sabah in 2011. Tourism suppliers need to understand the risk constructs in tourist behavior; and the role of travel information and security information in shaping destination choice and travel behavior. Simply, one has to understand that dealing with tourism safety and security is a complex and complicated affair and involve multi levels of stakeholders from the private and public sector, whereby each party plays a different role and has different responsibilities in ensuring safety and security. The root causes of these incidents need further in-depth investigation from relevant parties as well as tourism suppliers and local community. Analysis of what led to these incidents need to be properly understood in a holistic manner to reduce such incidents in future.

In addition to co-ordination and co-operation at the national level, there is a need for extending and strengthening regional co-ordination and co-operation among all parties involved in ensuring tourism surety by combating crime and protection for the residents and visitors, as well as the destination's reputation. In this regard, the initiatives of everyone concerned to focus discussion on the subject of safety and security in the tourist destination is a commendable step in the right direction.

However, if the initiatives and actions are to have a positive and lasting impact, they must benefit from effective co-ordination and co-operation, including the sharing of information and harmonizing of strategies. They must also be fully supported by other principal partners, including the government, the tourism industry and the community at large. It is undeniable that the tourism industry has a right to defend itself as well as to have a legitimate expectation that the State will do all it can to ensure safety and security. It is, therefore, in the industry's own interest to co-ordinate its efforts and co-operate fully with the other main partners, i.e. the government, law enforcement agencies and the wider community. It must recognize that when the environment is safe, the visitor is also safe and that if the travel and tourism industry emphasizes security, it will have a good chance of surviving.

Safety and security issues have been treated as important conditions of tourism. Safety and security issues in travel and tourism came to the front by the evolution of the mass tourism from the beginning of the 1950s.

### **Challenges Faced in the Tourist Destination**

Political situation in a given destination or in the whole world always have a crucial effect on the tourism safety and security issues. The evolution of political situation in the world in the last decade of the 20<sup>th</sup> Century was determinative on the tourism including safety and security problems.

In conjunction with this fundamental fact, a wide range of changes and challenges in the world influenced the content of notion “safety and security in tourism and hospitality” industry (Kovari, I, 2010).

Despite the results in studying problems of safety and security in tourism destination, there are several challenges for tourism researchers as follows:

- Consequences of indivisibility of safety and security problems globally;
- Safety and security related problems created by the internet; and
- Safety and security in travel and tourism versus human freedom and rights

### **RESEARCH PROBLEM STATEMENT**

Tourism is ranked as the sixth largest contributor to the Malaysian economy in 2013, yet there is a lack of intensive public-private network amongst tourism stakeholders, in terms of a systematic approach towards tourism safety and security that creates tools for crisis communication, safety management and risk management. It is high time for an approach to be considered as safety and security practices in tourism must be assured at multiple levels.

As the country, in general, and the State in particular, is inundated with a lot of negative perception in as far as safety and security is concerned, it is now timely that all negativities or repercussions arising from the lack of safety and security measures be ‘nipped in the bud’. The recent safety and security incidents have caused a significant decline in tourism demand through trip cancellations and a shift of bookings away to safer tourism destinations. It is envisaged that such safety and security incidents have caused negative impacts on the tourist destination and the perceptions of the various tourism stakeholders.

The purpose of this research is to endeavor to address the safety and security issues in the tourist destination in Sabah as this would have an impact on the country’s economy. Hence, if the safety and security measures are not addressed or highlighted, it may have a serious effect to the country’s image and economy.

### **RESEARCH OBJECTIVES**

This research aims to describe the phenomenon and consequences of safety and security issues in Sabah as a tourist destination and its tourism activities, from the perspective of key tourism stakeholders.

The key objectives are:

- (1) To review factors leading to safety and security issues from the tourist destination’s perspective;
- (2) To highlight the importance of safety and security in the tourist destination;

- (3) To formulate an indepth understanding of tourism, safety and security and actions that should be in place in order to improve the safety and security of the tourist destination and guests; and
- (4) To identify risk constructs in tourists' behavior and the role of travel and security information in shaping destination choice and travel behaviour;

### **Location of Research**

Following the intrusion and invasion by Sulu gunmen in Tanduo, Lahad Datu District, in the eastern part of Sabah (Figure 1), the Eastern Sabah Security Zone (Esszone), a security zone in Sabah was launched by the Prime Minister on 25<sup>th</sup> March 2013. Esszone (Figure 2) includes the districts of Kudat, Kota Marudu, Pitas, Beluran, Sandakan, Kinabatangan, Lahad Datu, Kunak, Semporna and Tawau. The Eastern Sabah Safety Zone Committee (Esscom) is the main enforcement authority for Esszone.

### **RESEARCH METHOD**

The research method to be used for this research is by way of multi-qualitative methods consisting of interviews, profile accumulation techniques (open-ended questions) and focus groups to address the research objectives. A multi data source triangulation will be used to enhance the validity and credibility of the data collected. Qualitative data analysis is based on single phrase or several significant statements using the qualitative phenomenology approach.

### **Expected Results/Benefits**

The expected result would be to analyse and ensure the safety and security issues in the tourist destination and everyone involved in the tourism and hospitality industry as the lack of these measures would be detrimental to the growth of the tourism and hospitality industry.

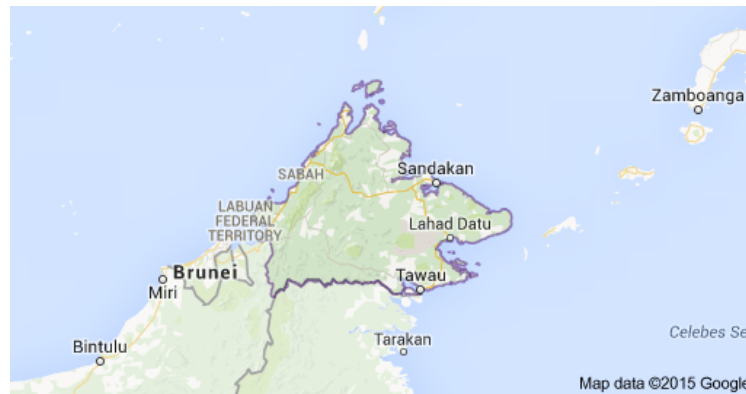
As tourism increases, more and more people are travelling via the internet reservations to increase mobility of people so therefore one of the current issues in the tourism and hospitality industry is the safety and security of not only the tourists but the employees of the tourism and hospitality industry as well.

In terms of safety and security issues in the tourist destination, everyone involved should heed precautionary measures so that tourists would not deter and avoid the tourist destination as when tourists deter from visiting, it would not do any good to the economy of the tourist destination as tourism can boost economy.

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**Figure 1:** Map of Sabah



**Figure 2:** Location of Esszone

**Table 1:** Demographic Profiles of International Visitors in Sabah

Demographic Profiles of International Visitors	
Profile	2011
Age Group	21 - 30 (18.9%) 31 - 40 (25.2%) Above 50 (23.0%)
Gender	Male (51.0%) Female (48.7%)
Purpose of Visit	Holiday (75.2%)
Travel Arrangement	Free Independent Traveler/Tourist (FIT) (54.7%) Tour Package (43.3%)
Repeat Visitors	47.2% First Visit (51.7%)
Occupation	Professional/Technical (25.5%) Management/Administration (13.2%) Student/Retired (13.8%)
Travel Accommodation	Paid Accommodation (86.2%)
Source: Research Division, Sabah Tourism Board: 16 <sup>th</sup> April 2013	

# THE RECREATIONAL AND TOURISM POTENTIALS OF RURAL LANDSCAPE

## CASE STUDY: LENGGONG VALLEY

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### Abstract

The purpose of this research was to explore the value of rural landscape from the community's perspective. Lenggong valley in Perak is characterized by traditional Malay settlements – the *kampungs* - intermingle with reserved forests and rural land use activities which are predominantly agricultural farming. The declaration of Lenggong as a UNESCO World Heritage site in 2012 is an international recognition due to the significant archeological finding of an 11,000 years old human skeleton known as the Perak Man and other archeological artifacts found in the area. Besides heritage, there are other potential recreational and tourism attractions in the Lenggong Valley. Some of these are popular among the local community and most of these attractions should be promoted to bring more visitors to Lenggong. Methods used to gather data were visual observation, questionnaire survey and interviews. Observation includes the inventory and capturing the image of rural properties as guided by a set of criteria. This research also seeks opinions from community leaders and local entrepreneurs through focus group discussions. One of the major findings from this research was the identification of potential recreational and tourism attractions in Lenggong. This paper aims to highlight these potential rural attractions. At the end of the paper, suggestions were outlined. This include ideas on promoting Lenggong as a tourism destination capable to boost the local economy and by doing so; improve the people's income and socioeconomic status.

Keywords: *Rural landscape, Heritage tourism, Recreational area*

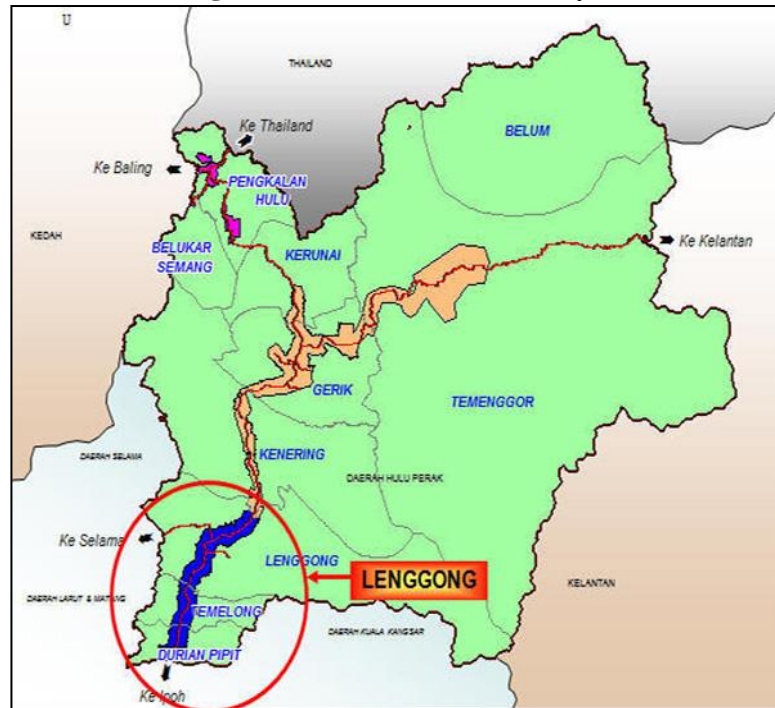
### INTRODUCTION

This research evaluates the recreational and tourism potential resources of the archaeologically significant Lenggong valley in northeast Perak. As a typical rural area in Malaysia, Lenggong valley is inhabited by the Malay population. According to Lian (2001) and Saiful Arif (2011), the Malays are traditionally settled at the coastal or riverine areas and the mountain or near the forested areas because the early settlers usually depended on the resources that came from those areas. The livelihood of the Malay community was mostly centered on agricultural activities and gathering forest resources such as rattan, bamboo fruits etc. The Lenggong valley has several features and attractions for cultural tourism including its scenery, recreational opportunities, ecological and natural features, historical remnants, socio-cultural characteristics and its rural setting.

### THE STUDY AREA

Lenggong is part of the Hulu Perak district. It covers an area of 11,456.29 hectares. This sub-district is divided into three *mukims* (similar to a parish) which are mukim Lenggong, mukim Temelong and mukim Durian Pipit. Lenggong is situated in between two mountain ranges of Peninsular Malaysia, namely the Titiwangsa range and the Bintang range.

**Figure 1.** Location of the study area



The major landuse in the study area is agriculture, covering approximately 64 percent of the total area. Agricultural landuse includes fruit orchards, oil palm plantations, rubber plantations, livestock grazing/ farms, freshwater fishing/ fish-farming, herbs planting and also forest-based resources. The local residents were also involved in cottage industries and Lenggong is popular for the freshwater fermented fish known as *ikan pekasam* which are processed by villagers living along *Tasik* (Lake) Raban. With the recent listing in the UNESCO World heritage list for its archaeological significance, the study area has great tourism potential in the future.

## **BACKGROUND LITERATURE**

Cultural or rural landscape evolves or develops through the interaction of human-environment relationship and transforms into a landscape that has its own identity. It includes human activities such as farming, settlements, local climatic conditions and other factors. Through time, human activities on a particular landscape caused changes of a place. As a result, the identity of a place will slowly disappear. Some of the cultural landscape in Malaysia has been changed to other forms especially into an urban landscape due to the rapid socio-economic development (Saiful Arif, 2011). Mitchell & Buggey (2000) stressed that cultural landscape are the most fragile and threatened sites on earth and there is an urgent need for its protection and proper management.

## **Landscape**

Landscape has various meanings depends on the situation. It not just the tangible aspects like manmade features but also describes the intangible features such as the surrounding environment of a place. Landscape is usually understood as a portion of land that has view, picture or scenery (Palang et al, 2006). Examples of such areas are gardens, rural landscapes, coastal landscapes, urban landscapes and any other landscapes. Wylie (2007) has described landscape in several meanings which is synonymous with nature or wilderness, real and solid, related with geography and also culture. According to Taylor (2011), landscape defines the

relationship between human and nature in that place. It can be seen through sense of place or identity of that particular landscape.

### **Rural or Cultural Landscape**

Rural or cultural landscape is divided into three categories which are: a) clearly defined landscape, b) organically evolved landscape and c) associative cultural landscape (Akagawa & Sirisrisak, 2008; Rossler, 2006; Mitchell & Buggey, 2000). Clearly defined landscape represents a landscape that is designated and intentionally created by man such as parks and gardens which has its own value. Organically evolved landscape represents a relict landscape or continuing landscape such as archeological remains and historical sites. Associative cultural landscape represents a landscape that is significant in terms of the intangible heritage such as religious, artistic or cultural associations.

Akagawa & Sirisrisak (2008) reported that in the United States, the term cultural landscape was initially defined by the US National Park Service (NPS) under the Department of the Interior through the Heritage Conservation and Recreation Service (HRCS) in 1977 as “an open space, natural form or setting that is significant primarily for its environmental relationship to or historical association with other tangible or intangible cultural resources”. In the NPS guideline for heritage management, cultural landscape is defined as “a geographical area including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetical values”. The World Heritage Convention also defined cultural landscape as the combined works of nature and of man which in interaction between people and environment (Akagawa & Sirisrisak, 2008). Many authors agreed that such landscapes, which are created through the relationship between human and nature over time, possess its own unique identity (Mitchell & Buggey, 2000; Saiful Arif, 2011; Akagawa & Sirisrisak, 2008). It conveys messages from the past in both positive and negative aspect as a lesson for future development.

### **Community and Rural Landscape Values**

Value of a place comes from the perception of community towards the surrounding landscape environments. Perceptions and understandings of the community towards rural landscape values will aid in the development of conservation strategies (Taylor, 2011; Kamarul et al., 2010; Mitchell & Buggey, 2000). Kamarul and Habsah (2011) stated that perception of the people gave meanings to a place. Rossler (2006) highlighted the need to involve local community in the identification, planning and management of rural landscape because they are the most affective guardians to the landscape. Involvement of the community is also vital for short and long term management of rural landscape (Mitchell & Buggey, 2000). Besides that, the community perspective is important for the interpretation and definition of rural characteristics towards maintaining and conserving rural landscape (Kamarul and Habsah, 2011; Kamarul et al., 2010).

### **METHODOLOGY**

This study employed the cross sectional study design to find the value of rural landscape as perceived by the community. Lenggong has its own unique value in terms of nature, culture besides historical and archaeological evidence. There are several traditional villages (*kampung*) such as Kg. Gelok, Kg. Beng, Kg. Bangol Batu, Kg. Bangol Belimbing, Kg. Sumpitan, Kg. Gahar etc. There are also planned housing areas such as Kg. Baru Air Kala, Kg. Baru Padang Gerus and Kg. Kota Tampan. The local communities involves in traditional activities based on the natural resources existed in Lenggong such as fishing and farming.



There are also people involve in small scale or cottage industries such as processing fermented fish (Pekasam), foodstuff, and local delicacies. Other rural landscape characters in Lenggong includes scenery, recreation potential, conservation area and agro-biodiversity.

### **Data Collection**

Observation at the study area has been done during the initial pilot survey and during the one-week field work. It included taking photographs of the various scenes and landscape in the Lenggong valley. Several of these photographs have been used in the questionnaire for the community perception survey. A total of 353 respondents were involved in the community perception survey conducted during the one-week field work at the site. Stratified sampling method is being used in this survey and ten villages were selected in the three mukims in Lenggong sub-district. The respondents represented residents in these selected villages and settlements. This survey has using photos as surrogates the real landscape and involved face to face interview with the respondents.

Focus group discussions and interviews with key informants have been conducted to get responses and reactions from specific individuals about the potentials and challenges in the study area. There are two groups involved in the focus group discussions, i.e. a group of 14 community leaders and a group of 11 local entrepreneurs. Respondents for the focus group discussions were invited through letters sent in advance and they subsequently confirmed their attendance through phone calls by the research assistants. Respondents shared their views and expressed their opinions in a relaxed atmosphere guided by the moderators.

### **ANALYSIS**

Data from the questionnaire survey has been analyzed using the Statistical Package for the Social Science (SPSS). It consists of descriptive analysis by using frequencies and mean. Besides that, cross tabulation for some variable with demography of the respondents also being used to compare their value. Data are then presented by using frequency tables. Manual transcription and analyzing discussion themes has been used for the focus group discussions and key informant interviews.

### **DISCUSSION**

Lenggong possess abundant nature areas including forests, swamps, caves, rivers and mountains. There are many built heritage in Lenggong like old traditional houses and mosques. Most of the traditional houses in Lenggong are wooden houses with intricate carvings. There is a mosque that that is 100 years old. The study area's attractions include Tasik Raban, Lata Kekabu and network of hills and limestone caves.

### **Rural Landscape Potentials**

Table 1 shows the respondents' perception on rural characteristics of Lenggong that has potentials for tourism development. 32.7 percent of the respondents agreed that historical area in Lenggong has the most potential in Lenggong. Besides that, recreational and agricultural areas in Lenggong were also seen as tourism potentials. There are also respondents who value the environment / nature area, custom and culture and to a lesser extent, the local traditional foods.

Lenggong Valley which is rich with archaeological evidences was designated as a World Heritage site in 2012 by UNESCO, a worldwide organization for educational, scientific and culture. The archaeological areas included four excavation sites divided into two clusters which consist of Bukit Bunuh near Kota Tampan, Bukit Jawa, Bukit Kepala Gajah and Bukit Gua Harimau. These areas were significant because there are remains of culture and evidence

of the paleolithic, neolithic and metal age's human living. Besides that, Lenggong is also blessed with sites of recreational potential including rivers, lakes, caves, forests, hills and mountains. In terms of environment, Lenggong portrays the rural landscape represented by traditional villages, orchards and farmland and vast green areas and forests. Community in Lenggong has its own unique culture. In some place such as Kg. Beng, villagers are still using *sampan* (small boat) as their daily transportation even though there is a road to that village. Besides that, the local people have many unique traditional dishes such as *Gulai Kemahang*, *Gulai Lemak Patani* and *Lemok Pekasam*.

**Table 1:** Perception about Tourism Potentials

Potentials	Number	Percent
Custom and culture	42	13.1
Historical area/attraction	105	32.7
Recreational/agricultural area	78	24.3
Traditional foods	34	10.6
Environment/nature area	62	19.3
Total	321	100

### Significant Sites in Lenggong Valley

Tasik Raban is a large lake formed during the construction of the Chenderoh dam for hydroelectric power generation during the 1920s. Tasik Raban is divided into four lakes called Tasik Temenggor, Tasik Chenderoh, Tasik Kenering and Tasik Bersia. Historically, the place was a village called Kg. Raban that was inhabited by people who were moved to a surrounding settlement when the area was purposely submerged to form the lake. Sungai Raban, Sungai Changkat Berangan and Sungai Danglang flow into Tasik Raban and maintain the water level in the lake. Besides supporting the local resident's livelihood and sustenance through freshwater fishing and aquaculture farming, Tasik Raban is a heaven for anglers and nature lovers for its resources and enchanting scenery.

Kg. Beng is a traditional Malay village which attracts many tourists. Located at the edge of Tasik Chenderoh, Kg. Beng has five sub-villages i.e. Kg. Batu Reng, Kg. Durau, Kg. Dusun, Kg. Beng Dalam and Kg. Durian Lubuk. Located about 15 km from Lenggong town, Kg. Beng could be reached via land and water. There are several homestays in this village to cater for local and foreign tourists. Kg. Beng had also become location for film production including an international film "Anna and the King".

Lata Kekabu is a recreational park with an attraction of a waterfall known as Sungai Tampan Falls. Situated in the Bintang Hijau forest reserve, this park is surrounded by pristine forest rich in natural biodiversity. Lata Kekabu is popular among the local residents for recreational activities especially during weekends and school holidays. The forest park is equipped with several amenities including paved walkway, boardwalk, bridges, benches, gazebo etc.

Cluster Caves. There are about 16 caves in the Lenggong valley which had attracted visitors and explorers. There had been evidence of early and prehistoric life in some of these caves and teams of archaeological researchers had undertaken several excavations in search of these historical evidence. The breakthrough discovery of an ancient grave which laid the Perak Man at the Gua Gunung Runtuh had brought increasing interest in the the Lenggong valley and led to the inclusion of Lenggong valley in the UNESCO's heritage sites in 2012. Other

caves included Gua Puteri, Gua Harimau, Gua Dayak, Gua Teluk Kelawar, Gua Ngaum, Gua Kajang, Gua Tarzan, Gua Ular, Gua Memerang, Gua Asar, Gua Gelap and Gua Gelok.

### **Community's Perspective**

Many respondents acknowledge the tourism potentials in Lenggong and are very hopeful that the UNESCO's recognition would make Lenggong a well-known tourist destination in the future. A community leader from Kota Tampan expressed his dream for Lenggong stating that..

*“pertama Lenggong dikenal, seperti mana orang sebut kota Paris, seperti mana orang sebut Istanbul, seperti mana orang sebut Mesir, Iskandariah, seperti mana orang sebut Kashmir, Angkor Wat, sepertimana orang sebut Greece... ‘now’, orang sebut Lenggong... Lenggong masuk dalam peta sejarah dunia”*

“firstly Lenggong is known, just like people talk about Paris, just like people talk about Istanbul, like people talk about Egypt, Iskandariah, like people talk about Kashmir, Angkor Wat, like people talk about Greece.. now, people talk about Lenggong... Lenggong is included in the world historical map”.

Based on the respondents in this study, many agreed that cooperation is the most crucial aspect in managing rural heritage landscape while promoting tourism potentials in the area. Respondents also highlighted that participation from the younger generation is vital. In general, the community acknowledged that even though development is needed, it must be well planned to avoid damage on the heritage landscape. The identity of the rural area must be preserved for the future generations. An elderly male respondent, aged 86 years from mukim Lenggong has suggested “*kawal pembangunan* (control the development)” as it is important to preserve the heritage. Similarly, a 22 years old male respondent from mukim Lenggong suggested that “*majukan kampung dengan pembangunan terancang* (develop the villages with planned development)”.

### **RECOMMENDATIONS AND CONCLUSION**

The relevant authorities at the local level must collaborate and also cooperate with the residents in managing the landscape and creating tourism opportunities. Effective management of resources and development is also important. Even though some of the development needed in the rural landscape area, it must be well planned. It is vital to make sure that the development does not destroy the landscape or identity of rural areas. Campaign or promotion of rural heritage may help to save or maintain the rural landscape in Malaysia. This program helps to improve understanding and awareness among the community. Examples of programs are talks, seminars and also visits to the rural heritage areas.

The conservation – development dichotomy is a major issue facing the rural landscape. Therefore, values of the heritage, resources and culture from the community's perspective should be considered in land use planning policy and practice. This study is part of an initial effort in understanding the role of community in planning and managing rural landscapes and potential cultural tourism resources. Studies like this will be helpful in determining approaches in conservation practice in Malaysia. Proper heritage conservation efforts would be a step forward in promoting cultural tourism in the rural areas.

### **ACKNOWLEDGEMENT**

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# **HANDICRAFT AS TOURISM PRODUCT: THE IMPORTANCE OF SUPPORT CONTEXT TO SMALL HANDICRAFT ENTREPRENEURS IN SABAH.**

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## **ABSTRACT**

Recognition of the role of handicraft as the most popular tourism product that has been contributed to the economy of Sabah has resulted in a proliferation of support services from the government and other institutions to assist the growth of the business. However, the evaluation of the effectiveness of support services have been focusing more on the level of business performance, sales and profit. There is still lack of studies on how different external support helps entrepreneurs in different ways, suitable for their level of performance. Therefore, drawing upon the findings of structured interviews among 210 handicraft producers in Kota Belud, Sabah, this paper contributes evidence about the significance of support services to small handicraft entrepreneurs and the impact on their business performance. In addition, this paper hopes to provide insight to the Malaysian government to improve support measures that are accurately tailored, by providing the right supports to the right entrepreneurs.

*Keywords: Handicraft, Support Context, Business Performance*

## **BACKGROUND TO THE STUDY**

Tourism contributes as the second largest income to the economy of Sabah, after agriculture sector, in which cultural-based good segment like handicrafts, food and village stays are now the key contributors of the tourism-related product (Ninth Malaysia Plan, 2010). Based on the data on tourist expenditure on tourism products in Sabah, shopping for handicraft is the most demanded product by domestic and international tourists (Sabah Development Corridor, 2008). For that, there have been many initiatives or policy measures the Malaysian government has put in place to enhance economic development in Sabah, especially to encourage and facilitate the local people on how to earn cash income from small-scale handicraft production, especially in rural Sabah.

One of the initiatives under the Sabah Tourism Plan is to encourage rural participation in community-based tourism. This program is especially targeted to poor households in rural areas intending to participate in the village-stay program, small-scale food production and handicrafts production under the One District One Product (ODOP) program supported by the taskforces, i.e. Ministry of Tourism, Culture and Environment, Ministry of Rural Development of Sabah, Ministry of Industrial Development and Malaysian Handicraft Development Corporation (MHDC). These taskforces provide assistance in the form of advisory services on production, quality control, packaging and product designs, market opportunities and start-up grants, as well as funds for business upgrading for communities interested in ODOP production full-time. In particular, the Malaysian Handicraft Development Corporation (MHDC), under its Craft Entrepreneur Development Program has

introduced the Craft Incubator Scheme aimed to develop skills in handicraft production and instil participants to engage in commercialised production on a full-time basis once they completed the training.

Nevertheless, despite the government's aim to encourage formal commercialisation of handicraft production with the financial and technical supports it has put in place, the vast majority of handicraft producers in Sabah remain as home-based and part-time producers (Noor, Kamarul & Juliana, 2012). Acknowledging this issue, and knowing the variety of supporting mechanisms and policies that exist for handicraft development in terms of funding schemes, physical infrastructure, advisory services and training, this paper discusses from both literature and empirical study about the type of support context that are importance to handicraft entrepreneurs and in what way it may contribute to their business performance.

### **Contextual Factors Influencing Start-up and Performance**

Many studies of entrepreneurial development propose that the meaningful value of personality traits in the course of commercialisation is only possible in conjunction with additional influencing factors in the founder's environment (Korunka, et al, 2003; Lee & Tsang, 2001; Baum & Locke, 2004; Frank, et al, 2007). Gartner (1985) highlights a range of infrastructural factors important to new venture creation, like availability of skilled labour, accessibility to transport, accessibility to customers and new markets, and availability of financial resources. In fact, many studies have demonstrated the importance of availability of resources, such as raw materials (Berma, 2001), financial (Berma, 2001; Chan, 2005, Korunka, et al, 2003), technically skilled labours or helpers (Roberts & Robinson, 2010) and market opportunities (Cooper, 1981) as factors that may influence the development and growth of an enterprise.

A number of studies in this literature find that external factors, in particular, have significant role in contributing to the performance of small rural entrepreneurs. For example, two influential factors which are often mentioned in the literature are government assistance for entrepreneurial development (Yusuf, 1995; Sarder, et al; 1997; Kader, et al, 2009) and social/family networking (Honig, 1998; Chan, 2005; Bhagavathula, et al, 2010). Nevertheless, internal factors like personality traits, skills and motivations are also found to contribute to performance.

Yusuf (1995) in his study of entrepreneurs in the South Pacific region found that government assistance was more crucial to local small entrepreneurs than in-migrant rural entrepreneurs. He asserts that this is because the in-migrants have greater external exposure, for example, overseas experience and established business networks, than the local entrepreneurs, which allows them to have a greater experience and resources to draw from. Dhamija (1975) also found government support was critical for entrepreneurial development in rural areas, in particular subsidies for tools and equipment, and technical guidance on marketing and finance. Likewise, Kader, et al (2009) found rural entrepreneurs rated the training and education they received through government assistance as key factors for their development. This is similar to the early work of Sarder, et al (1997) on small enterprise support in Bangladesh, which found that entrepreneurs attendance in technical training like marketing, management and accounting contributed to significant increases in sales, employment and productivity. These studies provide insights that government assistance for facilities/infrastructure, especially for access to resources (financial, technical knowledge and skill) is critical to local entrepreneurs in rural areas.

Many studies highlight the importance of social networks amongst rural entrepreneurs to the start-up and growth of their enterprises. Family and friends are widely mentioned as sources of resource, like financial capital (Honig, 1998; North & Smallbone, 1996; Chan, 2005), labour (Berma, 2001; Kodithuwakku & Rosa, 2002) and knowledge/skills (Berma, 2001; Bhagavathula, et al, 2010). Honig (1998) asserts those entrepreneurs' networks with extended family and community-based relationships are likely to increase the establishment and growth of enterprises through the accumulation and utilisation of resources, especially credit. Chan (2005) also finds small business owners in rural Malaysia typically rely on informal social networks, especially family and friends, as sources of financing. Bhagavathula, et al (2010) in their study of textile weavers in India, find family and friends are the main source for obtaining resources, especially financing, at the initial start-up phase. Social networks are also used to find labour.

A number of studies mention lack of skilled labour as one of the main reasons why small enterprises in rural areas are not so well developed compared with those in urban areas (Kalantaridis & Bika, 2006; Shaolian, 2000). Berma (2001) explains that handicraft producers depend on their family to take up handicraft production when they are unable to find labour. Similarly, Kodithuwakku and Rosa (2002) find rural entrepreneurs' use social contacts like, family, friends and villagers as sources of labour and credit. Some studies mention the importance of the social network as a source of human capital, i.e. knowledge and competencies likely to have an impact on performance. Bhagavathula, et al (2010) identify that relationships with family (social capital) mediate the impact of knowledge and skills (human capital) towards resource mobilisation and opportunity recognition among textile weavers in India.

Besides family and friends, some studies highlight how rural entrepreneurs also develop networks with intermediaries and other entrepreneurs or organisations in their surroundings for better market opportunities. Kader, et al (2009) found rural entrepreneurs rated the establishment of good networks with wholesalers and retailers to penetrate niche markets as one of their success factors, though business technical skills were also rated as important. Berma (2001) highlights how handicraft producers in rural Kapit, Sarawak, sought advice from fellow crafts persons of the prices they should charge for their handicrafts. Kodithuwakku and Rosa (2002) found rural entrepreneurs coordinated with traders and middlemen to share information about customer and competitors. Lerner, et al (1997) in their study of factors influencing the performance of women-owned enterprises in a developing country, found that network affiliations like membership of social or trade associations provided potential markets for their products and services, thus increasing profitability. These studies imply that network affiliations contribute to some aspects of human capital (knowledge and competencies) which may influence the development and performance of small and handicraft enterprises in a developing country context. Walker and Brown (2004) in their studies on success factors for small business owners found non-financial motivations like independence and flexibility influence people to go into small business ownership. He also found that entrepreneurs who are motivated by their own flexible lifestyle like enjoy doing things in their own time tend to sustain in their business although in a modest level.

Overall, these factors drawn from literature suggest that other than person-related factors, external context in the entrepreneur's surroundings, including support, resources and opportunities may contribute to the development and growth of an enterprise. Therefore, acknowledging these factors in the literature, this study proposed seven variables of support context as likely to influence handicraft entrepreneurs towards their levels of

commercialisation and performance, namely (1) family/friends support, (2) government support, (3) access to finance, (4) access to reliable workers, (5) access to raw materials, (6) access to market/sales opportunities, and (7) flexibility of time for production.

### **Research approach and analytical techniques**

Undeniably, good quantitative research practice has been always strongly associated with random or probability sampling in order to gain representativeness of a sample to a population, which later contributes to the generalisability of findings. Nevertheless, in actual research practice, probability sampling might not always be preferred, especially when it is perceived as difficult due to limited resources available to the researcher, for example time and cost constraints. However, the avoidance of probability sampling is not only based on limited resources, in fact, non-probability sampling is considered an appropriate approach if it is reasonable in terms of its purpose (Bryman, 2004). It is found that non-probability sampling, like convenience and snowballing, is claimed by some researchers to be almost as good as a probability sample (Bryman, 2004). This is because non-probability samples are often purposive in nature, i.e. to capture those respondents who have met predefined criteria of a study. Therefore, this study used convenient sampling in selecting and recruiting the samples for the survey.

Kota Belud district was chosen as the geographical area for this study since the district contains the largest number of handicraft producers in Sabah, thus, it was a suitable and convenient site in terms of getting access to a large number of respondents. Out of the 682 handicraft producers in Kota Belud district listed in MHDC census (2010), only 338 names were potential contacts, due to incomplete and outdated contact details of the remaining names, especially their phone numbers. These 338 producers were scattered across 13 villages in Kota Belud. Within each of these areas, the researcher contacted producers based on , and surveyed as many as possible given time and manpower constraints. Nevertheless, out of the 682 handicraft producers in Kota Belud district listed in MHDC census, only 338 names were potential contacts, due to incomplete and outdated contact details of the remaining names, especially their phone numbers. These 338 producers were scattered across 13 villages in Kota Belud. Within each of these areas, the researcher contacted producers at convenient, and surveyed as many as possible given time and manpower constraints. Within this, full-time/part-time status and income were used as further sampling criteria, whereby the researcher aimed to survey approximately 50 respondents who were full-time, higher income, 50 respondents who were full-time, lower income, 50 respondents who were part-time, higher-income and 50 respondents who were part-time, lower income.

All the potential respondents were first contacted via phone calls, asking whether they would like to participate in the survey. For representativeness purposes, a few screening questions were also asked, especially relating to whether they were still part-time or full-time producers, and whether they were government assisted or not. Unexpectedly, an additional ten respondents were gathered through several walk-in interviews in a weekly market and handicraft exhibition in a shopping complex. The whole process led to 210 producers being surveyed in total. Face-to-face structured interviews with all respondents were conducted personally by the interviewer. All responses from respondents were recorded on a hard copy questionnaire by the interviewer and some photographs were also taken. Interviews were conducted at each responden's preferred place and time, thus not all interviews were conducted at respondents' houses, instead some took place at their shops, workshops, at government incubators, or when they were at the weekly market.



The main analytical techniques used were: (i) descriptive test to explore the kind of external support experienced by the entrepreneurs, (ii) cluster analysis to explore the type of handicraft entrepreneurs based on their level of business performance (iii) One-Way ANOVA to explore significant support context to each type of handicraft entrepreneurs.

## FINDINGS

The descriptive test revealed that nearly three-quarters of respondents stated that they had received external support. Half of them claimed government agencies were the main source, followed by family/friends and non-government agencies. The results showed a much greater proportion of respondents who have been supported by the government agencies received direct assistance, substantially in terms of technical skills, marketing and production and a very small number of them claimed to receive financial assistance. It is also interesting to note the differences that respondents revealed between the sources of help and support they use, i.e. family and friends were mainly used as a labour resource, and most often this was informal and unpaid. Meanwhile, the government agencies were most often sought for help in acquiring capital items.

The two-step cluster analysis identified three clusters of respondents based on the four inputted variables – (i) sales turnover, (ii) profit, (iii) status of business (full-time/ part-time) and (iv) location of business (premises). Cluster 1 – “high performance full-timers” (38 percent of the sample) were all full-time, evenly split between home-based and workshop-based production, and earned the highest sales turnover and profits. Cluster 2 “part time professionals” (26 percent of the sample) were almost all part-time and non-home based, earning medium sales turnover and lowest profits. Cluster 3 “part-time home workers” (36 percent of the samples) were entirely part-time, home-based, with lowest sales turnover but medium profits. The validity of the cluster membership was tested using discriminant analysis with acceptable level of accuracy more than 70% of the predicted group. Table 1 summarises the cluster profile.

**Table 1:** Cluster Profile Summary (n=210)

Key Performance Variables	Cluster 1 “High- performance full-timers” (n=80)	Cluster 2 “Part-time professionals” (n=55)	Cluster 3 “Part-time home workers” (n=75)
<i>Performance</i>			
Annual Sales Turnover (Mean)	RM 11, 053	RM 7,685	RM 4,285
Percentage of Annual Profit (Mean)	64%	58%	60%
<i>Status</i>			
1. Part-time	0	53	75
2. Full-time	80	2	0
<i>Premises</i>			
1. Own home	36 (45%)	1 (1%)	75
2. Own workshop	27 (34%)	11 (20%)	0
3. Government workshop	17 (21%)	28 (51%)	0
4. Parent’s house	0	8 (15%)	0
5. Neighbour’s house	0	7 (13%)	0

The results of Univariate Analyses (One-Way ANOVA) showed the clusters exhibit significant differences on three variables of support context, namely government support, access to finance and access to reliable workers. Table 2 shows the results of univariate analysis. In terms of respondents' profile, One-Way ANOVA tests revealed significant differences between the clusters in terms of their education level, and whether they had attended courses in an incubator. In most of these, the key differences were between Cluster 3 and the other two clusters. Namely, Cluster 3 members were more likely to have a lower education level and not former trainee in incubator, compared to Cluster 1 and Cluster 2. The education result fits with previous studies which propose a relationship between education level and entrepreneurial development (Davidsson & Honig, 2003, Kader, et al, 2009). The result on incubator attendance also fits with studies which find that non-growth enterprises have limited attendance at training programs compared to the growth enterprises (Holmes & Zimmer, 1994; Totterman & Sten, 2005).

In terms of support contexts, the results of the One-Way ANOVA tests revealed significant differences between clusters in terms of their ratings of government support, access to finance and access to reliable workers. For government support and access to finance, Cluster 2 members were most likely to agree that they received government support in handicraft production, whereas Cluster 3 members were least likely to agree with this aspect. This is a logical result, as Cluster 2 members were mostly ex-incubatees, who had received a lot of support in terms of training and financial assistance to start handicraft production. In comparison, it is logical that Cluster 3 respondents, being part-time home workers, could feel that they received little official help or support. In terms of access to financial resources, Cluster 3 respondents were least likely to agree they had access to finance for handicraft production. Like the previous result, it is logical that this type of producer would rate access to finance so lowly. In terms of access to reliable workers, Cluster 2 respondents were most likely to agree with this, whereas producers in Cluster 1 and Cluster 3 gave almost identical ratings on reliable workers. This interesting result suggests that producers who attended an incubator prior to starting their handicraft enterprise may be able to find labour in ways that other groups cannot. Smilor and Gill (1986) found that an incubator not only offer support services, and technical and business consulting services, but also allows continuing contact with other trainees or entrepreneurs. This provides better opportunities to access other producers in the same area, to help them in their operation. Table 2 shows the results of univariate analysis of support context of handicraft entrepreneurs.

**Table 2:** Results of Univariate Analysis of Support Context of Cluster (n=210)

<b>Independent Variables</b>	<b>Cluster</b>	<b>N</b>	<b>Mean</b>	<b>Significance Level</b>
<b>A. Personal Background</b>				
Age	1	80	3.98	0.079
	2	55	3.64	
	3	75	4.21	
Gender	1	80	1.73	0.300
	2	55	1.74	
	3	75	1.83	
Family Status	1	80	2.29	0.502
	2	55	2.33	
	3	75	2.21	
Education**	1	80	2.65	0.005

	2	55	2.71	
	3	75	2.31	
Training in Incubator***	1	80	1.62	0.000
	2	55	1.88	
	3	75	1.43	
Parents running a business	1	80	1.28	0.392
	2	55	1.24	
	3	75	1.35	
<b>B. Support Context</b>				
Emotional support from family/friends	1	80	4.00	0.882
	2	55	3.98	
	3	75	4.03	
Technical support from family/friends	1	80	3.89	0.880
	2	55	3.95	
	3	75	3.91	
Government support***	1	80	3.57	0.000
	2	55	3.64	
	3	75	2.94	
Access to finance**	1	80	3.06	0.010
	2	55	2.88	
	3	75	2.60	
Reliable workers*	1	80	2.91	0.023
	2	55	3.29	
	3	75	2.90	
Access to raw materials	1	80	2.98	0.285
	2	55	3.14	
	3	75	2.83	
Sales opportunities	1	80	3.32	0.150
	2	55	3.24	
	3	75	3.03	
Lifestyle flexibility	1	80	3.96	0.432
	2	55	4.00	
	3	75	3.90	

Convention is \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

## CONCLUSION

This paper provides recommendations to government and related supporting agencies on how to increase the effectiveness of support to handicraft production in a Malaysian context. Despite government encouragement for formal commercialisation (full-time, workshop production) among small-scale, craft-related enterprises in Malaysia, the vast majority of handicraft production in Sabah is home-based, mainly on a part-time basis. The evidence from this study revealed that part-time/home-based production is highly favoured among handicraft producers in rural Sabah because of the challenges and risks arising from being full-time or producing in a workshop, especially in terms of resources and management skills needed to take-up this so-called 'formal commercialised' production. In addition, part-time/home-based production is seen as convenient and flexible to fit around household work. Findings of this study also showed in relation to perceptions of external support, the workshop-based producers perceived they received satisfactory levels of support from government agencies

and access to reliable workers, while full-time producers tended to have positive perceptions towards access to finance.

In conclusion, this study has found that for many producers, handicraft production can generate good returns, and these producers can receive incomes comparable to production operators in the manufacturing sector or clerical workers in the government sector in Malaysia. By employing other villagers and linking handicraft production to homestay initiatives and tourism, wider economic benefits can also be generated. However, there is a proportion of handicraft producers who generate very low incomes. If those incomes are the household's main source, it is not financially viable for these producers to stay in handicraft production. The government needs to identify such producers and encourage alternative kinds of employment.

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# SERVICES MANAGEMENT

# **AN INTERPRETIVE STUDY OF HOTEL OPERATIONAL MANAGEMENT ISSUES IN MALAYSIA: MANAGERS' PERSPECTIVE**

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## **ABSTRACT**

This study presents an analysis of the challenges faced in managing hotel operations in developing countries with special references to Malaysia as a part of the developing world. Past literature in the area of hotel management issues were mainly exploratory in nature, however, deeper understanding of hotel operational management issues and how it occurs is still lacking. Descriptive findings of this study could enhance hotel managers' problem solving skills as well as to path new directions for future empirical studies. In-depth interview with 26 hotel managers were conducted in understanding their respective challenges and possible reasons to such incurrence. It was found that the challenges in managing hotel operations were poor staff productivity, maintenance of up-to-date facilities, managing foreign employees, poor employee retention rate, and managing shareholders' expectations. Factors to these challenges are related to poor recruitment and staff development practices, no revision of standard operating procedure, unsupportive working environment, ineffective management of emotional labour, owners' intervention in operational decision making, and heavy reliance on outsourced manpower.

Keyword: Hotel Management, Hotel Operation, Hotel Issues, Hotel Challenges

## **INTRODUCTION**

Hotel industry is said to be a complex industry due to its business natures whereby it offers both tangible and intangible products to customers and provide a range of facilities and services in various departments (O'Shannessy & Minett, 2003). Besides, hotel industry also relies extensively on seasonality which even complicates business management and operations. Due to its complexity, many hotel operators' encounters issues in operating their business ranging from human resources related to product and service quality associated.

In a study, Dube & Renaghan (2000) explained that market complexity and the nature of hotel product makes hotel attributes (e.g. hotel facilities and service quality) as important factors in sustaining and maintaining daily performances. It is also mentioned that any failure in putting attention into hotel attributes will resulted in lower opportunity of repeat business. In respond to such significance, past researchers (e.g. Duncan, 2005; and Riegel, 2002) in the area of understanding hotels' operational challenges have developed an important framework in conceptualizing issues and challenges in relation to managing hotel facilities and services. However, out of these challenges, only human resource management issues were the most tested and further explored. Besides that, the existing knowledge about hotel challenges were still lacking in generalization. Environmental factors such as government policy, socio-cultural variance, organizational and consumer behaviour differences could results in whole new dimensions of challenges in managing hotel operations.

Hence, the purpose of this study is not only to explore a more contextual challenges faced by Malaysian hotel operators but also to interpret those challenges in respect to the effects and

causes. Operational management issues will be the focus of this study. In regards to this study, operational management issues can be defined as the concerns or challenges faced in managing the production and delivery hotel goods and services.

## **METHODS**

The data gathering technique used is in-depth interview. Marshall and Rossman (2006) stated that the interview method is considered suitable for collecting behavioral data and this is the technique most commonly used among qualitative researchers to gather information. In addition, pointed out that in-depth interview seeking to probe more deeply than an interview questionnaire. Using in-depth interviews encourage respondents to explain and clarify their response (Veal, 1998).

A purposive sampling method was adopted. The sample size consisted of 28 hotel managers in west Malaysia (Selangor, Kuala Lumpur, Pahang, Kedah, and Penang). These respondents are chosen based on the hotel star rating (4 and 5) which used as an indicator of business scale and operational complexity. Other than that, these managers are also responsible for the main functional areas in a hotel operation namely the front office, housekeeping, food and beverage. The respondents were contacted using e-mail and phone. Once they agreed to become a respondent, an appointment for interview was made. In-depth interviews, based on open-ended semi structured questions, were conducted face-to-face between respondents and researchers. Two main questions were asked: 1) What are the most concern issues in managing your respective operation? 2) What would be the possible reasons to these matters?

A total of 28 interview transcripts were examined using a qualitative phenomenological approach. Coding was carried out grounded on significant meaningful reports that produced themes associated to the research questions. Key themes and patterns emerged from the coding process. The interviewed responses were analysed by drawing out the key themes and variables relating to the descriptive themes – specifically, operational issues and reasoning encountered by hotel operators. The main issues and reasoning identified from the transcripts were grounded in respondent's own explanations, which is consistent with inductive analysis. Therefore, this increases the consistency and validity of the study.

## **FINDINGS**

The issue of low productivity among the hotel front-liners was highlighted by the majority of the respondents. Hotel managers commented that slow responsiveness, inattentiveness, rudeness, emotional, unwillingness, no sense of urgency and laziness are the main characteristics observed in many incompetent hotel employees. Besides that, it is also considered that this individual incompetency could directly affect the team spirit and dynamic of other front-liners and eventually results in service failure. Evidently, analysis of poor comments drawing from the Tripadvisor.com in specific to the selected hotels in this study also showed a similar concern. According to the Tripadvisor review, many guest shares their disappointment towards the service standards (e.g. poor and sluggish customer service) in those hotels. The following are some of the interview responses showing the issue of incompetent workforce:

*“Slow responsiveness and inattentiveness are the two common negative attributes we have in our employees.”*

*(Interview informants 1, 5, 8, 10, 12, 15, 20, 21, 22, 25 & 26)*



*“Bad attitudes, show unwillingness and show no urgency in work especially among the local employees.”*

*(Interview informants 2, 4, 7, 9, 11, 16, 18, 19, 24)*

*“Always looking for shortcuts and not fully compliance with the standard procedures set by the management.”*

*(Interview informants 3, 6, 13, 14, 17)*

#### *a. Leniency in Human Resource Recruitment Practices*

The struggle between sufficiency and competency of manpower that causes leniency in hotel recruitment is the main reason contributing to the issue of poor employees' productivity, according to the comments gathered from the interview. The rationale being that the current skilled labor market is scarce and high turnover rate which causes unbearable cost of training for new staff development. For example, holiday seasons and occasional functions that normally require significant pool of workforce are cautiously arranged in a contractual and timely basis. Hence, part-timers, seasonal contractual staffs and outsourced services that have little understanding about the industry and the hotel's standard operating procedure are the main remedy to this instantaneous request. The following are some of the interview responses showing their reasoning in relation to leniency in HRM practices:

*“many skilful hoteliers are now in countries like Macau, Dubai and Singapore, what is leave in Malaysia is what we can recruit.”*

*(Interview informants 1, 5, 8, 10, 20, 21, 22, & 26)*

*“is not easy to recruit skilful manpower yet willing to work with relatively low salary, many times we shortlist base on availability rather than competencies.”*

*(Interview informants 2, 4, 7, 9, 18, 19, 24)*

#### *b. Ineffective Standard Operating Procedures (SOP)*

Many have said that service failure are mainly caused by weak enforcement of S.O.P compliances among the workers, however, this study reviews that weak S.O.P development which doesn't correspond to the changes and variance in workplace organization and the need of the hotel guest is the main reason of low acceptance among the workers. The following are some of the interview responses viewing their thoughts about ineffective S.O.P:

*“Some S.O.P is just too rigid and too lengthy to follow, this discourages many to follow.”*

*(Interview informants 4, 8, 10, 17, 21, 22, & 23)*

*“Standards are not flexible enough to tackle ever changing situation in our operation”*

*(Interview informants 2, 5, 7, 9, 18, 19, 24)*

#### *c. Heavy Workload and Ineffective Motivational Practices*

According to the interview, heavy workload is an on-going issue in the hotel industry and yet there is no definite solution to it. This issue will be worsened when peak season and high turnover happen at the same time. This workload did not only specify the number of tasks that required to be performed (e.g. multi-tasking), but also other working condition such as emotional labors requirement (e.g. requirement to manage emotions during working period) and long working hours. Furthermore, many chain and franchised hotel operations practice complex-manager program whereby one employee are required to manage centralized duties for few properties within the closest network. These working conditions not only create

pressure on employees' mental and emotional condition but also their physical condition due to the requirement of frequent mobility from one property to another.

In remedy to such sacrifices and stresses, many hotels are merely relying on monetary rewards and career development opportunities as their motivational tools in retaining their workforce. However, only a few are attracted while majority are not. The following are some of the interview responses showing their reasoning:

*“is hard to demand more when they are tired because of long working hours.”*  
(Interview informants 1, 3, 5, 8, 9, 10, 17 & 21)

*“there is no effective mechanism in place to motivate them in fulfilling the company's goal”*  
(Interview informants 2, 4, 5, 7, 9, 18, 19, 20, 21, 22, 23, 24)

#### *d. Technology Shock & Technology Deficiency*

Nowadays, the implementation of technology in hotel operation is a necessity to allow advancement in the system which would help to improve work effectiveness & efficiency, to improve productivity, and to reduce employees' workload (e.g. administration tasks). However, the feedback shows that the adoption of technology in hotel operations may also cause low productivity or reduced in employees' productivity. The following are some of the interview responses showing their reasoning:

*“it takes time for our front office attendants to pick-up new version of PMS.”*  
(Interview informants 1, 2, 3, 5, 8, 9, 10, 11, 13, 15, 17 & 21)

*“with the global distribution system and many booking intermediaries, it makes coordination much more difficult and it can be very tedious. ”*  
(Interview informants 4, 6, 7, 9, 18, 19, 20, 21, 22, 23, 26)

#### *e. Non-conducive Working Environment*

Poor working environment is also mentioned to be related to the job performance of the employee. Based on managers' comments, the availability, conditions and quality of staff facilities such as hostel, cafeteria, locker rooms, and rest room etc are far from ideal. In comparison to their others hotel properties in neighboring countries (Singapore, Thailand, Indonesia and Vietnam etc), staff facilities in many Malaysia's hotel properties are under managed. Under capacity of shared resources, and poor staff meal is the most area of concerns. Due to this inadequacy of space, many employees are struggling for seat in the cafeteria during lunch hours or forced to stand-up while consuming the meal. Other than that, social relationship between employees is another factor that contributes towards poor working environment. The following are some of the interview responses showing their reasoning:

*“how to be cheerful and energetic if our staff don't even have good place to rest and good food to eat.”*  
(Interview informants 1, 2, 3, 11, 13, 15, 17 & 21)

*“relationship between us (the management team) and our front-liners are crucial to created pleasant and cooperative working culture. ”*  
(Interview informants 4, 6, 7, 9, 18, 19, 20, 26)

#### *f. Emotional Labor and Occupational Stress*

The issue of occupational stress is no longer a rare issue in the hotel industry. Many international hotels are implementing quality control to ensure its performance and continuously required employees to deliver service excellence. However, there is lack of supports from the management on how to handle such stringent requirements physically, mentally and emotionally. It was recorded that many hotels are still relying on cognitive understanding as a measure of employees' readiness in execution of their respective standards set. Hence, training and development for employees in respect to quality standards are mainly focus on "what to do?" and not "how to do it sustainably?" The following are some of the interview responses showing their reasoning:

*"putting a smile while being scolded by hotel guest is not easy, you can find our yourself crying at the back of the office"*  
(Interview informants 2, 3, 10, 13, 15, 16 & 23)

*"is not easy to put up a good show when you started the day with bad things happened. "*  
(Interview informants 4, 6, 7, 9, 17, 19, 21, 25)

Other than newly established hotel which period around 1 to 3 years old, most of the hotels are receiving complaints regarding the appearance, standards, and functionality of hotel facilities. Many complaints from Tripadvisor, Facebook, as well as direct complains from in-house guest are related to issue of poor and old room design that is neither up to guest expectation, nor matching with the hotel brand image. Though many hotel managers have realized the problem and the damages that might occurs, however as long as the investment budget is concerned, there is no further action can be taken to solve the issue.

Though hotel industry is a service industry, the existence and condition of guest rooms and other physical evidence are very crucial due to its position as hotel core product. Over the years, many hotels, such as; Grand Hyatt Tampa Bay and Hilton has done renovation in their establishment (e.g. guest rooms) with purpose to fit in current market trend and preference. However, this only happened when hotel property owners and hotel management agencies have the common understanding of such issue and its significance to re-establish the physical condition of the properties. In reality, many hotel owners are reluctant to carry out any major refurbishment until the property has reached a minimum of 15 years old. The following are some of the interview responses viewing the issue of maintenance:

*"building a hotel is tough but maintaining hotel is even tougher. "*  
(Interview informants 1, 2, 3, 11, 13, 15, 17 & 21)

*"we spent so much energy in maintaining the rooms and facilities however we can't prevent our facilities to get old and out of date. "*  
(Interview informants 4, 6, 7, 9, 18, 19, 20, 26)

#### *a. High Capital Investment*

First factor that contribute to issue of keeping up is the high capital investment requirement for hotel renovations and maintenance. Most of the Malaysian hotels are private owned property and this situation might have created financial support limitation towards the organization due to the reason that financial injection is done solely by owners' retained profit with little assistance from public funds. The high capital investment and the limited

source of financial are believed to be the main reasons that restrict the resort to conduct renovation. The following are some of the interview responses showing their reasoning:

*“it is very hard to convince our hotel owner to inject extra budget for refurbishment because that amount could cost few millions ringgit”*  
(Interview informants 2, 3, 11, 13, 14, 17, 18 & 20)

*“the investment for renovation is so huge that it only can be done on stages within a spread of few years. ”*  
(Interview informants 1, 5, 6, 7, 9, 18, 19, 25, 22)

#### *b. Lengthy Research and Development Process*

The process of research and development program takes years before the organization able to come out with the most appropriate ideas and prototype (market surveys, designs review, searching for contractor, logistic of supplies and compliance audit of rules and regulations etc). Besides, to enable the company to conduct an adequate research and development, it is important to preserve certain amount of capital to support the project. The duration and cost of research is then become another factors which hesitate organization to refurbish the establishment. The following is the response showing their reasoning:

*“the time used in compiling feedback and involvement in project consultancy work are just too long, sometimes we just lost of direction in mid ways”*  
(Interview informants 4, 6, 7, 9, 18, 19, 20, 26)

#### *c. Owner’s Intervention*

The issue of irrelevant and non-uniformity of room design and other hotel facilities are considered as a result from owners’ intervention in operational decision making. It is normal to see many micro decisions in relation to operational practices are being intervened and sometimes systematically structure as a channel of decision making in many Malaysian hotels. This organizational behavior is then become the foundation of many hotels in reluctances towards changes and involvement in operational decision making. This can be worsened if hotel owners are mainly driven by short-term gain and ignore the necessity of sustainability strategy. The following are some of their reasoning:

*“my hotel owner likes to involve in some operational decision such as room designs, amenities, and sometimes even the menu items in our restaurant.”*  
(Interview informants 1, 5, 6, 7, 9, 18, 19, 25, 22)

*“he always around the hotel and commenting on certain functional related matters.”*  
(Interview informants 4, 6, 7, 9, 18, 19, 20, 26)

#### **Communication barrier as the source of service failure**

According to the interview findings, the issue of language barriers has been existed in most of the hotel for a period of time. The problem of language (e.g. English) inadequacy is commonly found in housekeeping and kitchen department, as well as front office department. The issue of English proficiency often leads to misunderstanding and miscommunication within the organization. The repercussion of this misunderstanding often creates weak team dynamic and causes service failure notably when customers are dealing with housekeepers and front office attendants. The following are some of the interview responses pertaining to the issue:

*“common complains that we got are got to do with misunderstanding and poor response due to understanding.”*

*(Interview informants 1, 2, 3, 5, 6, 7, 9, 18, 19, 25)*

*“we find it difficult to train our foreign employees in accordance to our standards where they can't even fully understand our language command.”*

*(Interview informants 5, 6, 7, 10, 11 19, 26)*

#### *a. Outsourced Employees*

This issue rises mainly because the majority of the employees working in housekeeping departments are either outsourced from agencies which workforce are mainly from Indonesia, Nepal and Bangladesh or permanent employees from the local communities could not speak fluent English. There are few reasons which encourage organization, especially hotel industry to outsource their employees from other countries, such as; the opportunity to solve labor-shortage issue, the opportunities to seek expert workers and the reduction of labor-cost (e.g. by outsourcing skilled labor from other countries with lower salary standard, such as; Indonesia, Nepal, Bangladesh and Pakistan). As a result, most of the hotels especially the resorts hotel that are deserted from urban cities have often received complaints from guest with regards to poor English skills which often leads to slow responsiveness towards guest questions or requests. The following are some of the interview responses showing their reasoning:

*“communication failure is getting out of hand when we have so many foreign employees who could not fully understand English.”*

*(Interview informants 1, 2, 3, 5, 6, 7, 9, 18, 19, 25)*

*“many of our housekeeping staff now are Nepalese and Pakistani, they can speak Malay well but to English speaking hotel guest is problematic.”*

*(Interview informants 5, 6, 7, 10, 11 19, 26)*

#### *b. Little Attention to English Equipping Course*

The issue of English proficiency is worsened when most of the hotels don't even have any form of language equipping course especially for non-English speaking employees. Many managers commented that their hotels do aware of the importance of language equipping course however due to the concern of high training cost and availability of employees, it creates a barrier to run an effective and sustainable in-house language program. The following are some of the interview responses showing their reasoning....

*“English programme is something that is lacking in our orientation programme.”*

*(Interview informants 1, 5, 6, 7, 9, 18, 19, 25, 22)*

*“is not easy to create a schedule for your staffs which allow them to go for English workshop especially during peak seasons.”*

*(Interview informants 5, 6, 7, 10, 19, 20)*

#### *c. Negative Attitude towards English Speaking Group*

It is interesting to found out that there is a strong resistance among the non-English speaking employees towards learning English even though they are aware of the significance and enforcement by the hotel management. It is believed that the low educational background and

the limited exposure towards the usage of English are the main employees' limitation to improve their familiarity towards English. This condition is then become one of the foundation of language barriers issue in some of the hotels in Malaysia. The following are some of the interview responses showing their reasoning:

*“feedback from HR shows that they are not interested in coming to the lesson.”*  
(Interview informants 1, 5, 6, 7, 9, 18, 19, 25, 22)

*“the response rate is lower than 20% when comes to English workshop. Even we have tried to make it compulsory, they would find excuses to avoid the lesson”*  
(Interview informants 5, 6, 7, 10, 19, 20)

## **DISCUSSION**

There are three identified and elaborate issues, namely; the issue of incompetent workforce, the issue of “keeping up” and the issue of language barriers. An in-depth analysis was conducted with a purpose to explain the factors which contributes to the existence of the issues.

Many studies has shown that there is a close relationship between employees' productivity and company performances as employees' productivity is the key elements that assist the organization to produce quality product/services, positive financial performances (e.g. sales performance), customers' satisfaction, company growth as well as to build positive reputation for the company (Sigala, et al., 2005; Kefela, 2010; Sanchez, 2010). According to this study, the main contributory factors of low productivity among the selected hotels are: 1. Leniency in human resource recruitment practices; 2. Ineffective standard operating procedures; 3. Heavy workload and ineffective motivational practices; 4. Technology shock & technology deficiency; 5. Non-conducive working environment; and 6. Emotional labor and occupational stress.

In terms of recruitment strategy, Rueda & Haskel (2005) suggested that the relationship between skill adequacy and productivity is absolute, therefore, company with higher numbers of knowledgeable and skilled employees tend to be more productive and successful. Despite the significance and well-received understanding of this theory, in reality, hotel managers have taken the short-term recovery approach in dealing with labor shortage by ignoring the effort of critical selection and skill development.

Ineffective SOP could due to few reasons, such as; lack of expertise in the job area, excessively compound instructions and incomplete information. Some organization directs the task of SOP development towards HR department. This happened mainly to multi-national hotels which normally use S.O.P as a tool in quality control and service standardization in their global hotel networks. Nevertheless, the overly compound information has also creates issue whereby employees are burdened with the restrictions and complex guidelines which then lead to dissatisfaction and affects productivity.

As for working condition, poor working condition is highly de-motivating as well as dissatisfying. It is believed that, a non-conducive working environment will results in employees treating their job as burdensome and lost their sense of belonging, hence, perform averagely without any intention to create good impression towards the hotels' guest. Other than that, power distance is inevitable in many Asian countries, same goes to Malaysia. This will create a bonding issue between employees, mostly between management (e.g. managers

and directors) and rank and file (e.g. guest service agents and housekeepers) employees which caused by the existence of seniority. Lack of respect and no sense of team spirit are supposed to create poor work synergy and directly lead to productivity issue.

The implementation of technology might cause disturbance in productivity due to the existence of technology shocks (Christiansen, 2008). Technology shock happened due to employees' un-readiness and incapability to accept and utilized the technology. The implementation of technology could also affect the efficiency of work due to technology deficiency, such as; system breakdown with poor technical support. Those hotels which are distanced from their technical support center or internet coverage experienced greater impact in comparison to those hotels which are nearer to these facilities.

Lastly, the hospitality industry is a hectic industry which requires the employees to always perform excellence services. Here, the definition of excellence services did not limited in terms of attentiveness and responsiveness towards guest needs, but also the ability to perform prompt services, to manage their emotions, to work for a long hours and to perform multi-tasking. As the situation continues, employees are then started to develop occupational stress which in the end cause a reduction on work productivity as well as other social issues (Lo & Lamm, 2005).

This study suggested that it is very important for the hotel keep up with reasonable changes with regards to hotel facilities especially the room design with a purpose of being more competitive by meeting current market trend and preference. Hotel incapability in conducting changes pertaining to hotel facilities are mainly due to the domination of owners' decision in the business. This condition is a very common in Malaysia due to the existence of high power distance, seniority and inequality (Hofstede, 2013). In Weber's Theory of Social Class, it is mentioned that class and status indicates the manner in which society are related towards an ideology. Here, Weber definition of social class includes the existence of power, prestige and wealth.

Many hotel owners are perceived to have the highest power in any decision making disregard the area of expertise due to their power and wealth domination in the organization. In this context, traditional authority approach is seen to be the most appropriate domination technique, in which the organization (e.g. employees) believes in a well-established form of power which is absolute and should not be questioned. Nevertheless, business should not be dominated by one person (e.g. owner) and there should be a separation of power in decision making as concentration/domination of power might create issue of imbalance business outcome (e.g. profit and sustainability).

This study discovered that language barriers (English proficiency) are the third most concerned matters in the hotel operations. Many studies show that language barrier could create conflict within the organization and also the outside the organization (Kim & Mattila, 2011; Harzing & Feely, 2007). The main factor that contributes towards the language barriers issue is the practice of outsourcing labors from others countries. When company utilizes outsourcing strategy to fulfill their manpower requirement, the company will be benefited through the opportunity to reduce labor cost. Nevertheless, outsourcing will also bring issue towards the organization, such as degradation in quality of service, language and culture (Simon, 2010).

When organization experiences language barriers issues, employees will face difficulties in serving and interacting with guests. In such scenario, conflict might arise due to guest disappointment in service provided and lodge a complaint. Besides that, the issue in English proficiency might also cause individual psychological damages, such as; frustration, dissatisfaction and friction which gives great impact to employees' social situation (Harzing & Feely, 2007; Kim & Mattila, 2011; Rodriguez, 2006). This situation happened due to employee inability to express their feelings or difficulties to others.

According to Social Identity Theory negative attitudes might be formed due to people unavailability to identify certain cultural groups. In this case, employees might have a negative perception towards English language due to their unfamiliarity towards the language and unavailability to identify the importance of English in the industry. In the global industry and multicultural organization, employees are expected to be able to communicate in English as international language. According to the interview, there are few factors which could stimulate these negative attitudes, such as; low readiness level towards English, resistances to learn the language, employees do not think that English is an important resources for them and they do not have any intention/interest to learn the language.

## **CONCLUSIONS AND LIMITATIONS**

The findings of this research could contribute with new information within the field of hotel operations management, more specifically, in relation to hotel operational challenges. As illustrated in the literature review, the understanding of hotel challenges is significant to become a great support for hotel education development, hotel managers and investors' decision making. The findings from this research will enable hotel educators to adopt new skills and knowledge in improving the relevancy of their hotel management courses especially in the area of hotel operations management. Other than that, this knowledge will help alert the managers to design and manage their hotel operations in a more employee-centric manner. Furthermore, the findings also help to alert Malaysian hotel investors to realize the impact of owners' intervention in operational decision making could results in management tensions and ineffective decision making.

In limitation, the study only represents small pool of 4 stars and 5 stars hotel establishments in west Malaysia. Hence, findings from this study unable to generally represent the challenges faced by all sorts of hotel operations in Malaysia. Other than that, east Malaysian hotels are not covered in this study, hence, significant issues related to illegal immigrants and cross cultural impacts among the natives' rank and file employees and west Malaysian managers were not further established.

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# STUDY OF DEMOGRAPHIC AND MOTIVATION FACTORS TOWARDS TAKING A HOLIDAY FOR MALAYSIAN

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## Abstract

There are various factors that motivate people into travelling. Just as normal product consumers, tourists undergo several stages of decision making before finally come to conclusion on which destination they will go for. Although there has been numerous studies done on travel motivations, the latest Malaysians travel motivation are somewhat unknown. This study, therefore, will identify the latest demographic variables of Malaysians on their travel motives. In this study, it is important to understand if travel motivations are affected by the demographic variables of Malaysians which includes factors such as genders, age groups and income levels. A 17 items questionnaire was used to measure about 200 respondents on their traveling motivation. It shows that the motives such as 'to discover new places and things', 'to rest', 'to build relationships with my family', 'to see new cultures', and 'to mentally relax' are ranked as the most important motives for Malaysian for travelling. Others attractive reasons that were ranked at the top for travelling abroad are, 'to visit places that are different', 'to satisfy a sense of adventure', 'to visit beaches', 'to meet new friends', and 'to meet interesting people'. It was noted that there were significant different holiday motives based on gender differences in terms of "rest and relax". It showed that female students inclined more towards 'rest and relax' reason. Besides, this study had shown that the age groups too, would influence the perception towards attractiveness, where the concerned age group was from 20 – 29 years. The most significant attractiveness were "sport and adventurer" and "cultural visit" that can also be related to the previous study in which it looked into the perceptions of young visitors. Furthermore, based on the current findings, we can see that travel motives did correlate to each other. However, it was not so strong as after the correlation test, it showed only 'self-ability enhancement' was most related to 'sight-seeing', and the least related was in between 'rest & relax' and 'sight-seeing'.

## INTRODUCTION

Although there has been numerous studies done on travel motivations, Malaysians travel motivation are somewhat unknown. This study, therefore, will identify the demographic variables of Malaysians on their travel motives and if it corresponds with the activities and attraction that holiday destination has to offer. In this study, it is important to understand if travel motivations are affected by the demographic variables of Malaysians which includes factors such as genders, age groups and income levels. Then, it is also important to explore if the relationships between Malaysians' motivation to travel and the many attractions in the destinations. This is highly important as it may assist the destination to develop its marketing strategies and enhanced its deliverables to create a more competitive advantage.

## LITERATURE REVIEW

There have been many studies conducted to understand the various factors that affect traveler's motivation to visit a certain destination. Origin of a certain visitor can also affect its decision making based on its perception towards certain destination.

In the study by Mohsin and Ryan (2007), Indian students rated “to increase my knowledge” and “to see new cultures” were the first and third most important motives towards holidaying in New Zealand. General relaxation needs were the second most important motivation. Females tended to score more highly than males. Besides, it indicated that New Zealand was a potentially attractive destination for the sample but the tendency was to prefer more generic attractions such as visiting beaches, visiting places different to elsewhere and to satisfy a sense of adventure. However, motivations to travel to other destinations may differ. The results of factor analysis by Yousefi and Marzuki (2012) of a self-administered survey which included respondents’ background and their travel characteristics, indicating their agreement with statements describing their reasons for travelling abroad (push factors), and indicating their agreement with statements about destination attributes that drew them to Penang (pull factors), indicated that “novelty and knowledge seeking” and “cultural and historical attractions” were the most agreed upon push and pull travel domains for international tourists travelling to Penang, Malaysia. Joppe and Yun (2013) research showed that Indians prefer to travel that offers a clean and unspoiled environment, a variety of tourism resources with world famous sites, good value air fares, and easiness to get visa, security and safety.

Another study done by Mohsin and Alsawafi (2011), uses the theory of ‘push’ and ‘pull’ travel motivations to investigate holidaying attributes of Omani students studying at the Colleges of Applied Sciences, Ministry of Higher Education in Oman. The research indicates that gender differences have a significant impact on some of the travel motivations with relation to Omani travellers. In order to attract the Omani students, the destination needs to promote leisure packages to help mental and physical relaxations along with its unique characteristics to explore and enjoy. Secondly, pull factors include safety and security, natural attractions destination features that can enhance the interest of Omani travellers. And importantly, as they are Muslims, availability of mosque/place of worship along with Halal food and shopping should be aware of this and use it in their promotions in targeting not only Omanis but travellers from the Middle East in general.

As for the French tourists, five attributes were rated as the highest importance: the beauty of scenery, the welcome of people, the potential of discovery, good environment and tranquility. In this article, the research has categorized travel motivation into four types namely organized mass tourist, individual mass tourist, the explorer, and the drifter, differently positioning on a continuum (Meng, Tepanon, & Uysal, 2008). Tourist is more likely to choose destinations which are believed to best fulfil their internal needs or push factors.

Other than the fact that a particular geographical market perceived certain destinations differently, gender differentiation can also affects travel motivations. Based on a study done by Meng and Uysal (2008), it provided insights into gendered perceptions and nature-based tourism. Females has placed a higher importance on destination attributes such as natural scenery and recreational activities and are motivated by having a relaxing time as well as valuing security and prestige (self-respect). However, males seek challenging nature-based activities and more likely to enjoy action and adventure tourism experience and value fun and enjoyment in life. These different characteristics of male and female on their motivation to travel to a certain destination provides valuable information to any destination marketing organization to develop its marketing strategies to reach its target market

Similar study done by Murphy, Benckendorff, and Moscardo (2007) explore the links among tourists’ needs, brand personality perceptions, self-congruity and behavioral intentions and satisfaction. The research found that there are two distinct groups of traveler which are novel

learners and escapers. Novel learner's main motive is prominence on experiencing new and exotic destination, excitement and learning about people, places and new skills. They are younger, more likely to be international, and possible to get their information from other travelers. They were also significantly more likely to describe the personality of the regional destination as exciting and rugged. Meanwhile, outcome displayed that Escapers had lower scores on all the personality descriptors and the pattern of results suggested a less strong brand personality perception for this destination and not one closely matched to their desired holiday outcomes. To conclude, perceived brand personality must also counterpart the needs of the tourists. The relationship contributes to perceived self-congruity, which effect to more positive behavior on satisfaction level with a visit to the destination but not to intention to travel to the destination.

Boukas (2007) looks into the perceptions of young visitors towards the archaeological site of Delphi, Greece through the dimension of a series of attributes that illustrate the destination. Its research outcome illustrated that culture experience is one of most important motives for young travelers when they travel to Delphi. It indicates that young travelers emphasize on the authenticity of cultural experience although previously it is more significant motive for elderly traveler. In terms of overall satisfaction towards Delphi, the landscape of the site, the destination itself, and its monuments and history were the strongest position.

Prebensen (2005) did a study on the different manners of how visitors express the destinations that they have visited. While some uses country to depict the destinations, some puts a heavier weight on regions, islands or cities with no mention of the country itself which means certain countries do not have one single image. Marketing and branding will have to be executed wisely to manipulate this situation. Nonetheless, Scott, Laws, and Boksberger (2009), also highlighted tourism needs to embark on a more sophisticated phase in which the concern is to understand, appeal to and satisfy customers' tourism experiences rather than base business success on the perceived features of tourism destinations and products.

## **METHODOLOGY**

All respondents for this study were Malaysians aged 18 and older within Kuala Lumpur and Selangor. The survey was self-administered based on convenience sampling, 196 samples were collected. A survey questionnaire was developed and divided into 2 parts and finally an open ended question to receive comment to help the research. Section one included questions about travel motives and section two focus on the respondents' socio-demographic characteristics. Section one was rated on 7-point Likert scale.

The data analysis consists of three stages. First, factor analysis was perform to group the 17 items into 3 groups attitudes towards travelling motives, then reliability test was conducted to ensure consistency and stability in the results of a test. Independent t-tests were then conducted to compare gender differences on travel motives. Further details on the data analysis are explained in the findings.

## **RESULTS / FINDINGS**

In the aspect of respondent profile, the sample consist of 101 male (51.5%) and 95 female (48.5%). It is remarkable that majority of our respondent (83.7%) is in between the age of 20 to 29 followed by 16% for the age group of 30-39 years old and minority is the elderly group and teenage that below 20. In addition, it is logical that approximately half of the respondent has income level below average due to the reason which majority of respondent is student or

graduate that has a junior position in the company. Besides that, there are 67 (34.2%) of them has average income. (Refer to table 1-3 in appendix)

**Grouping of Travel Motives**

For the first section of questionnaire, there are 17 questions included in the first part of questionnaire to analyze the travel motive of respondent. It is important to establish relevant and accurate question in order to obtain results that is valid. Therefore, Cronbach Alpha reliability test is conducted to check on the internal consistency of the questions. According to Reynaldo (1999), Alpha coefficient ranges in value from 0 to 1 and used to describe the reliability of factors extracted from dichotomous questions, multi-point formatted questionnaires or scales question. The higher the score, the more reliable the generated scale is. For social science research, 0.7 has been recognized as acceptable coefficient. The overall reliability for 17 questions are 0.883 which indicates 17 questions are inter-related and reliable.

In fact, there are questions that measure on similar content for purpose of travel. Therefore, with the reason of establish a more organized understanding of travel motive, questions has been undergo factor analysis (results are not report, can be provided upon request) to group them together to form a theme. By using the reliability test and logic interpretative analysis from researcher, it has emerge three main travel motives such as rest and relax with Cronbach's Alpha score of 0.808 using 5 relevant questions; self-ability enhancement with Cronbach's Alpha score of 0.846, using 6 relevant questions and discovery and relationship building with Cronbach's Alpha score of 0.714, using 6 relevant questions. (Results can be provided upon request)

**Ranking of Travel Motives**

Table 4 shows the mean motivational scores for the sample that responded to the items. According to our classification, it can be seen that discovery and relationship motives (mean = 5.53) occupy the first, followed by rest & relax (mean = 5.51) in second, and then self-ability enhancement (mean = 4.92). When back to the overall scores, it can be noted that “to discover new places and things” (mean = 5.92), “to build relationships with my family” (mean = 5.82), “to rest” (mean = 5.82) are the top three motives travelling to destination choice considered by Malaysian. At the low end are self-ability enhancement motives relating “to use my imagination” and “to gain a feeling of belonging with places”, with mean scores of 4.62 both. It can be seen that the scores are skewed and all have means above the midpoint of the seven-point scale.

**Table 4: Mean Scores for Holiday Motivation**  
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Discovery and relationship building	196	2.00	7.00	5.5315	.93049
Rest & Relax	196	.80	7.00	5.5143	1.16461
Self-ability enhancement	196	1.17	7.00	4.9150	1.31845
Valid N (listwise)	196				

	Rank	Mean	Std. Deviation
S1_01 To discover new places and things in the chosen destination	1	5.92	1.208
S1_02 To take a rest away from work	2	5.82	1.517
S1_03 To build relationships with my close family	3	5.82	1.379
S1_04 To discover different cultures	4	5.81	1.337
S1_05 To relax mentally for a while	5	5.77	1.390
S1_06 To explore different ideas	6	5.67	1.417
S1_07 To relax physically	7	5.44	1.489
S1_08 To be closer with friends	8	5.38	1.489
S1_09 To enjoy good time with existing friends	9	5.37	1.629
S1_10 To be in a peaceful environment	10	5.34	1.601
S1_11 To learn new knowledge	11	5.34	1.555
S1_12 To avoid the busy daily life	12	5.19	1.726
S1_13 To be with others and make new friends	13	4.90	1.611
S1_14 To test my new abilities	14	4.77	1.819
S1_15 To imaging for new concept	15	4.62	1.786
S1_16 To gain a feeling of belonging with places	16	4.62	1.868
S1_17 To challenge my abilities	17	4.48	2.009

*T-test 1: Gender Differences & Holiday Motives*

Table 5 provides the scores by gender using an independent sample t-test. It can be noted that females possess a tendency to score higher than their male counterparts. The table indicates that differences were significant in only 5 items (“to mentally relax”, “to avoid the hustle and bustle of daily life”, “to relax physically”, “to be in a calm atmosphere”, and “to rest relating) categorized into rest & relax, with a significant level of 0.001. In other words, the result does not support the null hypothesis that female and male have similar travel motivations, meaning that there is a significant difference between female and male’s holiday motives. Besides, the t-test result of one variable “to increase my knowledge” is also considered to be significant.

**Table 5:** Gender Differences – Holiday Motive

**Group Statistics**

	S3_1	N	Mean	Std. Deviation	Std. Error Mean
Rest & Relax	Male	101	5.2436	1.25111	.12449
	Female	95	5.8021	.99295	.10187
Self-ability enhancement	Male	101	4.8119	1.36273	.13560
	Female	95	5.0246	1.26766	.13006
Discovery and relationship building	Male	101	5.4818	.90765	.09031
	Female	95	5.5842	.95615	.09810

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Rest&Relax	Equal variances assumed	3.430	.066	-3.44	194	.001	-.55854	.16199	-.8780	-.2396
	Equal variances not assumed			-3.47	188.7	.001	-.55854	.16086	-.8758	-.2412
Self-ability enhancement	Equal variances assumed	1.272	.261	1.12	194	.260	.21268	.18831	-.5840	.1587
	Equal variances not assumed			1.13	193.9	.259	.21268	.18789	-.5832	.1578
Discovery and relationship building	Equal variances assumed	.084	.772	.769	194	.443	.10236	.13313	-.3649	.1602
	Equal variances not assumed			.768	191.5	.444	.10236	.13334	-.3653	.1606

*Independent Samples Test*

## CONCLUSION

This research is a study about Malaysian attitudes towards selecting holiday destination. It shows that the motives such as ‘to discover new places and things’, ‘to rest’, ‘to build relationships with my close family’, ‘to discover different cultures’, and ‘to mentally relax’ are ranked as the most important motives for Malaysian for travelling. Accordingly, the most attractive reasons that were ranked at the top for travelling abroad are, ‘to visit places that are different’, ‘to satisfy a sense of adventure’, ‘to visit beaches’, ‘to meet new friends’, and ‘to meet interesting people’.

It was noted that there were significant different holiday motives based on gender differences in terms of “rest and relax”. It showed that female students inclined more towards ‘rest and relax’ reason. This finding is consistent with previous studies of Meng et al. (2008) and Mohsin and Alsawafi (2011). Those studies identified ‘relaxation and culture seeking’ as the most important motives to travel overseas. Additionally, those studies also revealed that the attractiveness to **travel abroad such as ‘to use my imagination’, ‘to gain a feeling of belonging with places’, and ‘to challenge my abilities’** were rated at the bottom of the motivational item list.

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# PREFERENCE FOR A LOW COST CARRIER (LCC) AS LONG-HAUL TRAVEL TRANSPORT BY TOURIST: A REVIEW

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## Abstract

Long-haul travel is gaining the attention of visitors in exploring new and unique experience. The offering of promotion and attractive packages are making long-haul travel a choice for travellers. Long-haul travel is synonymous with transport. The usage of low-cost carrier (LCC) for long-haul travel seems has gained popularity among the tourists. Price and promotion carried out are sometimes lower than that found by full service carriers. The purpose of this study is to measure the usage of LCC as an option for long haul travel by tourists to the tourism destination. For this purpose, a comprehensive review and discussion on previous sources which involved a variety of secondary data sources will be used to meet every need of the study objectives. Although the service offered is cheap, there are some problems faced by travellers to reach destination. At the end of the study, the use of LCC is based on tourists' motivation to travel to remote destinations that are influenced by factors of cost, distance and transportation options.

Keywords: *Low cost carrier (LCC), Long-haul, Transport*

## INTRODUCTION

People assume that the need to explore or find something new that is outside of their horizon, and those who did long-haul travel are to satisfy their intellectual need (Nicolau, 2008). According to Muller (1997) travel farther from home and unfamiliar surroundings is driven by desire to see more and to gained experience. The distance can be positive and negative influences (Nicolau, 2008; Harrison-Hill, 2000) which depend on the travel characteristics and individual (Sharpley, 2006). The desire to travel is based on transport mode selected for the trip such as physical, temporal, and financial. Based on the World Tourism Organization (UNTWO) the concept of long haul travel based on Dateline project comprises a minimum 100km journey (Goeverden, 2009). This long-haul travel often takes a long time and depending on the destination chosen by the tourists. However, long-haul travel by airplane involves more than 5 hours or travel distance of more than 3,000 miles travel destination (Boerjan, 1995). Letho *et al.* (2002) defines the long-haul travel as “travel in excess of four nights or more by plane outside of the international area”. This long-haul travel is encouraging tourists to travel, according to the campaign carried out by the LCCs that offer cheap and valuable airfare prices.

## LCCs as Long-haul Transportation

LCC's defined as the airlines on fares are cheaper and there is only one type of class tickets. They eliminate various types of services that are normally provided by airlines such as fixing seating, food and entertainment in the aircraft cabin, loyalty programs and airport lounges. They provide flight services at high frequencies for short-haul, point-to-point domestic and international routes, ticket sales methods are cheap (reservation using the internet) and use the aircraft of the same type (MOT, 2013). Based on Wensveen and Leick (2009), LCCs have maximized all available space with profitable, premium seating at a reasonable price. High demands for LCC's have caused them to strongly compete with full service carriers (FSCs).

Low cost concept is not new, as LCC was started in early 1970 by Southwest Airlines in United State. The model used by their service focuses on low cost strategy is described as having 'no frills'. This means that all other services such as meals and entertainment flight is erased (Malighetti *et. al*, 2009). Among equation model that is still prevalent until now is point-to-point operation, in-flight catering available at extra cost and high density single class seating (Morrell, 2008). Based on Table 1 below, this table shows the different services between LCC and FSC. Air transport is not an option in Asian countries, but now has turned into phenomena (Zhang *et. al*, 2008). AirAsia X for example is the market leader for long haul travel in Southeast Asia to Australia and North Asia (AirAsia X, 2013). Table 2 below also shows an increase of passengers that were traveling long-haul from 2010-2013 using the service LCC AirAsia X. Meanwhile, Table 3 below shows the LCCs Long-Haul Operators in Asia.

**Table 1:** Different services between LCC and FSC

<b>Product Features</b>	<b>Low Cost Carrier (LCC)</b>	<b>Full Service Carrier (FSC)</b>
Brand	One brand: low fare	Brand Extension: fare + service
Fares	Simplified: fare structure	Complex fare: structure + yield mgt
Distribution	Online & direct Booking	Online, direct, travel agent
Check-in	Ticketless	Ticketless, IATA ticket contract
Airports	Secondary (Mostly)	Primary
Connections	Point-to-point	Interlining, code share, global alliances
Class segmentation	One class (high density)	Two class (dilution of seating capacity)
Inflight	Pay for amenities	Complementary extras
Aircraft utilization	Very high	Medium to high: union contracts
Turnaround time	25 turnarounds	Low turnaround
Product	One product: low fare	Multiple types: scheduling complexities
Ancillary revenue	Advertising, on board sales	Focus on primary product
Aircraft	Single type: commonality	Multiple types: scheduling complexities
Seating	Small pitch, no assignment	Generous pitch, offers seat assignment
Customer Service	Generally under perform	Full service, offers reliability
Operational activities	Focus on core(flying)	Extensions: e.g., maintenance, cargo

Source: *Adopted from O'Connell and Williams (2005)*

**Table 2:** Airasia X number of passengers from the year 2010-2013

<b>Year</b>	2010	2011	2012	2013
<b>Passengers</b>	2,504,005	2,526,181	2,580,946	3,161,456

Source: *Airasia X (2014)*

**Table 3: LCCs Long-Haul Operators in Asia**

<b>Operator</b>	<b>Commencement</b>	<b>Route</b>	<b>In flight Service</b>	<b>Aircraft</b>
AirAsia X	2007	International Long-haul (more than 4 hours)	Frill-or-no frill before boarding; light meals for purchases onboard	Single (A330)
Jetstar Asia	2004	International within 5 hours	No frills (food & beverages for purchase, but free for more 3 hours flights)	Single (A320)
Viva Macau	2006	International Long-haul (more than 4 hours)	Yes	B747

Source: *Adopted from Zhang et al., (2008)*

The influenced of information technology is very helpful in the development of LCCs particularly in facilitating travellers, internet to obtain information such as flight schedules, destinations, reservations and others. They can check flight schedules and choose the flight date itself without using an agent who often charge at a higher rate (Morrel, 2009). Travellers also are able to compare prices with other airlines to get a better deal. In addition, travellers an also can book other services offered as examples of food, goods, luggage and others.

### **TOURIST DESTINATION**

Every tourist has different desires, based on factors such as age, motivation, level of income and activities (Pearce, 2005). Each traveller has a different motivation based on the requirements or the need to travel. It is difficult to determine the factors that influence tourist motivation in choosing a travel destination, and it depends on tourist behaviour because, certain force drive individual to act (Kassean and Gassita, 2013). Past researchers also state that motivation to travel is considered as a key factor in explaining tourist behaviour. Different type of tourist has different type of behaviour. According to Nicolau (2008) the influence of distance on destination choice might be depending on the tourist's motivations. He examined the motivation such as search for relaxation, good climate of destination, curiosity and visiting friends and relatives. Tourists who travel long distances are organized and better prepared (Wardman, 2004). Tourists often go through the process in making travel decisions based on processes such as collecting information, process information, and finally in the decision to go on a trip to a destination of their choice (Swain and Mishra, 2011).

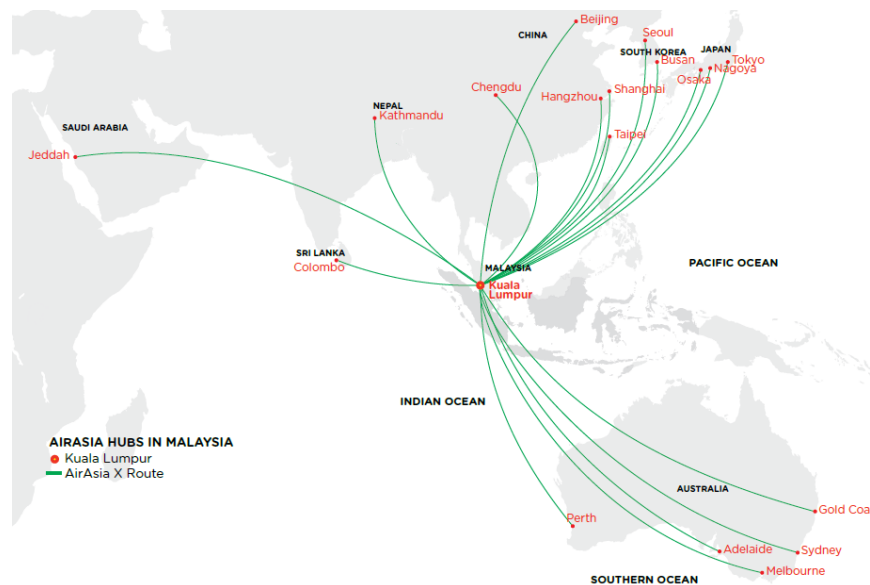
### **WHY LCC?**

According to Sharpley (2006), the choices of transport depend upon a variety of factors such as safety, time/speed, comfort, cost convenience, reliability, flexibility and availability. For the LCC, choices are made based on following:

#### **Route**

Most of the routes travelled by LCCs are similar to those experienced by FCSs. However, airport operations for both types of carriers might be different. For example Airasia X, has been providing 18 long-haul routes around Asia (see Figure 1), using a new A330-300 aircraft (AirAsia X, 2014). The main operational hub for LCCs in Malaysia is located in Kuala Lumpur International Airport 2 (KLIA2). AirAsia has adopted the strategies that

include new routes, high quality service, and low fares. These strategies have encouraged partnership between & mergers between airlines and relevant parties. By holding to these strategies, Air Asia can be able to realise its slogan as ‘Now everyone can fly’. Competition will occur within the same market segment and when airlines are operating the same routes and destinations. Great competition exists between these carriers have not just given unnecessary negative impacts on the passengers, but benefit their users in certain ways (Jamil *et al.*, 2012).



**Figure 1:** Airasia X Route  
Source: *AirAsia X (2014)*

### Promotion and Price

Low fare is a factor that encouraging long-haul flights to be the choice of consumers who have a limited budget. For example the price of a ticket to Perth, Australia AirAsia can be low as RM300, while Malaysia Airlines is priced at RM399 (both carriers including tax) (Morrel, 2009). Malighetti *et al.* (2009) stated that LCCs have been using the 'dynamic pricing' system, which is different from FSCs. Sometime, promotion given to their customers via email. This is one important aspect that has been done by LCCs companies in order to attract customers. Purchase tickets in advance can avoid high ticket prices increases when the travel date is getting closer, because this is not something extraordinary. LCCs also provide services not only tickets but also hotel accommodation in most destinations. Even the services offered comprises unforeseen cost that is lower compared to the original price. LCCs also provide special services to their passengers by providing a 'reward' to their loyal passengers with special bargains for example seat, airline tickets free, and others subject to the conditions imposed by the LCCs.

### Economic of Travel

According to Geoverden (2008) most authors agree that travel time and cost are important variables. Nicolau (2008) stated that distances have different influences on the individual, which are depending on their income level. However, Crouch (1994) states that traveller is very aware of the cost of transportation since the decision about transportation is related to decision about destination. The travel expenditure comprises transportation, rooms, food, and the entertainment-influenced expenditure pattern. In terms of services, value for money

is another prioritised factor in determining traveller's satisfaction. It also allows the return trip to be made by the same traveller in the near future.

## **ISSUES AND PROBLEMS**

### **Services**

Although the services provided are 'low fares' but there are still have some issues. The services offered by LCCs are just basic 'no frills', and not including meal, luggage, insurance and many others. If the travellers need additional services, certain prices will be charged to passengers. This is different compared to FSCs services that is complete and well-facilitate the travellers. For example in having luggage, LCCs can only carry a maximum of 7kg, while 30kg of luggage for FSCs is free. Seatings might be uncomfortable, since LCCs practice the policy of 'high density seat'.

### **Price**

Ticket prices are sometimes too high, similar to that offered by the FSCs. Ticket prices are sometimes inconsistent, resulting some travellers to opt for the FSCs. Cheap ticket prices should be purchased early, and it also depends on the promotions offered. If the purchases made near or on the travel date, the ticket price is likely to be more expensive. Every service is charged differently if payment is made by credit card via online purchase. Excess luggage is also charged a high price.

### **Management**

Some of the travellers have done online check in early in order to facilitate them. However, issue occurs whenever last minute changes is done. Other examples include changes of departure gate at last minute (due to technical problems), flight delay and others. It might be worse if the latest departure gate is too far and causing inconvenience for travellers to get to the gate. Sometimes travellers are not well-informed by the flight operators, and only get alerted by viewing the display board.

## **DISCUSSIONS AND CONCLUSIONS**

Tourist's motivation to travel is very difficult to understand because each individual has different needs and requirements. Selection of transport for long haul-travel to the destination also depends on the internal and external factors for travellers. Selection factors are mainly based by marketing strategies and campaigns that run continuously, and it gives travellers more choices to opt from. The website service systems are 'user friendly', simple and easy to the website users. Cost is an important factor for travellers to choose their carrier or flight operator. Although the offer is basic, but it depends on the travellers who want to travel cheaply, quickly, and safely. While there are issues encountered by using LCCs as long haul transport travel, it still does not severely affect the requirement of travelers by using their services. There are rooms for improvement, particularly in terms of quality of service that should be increased from time to time. Since competition between LCCs and FSCs is very huge, difference of ticket price is not very significant, hence quality of service is the main factor of selection by travellers while choosing their flight operator.

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# THE CHALLENGE OF PRACTISING FUNCTIONAL FLEXIBILITY IN FOUR-STAR HOTELS IN MALAYSIA

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## Abstract

The hotel industry is affected by environmental changes such as changes in law and regulations. In Malaysia, the hotel industry is afflicted by the increasing labour cost due to the implementation of a national minimum wage policy that started in May 2012. The policy implementation increases the need to practise functional flexibility. Functional flexibility refers to assigning an employee with a variety of jobs. Despite being one of the solutions to overcome the increasing labour cost, studies on functional flexibility practices in hotels in Malaysia is scarce. The objective of this study is to identify the challenge of practising functional flexibility in four-star hotels in Malaysia. For this purpose, twelve hotel managers from hotels that are located in Penang and Langkawi Island were interviewed. Hotels practise functional flexibility and face challenges especially from the labour union. Besides resistance from the labour union, other challenges are employees' attitude and readiness to cope with handling a variety of jobs. This study contributes to human resource management literature by giving an insight to functional flexibility practices' challenges in Malaysian hotel industry. The insight may serve as guide for hotel managers to handle the challenges and avoid legislation issues.

Keywords: *functional flexibility, minimum wage policy, hotel, Malaysia*

## INTRODUCTION

The hotel industry is susceptible to internal and external environmental effects, such as rules and regulations changes, economic changes, and increased labour cost (Nankervis, 2000). In May 2012, the government of Malaysia has announced the implementation of a national minimum wage policy for the private sectors, set at RM800 applied to the states of Sabah, Sarawak and the Federal Territory of Labuan, and RM900 in the Peninsular, covering employees in all economic sectors except those in the domestic service sector such as maids and gardeners (Ahmad & Sipalan, 2012). The impacts of minimum wage policy in developing countries are greater compared to developed countries (Todorovic & Ma, 2008). The issues revolving around the implementation of minimum wage provides a pertinent opportunity to study the practise of functional flexibility in order to offset the increasing labour cost as an alternative to employee layoffs and price increased.

“Functional flexibility” in this study refers to assigning an employee with a variety of jobs. Functional flexibility is usually used interchangeably with the terms multi-skilling, multi tasking and job enlargement (Farrell, 2009; Knox & Walsh, 2005; Price, 2007). Functional flexibility allows employees to be reassigned to different jobs or tasks (Peel & Boxall, 2005). The decision to whether implement functional flexibility depends on the needs, strategy and the pressures the organisation are facing (Van der Meer & Ringdal, 2009). The practise of functional flexibility requires employers to expand job descriptions and invest in training to enable employees to undertake a variety of tasks (Rönmmar, 2006).



Despite being the solution to overcome the increasing labour cost, especially with the enforcement of minimum wage order, studies on functional flexibility practices in hotels in Malaysia is scarce. Thus, questions related to functional flexibility remained unanswered. One of the questions is: What is the challenge of practising functional flexibility in Malaysian hotels? The objective of this study is to assess the practise of functional flexibility, and identify the challenge of practising functional flexibility in hotels in Malaysia. This study is significant to the hotel industry because the industry is labour intensive, and the wages of labour amounted to a relatively high proportion of total operating costs (Guilding, 2010). However, this study only focused on four-star hotels due to the full service status and the service finesse promised by the hotels to their customers.

## **LITERATURE REVIEW**

Functional flexibility lies with the ability of employees to carry out different tasks and to move between jobs within an organisation (Farrell, 2009). It requires employees to hold more than one position, perform more than one task, and it extends the scope of their main jobs (Dekker, 2010). Functional flexibility involves practices such as job rotation, job enlargement and multi-skilling (Cavagnoli, 2008; Dekker, 2010). Job rotation refers to the transfers of employees between jobs in an organisation (Campion, Cheraskin & Stevens, 1994). Job enlargement expands the number of tasks with the aim to increase employees' skills and competency (Riley, 1992). Functional flexibility can be achieved through technological improvement and investment, and the development of employees' skills (Horstman, 1988; Riley, 1992). The attempt to implement functional flexibility can also be achieved through workplace practices that engender employee's adaptability to deployment (Martínez-Sánchez, Vela-Jiménez, Pérez-Pérez & De Luis-Carnicer, 2009).

The introduction of functional flexibility is mainly cost-driven, to enable the reduction of employees (Desombre, Kelliher, Macfarlane & Ozbilgin, 2006). Functional flexibility leads to an efficient utilisation and organisation of employees while allowing greater flexibility for managers to move them when necessary (Reilly, 1998). When the demand for one type of job is low, employees who possess the appropriate skills may be redeployed to another job where the level of demand is higher (Kelliher & Riley, 2003). The utilisation of skill variety acts as an actual buffer against uncertainty. Staff can be scheduled more effectively, and sickness and holiday can be cover up more competently (Desombre et al., 2006). Functional flexibility is also a conflict resolution mechanism when consumer demand does not match congruously with labour supply (Riley, 1996). By practising functional flexibility, organisations are able to operate with fewer employees during slack periods (Desombre et al., 2006).

## **METHODOLOGY**

This study is an exploratory study with the intention to assess the challenges of practising functional flexibility in four-star hotels in Malaysia. To fit this purpose, a qualitative research methodology and semi-structured interview method was used. This study employed a semi-structured interview because it involves an in-depth examination of people and topics. Therefore, it increases the researcher's possibility to probe and generate richer information.

The selection of hotels began with the identification of hotels that practise functional flexibility. Hotels and the participants for each hotel were recruited by phone. The Human Resource Manager from each hotel served as the gatekeeper who decided whether the hotel will participate and helped identify managers for the interview. To ensure participants

ability to provide in-depth and accurate information, only hotel managers who have been working in the particular hotel for more than one year were interviewed. The interview was stopped once it reached the point of saturation. This study focused on Penang and Langkawi Island hotels. On average each interview took approximately 40 minutes. The main questions asked was “What is the challenge of practising functional flexibility?”

The interviews were recorded, transcribed and analysed using thematic content analysis (Krippendorff, 2004). Content analysis is a research technique for making replicable and valid inferences from texts and allows a researcher to discover what the text reveals. With thematic content analysis, data is analysed by themes that emerges from the data. Each transcript is systematically and thoroughly read through to identify the challenges with codes allocated to portions of the text. Codes concerning various challenges were grouped based on their similarities into a small number of manageable themes.

### **THE CHALLENGE OF PRACTISING FUNCTIONAL FLEXIBILITY**

Twelve hotel managers from five hotels in Penang and Langkawi Island participated in the interview. The managers are from various departments. All five hotels have a representative from Human Resource Department. The details of the respondents are listed in Table 1.

**Table 1:** Respondents’ Details

<b>Respondent</b>	<b>Hotel</b>	<b>Location</b>	<b>Designation</b>
R1	H1	Penang	Assistant Manager
R2	H1	Penang	Food and Beverage Manager
R3	H1	Penang	Housekeeping Manager
R4	H2	Penang	Engineer
R5	H2	Penang	Housekeeping Executive
R6	H1	Penang	Human Resource Executive
R7	H2	Penang	Human Resource Director
R8	H3	Langkawi	Food and Beverage Executive
R9	H3	Langkawi	General Manager
R10	H3	Langkawi	Human Resource and Admin Executive
R11	H4	Langkawi	Human Resource Manager
R12	H5	Langkawi	Human Resource Manager

#### **Resistance from Employee Union**

One of the biggest challenges of practising functional flexibility is resistance from the union who perceived that multitask is exploitation. The hotel managers show the employees the service charge to prove that the practise makes “people work for a better living” instead of exploiting them. R7 stated:

“Multitask is full of challenge since day one... but we practice, we put in a different manner. All union do not believe in multitask, to them, multitask is exploitation. To them, when you multi skill, you bully the work man. You offer one job, at the end you ask the staff to do this and that. (R7)”

According to R7, a hotel in Penang that practised functional flexibility and the hotel’s Union was in the industrial court to fight on a problem related to multi skilling because it is not allowed in the Collective Agreement. Therefore, hotels do not claim that they are practising functional flexibility or even use the term multi skill or multi task. To avoid problems with union, H1, H2 and H5 issue appointment letters with a less specific job title, and job descriptions that list out all the tasks the employees should do. Instead of “Reception” the

job title used is “Guest Service Agent”. R6 stated, “We put Guest Service Agent... So we have this daily job description... list out all the things in the front office, what are the things they can do”. Another example is given by R12 for Housekeeping Department. The job title used is “Housekeeping Supervisor” instead of “Room Supervisor”.

In housekeeping department we will not appoint the supervisor as a Room Supervisor because this position only concentrates for room section. So, we assign them as Housekeeping Supervisor. That means they could be in-charge of different sections such as pool, laundry, rooms, landscape and others. (R12)

### **Employees’ Attitude**

Employees’ attitude also affects the success of functional flexibility practices. According to the managers, some employees reject multi-skilling and thus, it is difficult to gain their cooperation to support the practice. The managers also stated that supporting functional flexibility practices shall benefit the employees. R1 stated “It depends on your mentality, your mindset... It is all up to you. If you take it negatively, it will be something negative to you, if you take it positively, it would be positive for you (R1). R7 mentioned about better career development opportunities for those who accept functional flexibility positively.

People who believe in multi task and accept multitask have a better opportunity for internal promotion. People who practice multi task and accept multi task with a right attitude. They are not smart, but they are willing to work harder. You (management) tend to give promotion opportunity to these people. (R7)

R7 further stated that practising functional flexibility is a necessity for business survival and competitiveness, and those who reject functional flexibility due to attitude problem will be replaced.

Practicing functional flexibility across departments in four-star hotels requires cooperation from the non-managerial employees and the managerial employees as well. While it is crucial for the non-managerial employees to agree to carry-out the task, it is also important for the managers to agree to lend their staff to other departments who are in need. R11 expressed his dissatisfaction towards some managers who are not willing to lend their staff to other departments. In contrary, R12 stated that practising functional flexibility across departments is suitable for small hotel companies but not for big ones.

Multi-skilling is quite practical for a small company because they have limited number of staffs for doing most of the things like kitchen, housekeeping, front office and others but if these staffs working in the big company have to follow and fulfill the policy and procedure like at F&B restaurant. (R12)

### **Employees’ Readiness to Cope with Handling a Variety of Jobs**

Some employees are not capable and have difficulty to cope with handling a variety of jobs. The issue is more serious when practising functional flexibility across department. Thus, managers have to face competency issues. According to R12, they are facing competency issues. The manager explained that multi-skilling requires extra trainees for backup, and training in order to increase productivity and deliver high value of service quality at the same time. The manager further stated that a longer training period is required when multi-skilling is practiced across departments. According to the manager, the process is difficult because different skill and experience is needed, and some staffs do not have the knowledge, skill and ability in multi-skilling. However, when they managed to do it they will demand for multi-skilling benefits. This is another cost that managers need to consider when practicing functional flexibility because employees are aware that multi skilled

employees are in demand. Other hotels are willing to offer a better position and pay more to multi skilled employees. R12 stated, “The staffs are particular about their job description. If a gardener is called for doing public area tasks and he managed to do it, then he will ask for multi-skilling benefits.” Due the possibility of losing employees, and the training time and cost factor, the manager prefers to employ new employees even though they are not skilled. Furthermore, new employees are more obedient thus easier to train compared to existing employees who are least likely to follow the procedures, and are difficult to control.

The issue of difficulty to cope with functional flexibility occurs not only among the non-managerial employees, but among the managerial employees as well. However, the managers take it as a challenge. R10 stated, “Sometimes I feel like too many task and too many job description to handle. Sometime I feel like it is a burden to me also. But like I say just now, I enjoy, so I take it as a challenge”. The managers also managed to adapt to the situation. According to R8, “I don’t take it as a burden. Although at the initial stage I do, but then overtime, I adapted to the work culture and I become used to it.”

### **Safety and Security Issues**

According to R12 and R7, safety and security issues must also be considered when practising functional flexibility.

Certain level of determination is based on agreement and contract agreement due to the time factor, and safety and security issues. If the staffs were arranged by management for multi-skilling in within their department, it is fine. But, if out of the department, they will be at risk because if the staffs are involve in any accident they will be taken for questioning such as “Why did you ask your staffs to do this?” (R12)

While R12 statement highlights the safety and security of employees, R7 statement concerns the safety and security of guests’ belongings from theft committed by employees. R7 stated, “Room attendants have access to rooms that guests occupy... If you train the public area cleaner to clean rooms, and if the thing goes missing, who will be responsible?”

## **DISCUSSION**

### **The Alignment of Job Title and Job Description with the Job Scope**

It is crucial for organizations to ensure that the practice of functional flexibility abides to the governing rules and regulations such as Collective Agreement to avoid from judicial problem with the union. Such problem is costly to the organization. Consistent with Rönmmar (2006), the changes in job scope such as job enlargement should be clearly reflected in the Job Title, Job Description and Job Specification. Instead of using a very specific Job Title, organizations used a less specific title that does not limit the employee only to certain tasks. Thus, the title Housekeeping Supervisor is used instead of Room Supervisor so that the supervisor can be assigned to supervise all the jobs within the Housekeeping Department. However, the changes made in the Job Title, Job Description and Job Specification is only possible to employees with new job appointment.

### **Increased Responsibility Rewarded with Improved Compensation**

Functional flexibility reflects job enlargement and increased responsibility. Thus, it is consistent with the increment of employees’ basic wage to RM900. For those whose salary is already above the minimum wage, it is crucial to increase their salary consistent with the enlargement of their job scope in order to retain them in the company. In addition, many

hotels in Malaysia include service point (taken from service charge) in their non-managerial employees' pay, and the amount varies based on the business (Ahmad, Solnet & Scott, 2010). When the hotel is busy and there are fewer employees to run the operation, each employee will receive more money for each service point. The practise of functional flexibility allows hotel to operate with fewer employees and thus, all individual employees can earn more money consistent with the increased responsibility. Employees' positive attitude towards functional flexibility can be developed when job enlargement is rewarded with improved compensation (Carey, 2008).

### **Functional Flexibility is a Necessity but the Extent of its Practicality Varies**

Functional flexibility is practised in all the hotels interviewed. However, the extent of its practise varies based on hotel size and level of service. In large hotels with high level of service the practise is limited within a department due to the extra attention given to deliver the quality service as promised. Functional flexibility across departments is more practical for small hotels with fewer staff and less service finesse. In addition, attention need to be given to safety and security issues when practising functional flexibility especially when it is practised across departments. The attention to safety and security concerns the guests, employee and employer.

### **CONCLUSION**

This study contributes to the hotel management literature by providing information of challenges faced by hotel managers in practising functional flexibility in four-star hotels in Malaysia. Such information is valuable to the practitioners in Malaysia especially with the implementation of minimum wage policy. However, this is an exploratory qualitative study and further research is needed to allow generalization of its findings.

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# THE ROLE OF THE BIDAYUH COMMUNITY IN PACKAGING CULTURE AND NATURE FOR SUSTAINABLE INDIGENOUS TOURISM PRODUCT IN BAU DISTRICT, SARAWAK

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## Abstract

This paper aims to explore the unique cultural attributes owned by the Bidayuh community. In addition, the existing natural products and its utilization for tourism sustainability is also captured. The tourism sustainability is measured from main three dimensions; economic, sociocultural and environmental sustainability. This study employs qualitative approach. The data is collected using initial inquiry technique aiming at induction of knowledge in the relevant field of community development and tourism. Apart from that, this study also reveals the readiness of the native community to involve in tourism business and challenges faced by them to develop tourism in their area. The cultural uniqueness of the community is recognized by both the international tourists and the other Malaysian communities. However, the development of tourism to expose the culture of the community to outsiders is still questionable. The preliminary data shows that the community is very proud with their culture and surrounding nature. They are willing to share their uniqueness to the outsiders. However, lesser contribution and support from other stakeholders makes their effort slow and diminished. Thus this study is important to create awareness to outsiders about the unexplored indigenous resources to amplify their uniqueness without destroying it by commodification.

Keywords: *Indigenous tourism, initial inquiry, sustainable tourism, rural destination, Sarawak*

## INTRODUCTION

The Bidayuh are a minority indigenous group in Sarawak. This community constitute 8.1 percent of Sarawak's population and less than 1 percent of Malaysia's population. According to Geddes (1954), Bidayuh means "people of the interior". According to a key respondent, the community is very close to the nature.

*"Bidayuhs are mainly Pagans or animist and they believe in ancestral worship and they also believe in the ancient spirits or nature. Due to that, they would have big celebrations like the Gawai (June 1st) which is a celebration to please the padi's spirit for good harvest. They would also hold small praise and worship sessions occasionally to the River and Jungle spirits to cure illness and ward of bad luck. However, at least 50% of the Bidayuh community have converted into Christianity since the arrival of missionaries into Sarawak" (personal communication 11 August 2012, Dihoi Anak Nyawen, Head of Village, Krokong-Tringus).*

Dihoi also highlighted the uniqueness of their culture which can be transformed for tourism business. Cultural dances, music and food are considered as the generally practiced attributes by the community.

*“Being the people of colourful culture, the Bidayuhs have their own cultural dress code (which, in the modern days, are only worn during festivities and celebrations) They have their own cultural dance and they play their own cultural music which comprises of a set of Gongs. The Bidayuhs are generally very soft-spoken people. While the men are proud and strong, the women are more gentle, less outspoken and would usually shy away from strangers and outsiders. The Bidayuh’s staple food is rice but in a lot of places, wild-sago became their staple food (personal communication 11 August 2012, Dihoi Anak Nyawen, Head of Village, Krokong-Tringgus).*

This community is well known for their longhouses and unique culture. They include six main subgroups: Bau-Bidayuh, Biatah-Penrissen, Bukar-Sadung, Padawan-Sembaan, Rara and Salako. All the subgroups were collectively called Land Dayak before officially named Bidayuh by the government in the year 2002.

### **LITERATURE REVIEW**

Cultural resource usually drives the whole tourism business in the rural areas which would contribute for positive socio-economic development (Butler and Hinch, 2007). One of the most established definitions of cultural resources can be seen in the work of Pedford, (1996). According to the scholar, the cultural resources are any living history attributes such as rural customs and folklore, local and family traditions, values, beliefs, and common heritage. Arguably, culture is the main resource that indigenous people possess. Their unique customs and traditions are developed as attractions to lure tourists to the rural areas (Brown and Cave, 2010; Cohen, 2007; Liu, 2009). Thus, it can be said that cultural resource is a must for any community as an identity to show their uniqueness to the outsiders.

### **METHOD**

This study employs a qualitative approach which is inductive in nature. The aim is to gather data with no assumption of the primary researcher (Creswell, 2003). This qualitative approach helped the researcher to eliminate the research biasness that can occur. In-depth interview was the main data collection technique supported by observation technique. The collected data was analyzed using thematic analysis technique.

Table 1 above shows the respondents that were interviewed. However, for this paper, not all the interview conversations from all the respondents are revealed. Selected conversations within the scope of cultural and natural resources were interpreted.



Table 1 : Key Respondents of the study

No.	Name of Respondent	Position	Location	Gender	Age
1.	Gabriel Tonga Noweg	Profesor UNIMAS	UNIMAS	Male	54
2.	Dihoi Anak Nyawen	Penghulu	Kpg. Krokong /Tringgus	Male	58
3.	Nani Anak Lajou	Woman Club Chairman	Kpg. Peros	Female	47
4.	Lipik Anak Salau	Counselor	Kpg. Bijulin	Male	51
5.	Jorim Anak Ayup	Coperation Member	Kpg. Batu Sepit	Male	53
6.	Risik Anak Giyan	Head of Village	Kpg. Belimbing	Male	48
7.	Pisiew Anak Salam	Head of Village	Kpg. Kaman	Male	60
8.	Takim Anak Sitam	Head of Village	Kpg. Peros	Male	58
9.	Abam Anak Asoi	Head of Village	Kpg. Pengkalan Tebang	Male	48
10.	Joseph Jap Anak Sayon	Homestay Chairman	Kpg. Krokong	Male	45
11.	Jesen Anak Laun	Head of Village	Kpg. Puak Krokong	Male	51
12	Rajulin	Head of Village	Tringgus	Male	48

### Natural Resources

According to the community, their surroundings are their biggest advantage to package tourism smoothly. The villages are located nearer to the caves and jungle.

*“But, the main attraction in this village is a beautiful river with crystal clear water. There are many other natural resources in our area and we have access to these resources without any constraints. The Pedi River is the largest. (Respondent No. 9)*

*“There is a beautiful and attractive place on top of the mountain which is really wide and from there one can see the panorama of the whole of Kuching. People seldom go there. It is about 4 to 5 hours from Kampung Tringgus. There is Bobot waterfalls which is also another attraction that can be reached in about 4 hours using the staircase. There are some tourists who go there are nature lovers” (Respondent No.12).*

Some of the resources are operated by the Sarawak Cooperative Society under the patronage of the Sarawak Ministry of Tourism which means there is government intervention in tourism development in the rural areas.

*“There are separate packages which include exploring jungle, rivers and caves in Bau, with very low charge for foreign tourists. We do offer package which include activities in attractive places at Fairy Cave, Sarawak Kanan River and explore old forest. In 2013, 3 groups of students from Singapore came for climbing the Fairy Cave and forest for 2 nights (Respondent No.10)*

*“Below the Fairy Cave at Tringgus, there is the Brobot Waterfalls. The waterfalls can be accessed by foot. On the high ground there are 2 pools, a small river and an orchard. It takes about 6 hours to get there, one way” (Respondent No. 4).*

However, some of the respondents also claimed that there are some setbacks in the local natural resources for tourism development which require attention from the local authorities.

*“The problems that we face with regards to resources are firstly the group known as Larian 3H which has disturbed the villagers’ crop and forest. Most of the problems that arise are from the aspect of safety of participants if they had a fall, disappear in the forest and others. (Respondent No. 8)*

Most of the respondents claimed that there are sufficient natural resources in their village that could be used to attract tourists. However, genuine participation is needed to make tourism business successful (Arnstein, 1969)

### **Cultural Attraction**

The community rely mainly on their culture to attract tourists. Their longhouses and dance with costumes are considered as their main cultural tourism products. According to them, they always want to show their culture to outsiders.

*“We have the uniqueness that the city people do not have. They might have money, but we have our culture which can be converted to money. A Baruk is a round house usually in the middle of the the village. This house was used as a meeting place to perform their traditional rituals, dances and festivals (gawais). The Bidayuhs had several annual gawais, e.g one for the rice to spring out, one for the rice to grow strong and healthy and one when all the rice were harvested. Some of these traditional gawais are still practised, but are now held on a certain date every year” (Respondent No.2).*

*“On 1st of June the Bidayuh people celebrate their Gawai and this lasts for about a week. During Gawai most of the Bidayuhs who are living or working outside the village usually returns to their respective village to meet and socialise with friends and family. It is not unusual to combine Gawai with a wedding since the whole family already are together. The Bidayuhs are a peaceful people and their hospitality is huge. Other than that, we offer group cultural performances at night and traditional food recipes. We also offer traditional sport for both tourist and locals” (Respondent No.5).*

*“The Bidayuhs are also known for their warrior audacity. In a war, a Bidayuh man’s status is judged by the numbers of skulls hung on the ceiling just before entering their houses. The more skulls you have, the higher your warrior’s rank” (Respondent No.7).*

Apart from that, the natural resources available in their area are adequate. However, many of these resources have not been identified and have not been developed to make as tourism products. So he suggested there should be cooperation to attract tourists to the area from government agencies for infrastructure . He himself felt that they did in terms of financial constraints for tourism projects.

*“Resources available in our area are too many. But many of these resources have not been identified and unexplored like Budu Cave to be made as tourism attraction. So I suggest that there should be cooperation to attract tourists to the area from government agencies. I personally feel that there is a constraint in terms of finance for tourism projects” (Respondent 8).*

Generally, the community believe that they are rich of resources especially their cultural resource. They agree that their culture is something that people could not see elsewhere in the world. Apart from that, they are rich natural resources. However, it must be explored and developed as tourism products. Thus, they suggested there should be cooperation to attract tourists to their area.

## **CONCLUSION**

The Bidayuh community has a lot of cultural and natural resources that can be commercialized for tourism business. The community believe that tourism will not only provide them financial support, but also helps to protect and sustain their culture. However, they are still not genuinely participating in any tourism developmental programs by the government. Although they are included in the planning process, the final decision only made by the governmental agencies. Thus, the community hopes that they are valued as equal partners by the government before taking any decision to develop tourism in their area.

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# **TRAINING NEEDS OF WOMEN ENTREPRENEURS IN SERVICES-BASED SMALL AND MEDIUM ENTERPRISES (SMES) IN KOTA KINABALU, SABAH**

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## **Abstract**

The main purpose of this study is to examine training needs of women entrepreneurs in services-based enterprises in Kota Kinabalu, Sabah by determining their adequacy of training based on type of establishment, highest academic qualification, size of enterprise and types of services to support their business activities. The proposed conceptual framework was used to test 300 women entrepreneurs who are involved in services-based economies. Overall, findings from this study indicate respondents perceived moderately on the level of adequacy of training in entrepreneurship. The moderate level of perception of participants on the aspects of sufficiency, number and type of training attended denotes that they received inadequate training. This shows that there is no significant difference in the perception of respondents based on type of establishment and highest academic qualifications on the adequacy of training of women entrepreneurs to support their business activities. This indicates that there is no difference in the way the respondents perceive the adequacy of training based on type of establishment and highest academic qualifications background. However, there is significant difference in the perception of respondents on the adequacy of training based on size of enterprise and types of services.

*Keywords: Training Needs, Training Needs Analysis, Training Needs Assessment, Women Entrepreneurs, Sabah*

## **INTRODUCTION**

Entrepreneurship is acknowledged as a decisive determining factor in today's competitive and dynamic economy of knowledge. Sarri and Trihopoulou (2005) assert that entrepreneurship is the predictor of achievement in economic development and job creation; Thurik and Wennekers (2004) view entrepreneurship as the driver of current global small businesses and contributory to employment, social and political stability, and innovative and competitive power. Small businesses and entrepreneurship are key to stimulating economic activity, creating jobs, alleviating poverty and uplifting of living standards (Van Vuuren and Groenewald, 2007). In Malaysia, SMEs have risen to become a vibrant economic force. Throughout the various national development plans implemented in the country, starting with the New Economic Policy (1971) to the recent Third Industrial Master Plan (2006-2010), the government's commitment in terms of support and assistance in developing SMEs has been highly significant (MITI, 2005). Alongside the growth of SMEs globally and locally, there is also an increasing number of women-owned enterprises (David and Burke, 2004). According to the Global Entrepreneurship Monitor (GEM) in 2004, more than one-third of people involved in entrepreneurial activities were women. These indicate the significance of women's contribution and participation in the economic development of their nation. Generally, women entrepreneurs are active at all levels domestically, regionally

and globally. The number of female business owners worldwide continues to increase steadily (Johanshahi et al., 2010). In Malaysia, the significance of SMEs as a major source of economic growth and employment for the country cannot be denied. A recent report by Wendy et al. (2008) listed 518,000 companies in services, manufacturing and agricultural sectors, of which 99.1 percent were SMEs. About 16 percent of this figure were women-owned companies with 89.5 percent of them involved in the services sector, 7.5 percent in manufacturing and 3.0 percent in the agricultural sector. Nelson and Cengiz (2005) stated that the Malaysian government has been very active in creating and developing quality, resilient and successful entrepreneurships to ensure its competitiveness in all potential growth sectors of the economy as well as cultivating the enterprising culture among Malaysian women. Nevertheless, not many women entrepreneurs are aware of these facilities and therefore have not had the opportunity to fully optimize and utilize them. Winn (2004) argues that the critical factors for women to succeed in independent businesses need to be understood to provide a better education and support system. Hence, women entrepreneurs in Malaysia are in need of appropriate training programmes to help them manage their business professionally, effectively and efficiently so as to enable them to offer high quality products or services that meet or exceed customer satisfaction. Therefore, this study aims to determine the training needs of the women entrepreneurs in services-based enterprises, with Kota Kinabalu, Sabah based on the following research questions: How adequate is the training of women entrepreneurs to support their business activities? Is there any difference in the adequacy of the training of women entrepreneurs to support their business activities based on type of establishment, highest academic qualification, size of enterprise and type of services?

## **CONSTRUCTS DEVELOPMENT**

Training needs is the result of the need for improvement from the actual performance to the desired performance based on the required changes for improvement in the current conditions. Boydell (1976), one of the early writers on training needs assessment (TNA), state that identification of training needs must firstly be resolved before training itself can be usefully undertaken. He reiterates that a training need exists when the application of a systematic training will serve to overcome a particular weakness. Miller and Osinski (2002) concur with this assertion and add that assessment begins with a 'need' which can be identified in several ways but generally described as a gap between what is currently in place and what is needed, now and in the future. McConnell (2002) on the other hand, emphasizes that training needs change periodically due to the creation of new jobs and new technology. The Buckley and Caple (2004) study on specific changes and training needs reaffirmed that new changes such as new technology, new products and services, and new legislations may cause training needs to arise directly from the knowledge, skills and attitudes needed to deal with performance problems caused by these very changes.

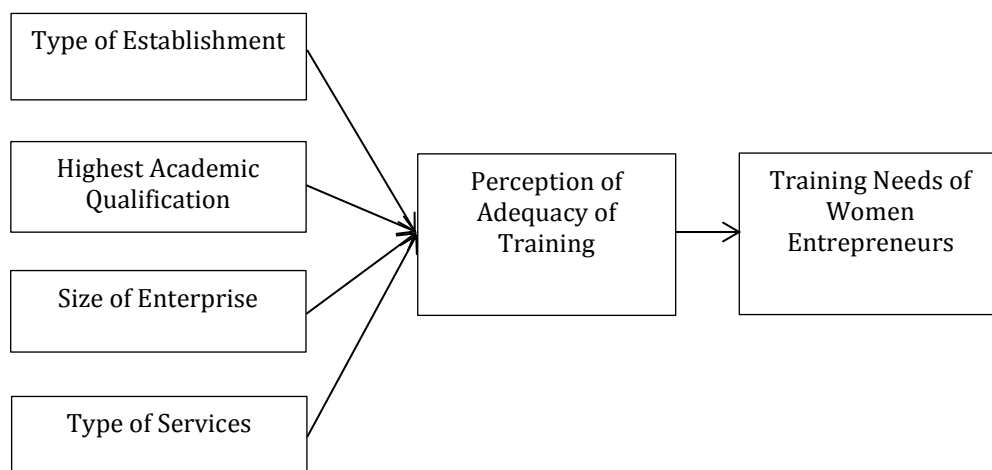
According to Boydell (1976), training needs can exist in three possible levels, organization, job or occupation, and individual. After more than twenty five years these findings are still relevant to researchers such as Miller and Osinski (2002), Noe (2010), and Lim et al. (2010) who concur that there are indeed three levels of needs assessment: organizational assessment, occupational assessment and individual assessment. Based on the various terms of the TNA family, Iqbal and Khan (2011) have reaffirmed that the terms *training needs assessment* and *training needs analysis* are not to be confused as having the same meaning. In fact, they have clearly indicated that *need assessment* and *need analysis* are not synonymous terms by several authors. *Needs assessment* is defined as a process for identifying needs and placing them in priority order on the basis of what costs to meet the

need versus what it costs to ignore it whereas *need analysis* is defined as the process of determining reasons and causes for a need so that appropriate interventions may be identified and later selected (Kaufman, 1994). These definitions are supported by the contentions of Watkins et al. (1998) that needs assessment may be designed to identify and prioritize needs, whereas a needs analysis should look into an identified need, its component parts and then ascertain required solutions. Training, according to Nadler (1980) is the process of acquiring and improving the skills, knowledge, and attitudes needed for present job performance. Training, as an intervention to solve performance problem in whatever forms, may result in mastery and acquisition of the skills, knowledge, attitudes, and attitude for the performance of mission and job related tasks.

Based on these definitions of terms, Triner et al. (1996) indicate that *training needs assessment* would be the process of determining the training requirement for bridging the gap between what is and what should be; it is clearly defined that needs assessment is a process for determining the gaps in results, or ends, so an effective and efficient solution may be chosen. Therefore, why go through the process of needs assessment if the decision as to a solution for training has been made. Thus, *training needs assessment* is an oxymoron. Training indicates a solution – a means, not an end.

A training process is a systematic method for improving skills, knowledge, attitudes, and attitude through training solutions once the requirement for training is established. The term *training needs assessment* is more accurate to be called a *training requirements analysis* or *training intervention selection* that is, conducted after training has been selected and justified. It is therefore indicated that training needs assessment does not dictate training as the solution, or entails that training may not be the solution. As pointed by several researchers' findings, TNA has been basically used for decades to conduct effective training programmes (Al-Khayyat, 1998; Iqbal and Khan, 2011). However, today it is used for developing and implementing different practical solutions for individuals, work groups, and organizations (Gupta et al., 2007) In this study training needs refers to the training gap between the existing training provided to women entrepreneurs in Kota Kinabalu, Sabah and the actual training required by them focusing on their perception on the adequacy of training to determine the training needs. The following conceptual framework is developed based on the above discussion:

**Figure 1:** The Conceptual Framework on the Perception Of Women Entrepreneurs on the Adequacy of Training to Determine the Training Needs of Women Entrepreneurs



The following hypotheses for this research are developed:

- H<sub>1</sub>: There is no significant difference in the perception of women entrepreneurs on the adequacy of the training of women entrepreneurs to support their business activities based on type of establishment.
- H<sub>2</sub>: There is no significant difference in the perception of women entrepreneurs on the adequacy of the training of women entrepreneurs to support their business activities based on highest academic qualifications.
- H<sub>3</sub>: There is no significant difference in the perception of women entrepreneurs on the adequacy of the training of women entrepreneurs to support their business activities based on size of enterprise.
- H<sub>4</sub>: There is no significant difference in the perception of women entrepreneurs on the adequacy of the training of women entrepreneurs to support their business activities based on type of services.

### **RESEARCH METHODOLOGY**

Research questionnaires were distributed to potential respondents based on convenience sampling. These questionnaires were distributed to 300 women entrepreneurs either by hand or through email, with the expected return timeframe of three weeks. Potential women entrepreneurs that were involved in this study was identified based on the information and recommendations from several women bodies such as the Sabah West Coast Rural Women Development (DESANITA), the Sabah Women Entrepreneurs and Professionals Association (SWEPA), the Sabah Women's Affairs Department (JHEWS), Department of Industrial Development and Research (DIDR), Huminodun Foundation (HF), Junior Chamber International Intan (JCI Intan), Kadazandusun Chamber of Commerce and Industry (KCCI), and the Sabah Association of Childcare (Persatuan Taska Sabah) to establish the training gap.

Key personnel from these organizations provided telephone contacts or email addresses which were used to track the women entrepreneurs so that communication could be initiated to invite them to become participants for the study. The sample for this study is selected using convenience sampling adapted from Sekaran (2007). This study is a cross-sectional, descriptive and quantitative research using the survey method with a self-administered modified Likert Scale adapted from Goddard & Melville (2007) and Polit & Hungler (1999) or distribution of variables and the relationships among these variables as indicated by Ary et al. (1996). This normally includes collection of data that will provide an account or description of individuals, groups or situations. The study focuses also on describing the characteristics of individuals and groups and uses a quantitative approach which means the systematic empirical investigation of social phenomena via statistical, mathematical or computational techniques (Bell, 1999). The process of measurement provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships (Neuman, 2003).

### **DATA ANALYSIS**

Data from the questionnaire was analyzed using descriptive and inferential statistical analyses with Statistical Packages for the Social Sciences (SPSS) version 17. Descriptive analysis is used to determine the frequency, percentage, mean and standard deviation. The overall findings of the first part of the analysis on the Perception of Respondents on the Adequacy of Training. The overall, findings of analysis indicates that there are a greater percentage of respondents who agreed on the adequacy of training (55.7%). However, it must be noted that 36.0% are unsure and 8.3% disagree. The results presented in Table 1.0

showed that respondents perceived moderately on the sufficiency of training (BC1) with mean value of 3.570 (standard deviation, 1.09044), number of training programmes attended (BC2) with mean value of 3.3833 (standard deviation, 1.09562) and type of training (BC3) with mean of 3.5567 (standard deviation, 1.10644). There was a high perception on the need for continuous training to further KSAOs in entrepreneurship BC4 with mean of 4.150 (standard deviation, 0.9784). Overall, the respondents perceived moderately on the level of adequacy of training in entrepreneurship.

**Table 1.0:** Perception of Respondents on the Adequacy of Training

No	Item	Agree	Not Sure	Disagree	Mean	SD
1	I believe the training I <b>currently</b> have is sufficient to support my business/entrepreneurial activities (BC1)	195 (65.0%)	39 (13.0%)	66 (22.0%)	3.5700 <b>Moderate</b>	1.09044
2	I believe the <b>number</b> of training programme I have attended is sufficient to help me become a successful entrepreneur (BC2)	163(54.3%)	53 (17.7%)	84 (28.0%)	3.3833 <b>Moderate</b>	1.09562
3	I believe the <b>type</b> of training programme I have attended is sufficient to help me become a successful entrepreneur (BC3)	189(63.0%)	51 (17.0%)	60 (20.0%)	3.5567 <b>Moderate</b>	1.10644
4	I believe I require <b>continuous</b> training to further my knowledge, skills, attitude and others (KSAOs) in entrepreneurship (BC4)	247(82.3%)	37 (12.3%)	16 (5.3%)	4.1500 <b>High</b>	.9784
	<b>Overall</b>	167(55.7%)	108(36.0%)	25 (8.3%)	3.6600 <b>Moderate</b>	.79154

The overall findings of the second part of the analysis on the Comparison of Perception on the Adequacy of Training was determined based on type of establishment, higher academic qualifications, size of enterprise and types of services. ANOVA at 95% confidence was used to test the four hypotheses. The overall result in Table 2.0 shows that the F value of 2.228 has a significant value of 0.110 which is more than 0.05. This implies that there is no significant difference in the perception of respondents regarding the adequacy of training based on type of establishment. Therefore, H<sub>1</sub> fails to be rejected. Thus, the findings showed that there is no significant difference in the perception of women entrepreneurs on the adequacy of training to support their business activities based on type of establishment.



**Table 2.0:** Comparison of Perception on Adequacy of Training Based on Type of Establishment

Perception on Adequacy of Training	Type of Establishment	ANOVA	
		F-value	p-value (sig.)
BC1	Proprietorship Private Limited Public Limited	2.786	0.063
BC2	Proprietorship Private Limited Public Limited	5.343	0.005
BC3	Proprietorship Private Limited Public Limited	2.936	0.055
BC4	Proprietorship Private Limited Public Limited	4.986	0.020
<b>Overall</b>	Proprietorship Private Limited Public Limited	<b>2.228</b>	<b>0.110</b>

The overall result in Table 3.0 shows that the F value of 1.503 with its p-value of 0.201 (higher than 0.05) indicates that there is no significant difference in the perception of women entrepreneurs on the adequacy of the training of women entrepreneurs to support their business activities based on highest academic qualifications. Thus, H<sub>2</sub> fails to be rejected.

**Table 3.0:** Comparison of Perception on Adequacy of Training Based on Higher Academic Qualification

Perception on Adequacy of Training	Highest Academic Qualification	ANOVA	
		F-value	p-value (sig.)
BC1	UPSR/Pri. 6 PMR/SPM/STPM Diploma Bachelor Master/PhD	4.208	0.002
BC2	UPSR/Pri. 6 PMR/SPM/STPM Diploma Bachelor Master/PhD	4.892	0.001
BC3	UPSR/Pri. 6 PMR/SPM/STPM Diploma Bachelor Master/PhD	0.503	0.734

BC4	UPSR/Pri. 6 PMR/SPM/STPM Diploma Bachelor Master/PhD	5.998	0.019
<b>Overall</b>	UPSR/Pri. 6 PMR/SPM/STPM Diploma Bachelor Master/PhD	<b>1.503</b>	<b>0.201</b>

The overall result in Table 4.0 shows that the F value of 5.092 has a p-value of 0.002 which is less than 0.05. Therefore, H<sub>3</sub> is rejected. The findings showed that there is significant difference in the perception of women entrepreneurs on the adequacy of the training of women entrepreneurs to support their business activities based on size of enterprise.

**Table 4.0:** Comparison of Perception on Adequacy of Training Based on Size of Enterprise

Perception on Adequacy of Training	Size of Enterprise	ANOVA	
		F-value	p-value (sig.)
BC1	<5	5.740	0.044
	5-19		
	20-50		
	51-150		
BC2	<5	2.320	0.075
	5-19		
	20-50		
	51-150		
BC3	<5	1.887	0.132
	5-19		
	20-50		
	51-150		
BC4	<5	9.121	0.0005
	5-19		
	20-50		
	51-150		
<b>Overall</b>	<5	<b>5.092</b>	<b>0.002</b>
	5-19		
	20-50		
	51-150		

The Overall F value is 2.259 with a p- value of 0.001 which is less than 0.05. Therefore, H<sub>4</sub> is rejected. The findings concluded that there is significant difference in the perception of women entrepreneurs about the adequacy of the training of women entrepreneurs to support their business activities on type of services.

**Table 5.0:** Comparison of Perception on Adequacy of Training Based Type of Services

Perception on Adequacy of Training	Type of Services	ANOVA	
		F-value	p-value (sig.)
BC1	Various Types	5.729	0.0005
BC2	Same as Above	4.653	0.0005
BC3	Same as Above	5.534	0.0005
BC4	Same as Above	6.789	0.018
<b>Overall</b>		<b>2.259</b>	<b>0.001</b>

**CONCLUSION AND IMPLICATION**

Overall, findings from this study indicate that there is a greater percentage of respondents who agree on the adequacy of training (55.7%). However, 36.0% are unsure and 8.3% disagree. Results show that respondents perceived moderately on the sufficiency of training with mean value of 3.570 (standard deviation, 1.09044), number of training programmes attended with mean value of 3.3833 (standard deviation, 1.09562) and type of training with mean of 3.5567 (standard deviation, 1.10644). There is a high perception on the need for continuous training to further KSAOs in entrepreneurship with mean of 4.150 (standard deviation, 0.9784). Overall, findings from this study indicate respondents perceived moderately on the level of adequacy of training in entrepreneurship. The moderate level of perception of participants on the aspects of sufficiency, number and type of training attended denotes that they received inadequate training. This finding implies that there is a gap between the existing training acquired and the training required. This confirms that there is a need for training for the respondents. This is supported by the high perception on the need for continuous training to further KSAOs in entrepreneurship disclosed earlier on by the respondents. Many women want post-start-up support that is accessible after trying out the skills learned in earlier training (Kock , 2008). This implies a need to conduct a needs assessment to measure the adequacy of specific type of training acquired and assure that the appropriate training in terms of sufficiency, number, type and continuity of training are provided for women entrepreneurs. This correlates with the Hierarchy of Needs theory (Framework One of this study) which indicates that a person is motivated by needs that had not been acquired. A need at any level only becomes relevant after a lower-level need has been satisfied. Therefore, all needs including training needs require measurement to ensure whether the particular needs have been achieved or not.

In addition to that, the implication of this findings also correlates with Maslow's applicable principles of this theory that indicates needs exist and can be measured and all needs are not equal in motivating behaviour. Comparisons based on type of establishment, highest academic qualifications, size of enterprise and types of services to determine the perception of respondents on the adequacy of training to support their business activities show the first and second hypotheses are accepted while the third and fourth hypothesis are rejected. This

shows that there is no significant difference in the perception of respondents based on type of establishment and highest academic qualifications on the adequacy of training of women entrepreneurs to support their business activities. This indicates that there is no difference in the way the respondents perceive the adequacy of training based on type of establishment and highest academic qualifications background. However, there is significant difference in the perception of respondents on the adequacy of training based on size of enterprise and types of services. Hence, the respondents perceived the adequacy of training differently based on size of enterprise and types of services. This findings support the statement by Cliff, J.E., (1998) that imply size and growth are typically used as criteria for evaluating organizational success.

Findings of this research have not only supported past research findings but also revealed interesting implications for future studies aimed on women entrepreneurs. The results indicate that the majority of women entrepreneurs who participated in this study are middle-aged, proprietors, attained diploma and higher levels in academic qualifications, have been in business for more than 5 years and mostly concentrate on childcare services, health and fitness, beauty and hair salon. It is therefore crucial that a needs assessment be conducted to measure the adequacy of specific types of training acquired and assure that the appropriate training in terms of sufficiency, number, type and continuity of training be provided.

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# **TOURIST'S INTENTION IN SELECTION OF A RESTAURANT: TESTING A MEDIATING INFLUENCE OF PERCEPTION.**

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## **Abstract**

The purpose of this research is to inspect in what extent service quality and satisfaction influence the purchase intention from a restaurant when perception employed as a mediating function. In order to test the proposed conceptual framework, this research used a sample of 200 tourists' who visited Kuala Lumpur, Malaysia. This research included both domestic and international tourists. Apart from confirmatory factor analysis, this research applied structural equation modeling to test the hypothesis. The results show that the relationships among the variables are all significant. Moreover, the mediating effect of perception in between service quality and purchase intention is partial. On the other hand, the role of perception as a mediation in between the relationship of tourists' satisfaction and their purchase intention from a restaurant was significant. This research offers substantial data for the restaurant managers to be aware about which criteria meet the expectation of the tourists' in order to attract their restaurant services in a consistent and attractive manner. This research also contributes to the existing knowledge of tourism study by focusing on the restaurant sectors of Malaysia.

*Keywords: Tourists' Purchase Intention, Service Quality, Perception, Satisfaction*

## **INTRODUCTION**

The increasing number of foreign and local tourists' arrival at the different tourists' destination places in Malaysia has been significantly increasing since 2004 with a predictable number of 29.7 million tourist by the year 2015 (Kosnan et. al,2012; Malaysia International Trade and Industry Report, 2009). According to Jang and Namkung (2009) the related industry in regards to tourism and hospitality requires world class infrastructure. As a result restaurant service needs substantial amount of customers centric rather business centric, which require promoting their services towards the customer by understanding their perception as well. However, the industry has already faced frequent challenges in meeting the international standard of food and drinks for their target clients (Mak et. al 2012; Jang & Namkung, 2009; Jalis et.al., 2009). Research on service quality and customer satisfaction on tourist's purchase intention from a particular restaurant is still scarce and additional investigation requires where perception will take as a mediating role in order to explain and understand the insight of the tourists' for developing a better marketing strategy by the restaurant owners in the coming future. Hence, the purpose of this research is to empirically test the tourists' purchase intention from a restaurant by considering service quality, customer satisfaction and perception variables. However, this research will answer the

following research questions: In what extent does the relationships exist between service quality and purchase intention to select a restaurant when perception play as a mediating role? In what extent does the relationships exist between touristst's satisfaction and purchase intention to select a restaurant when perception play as a mediating role?

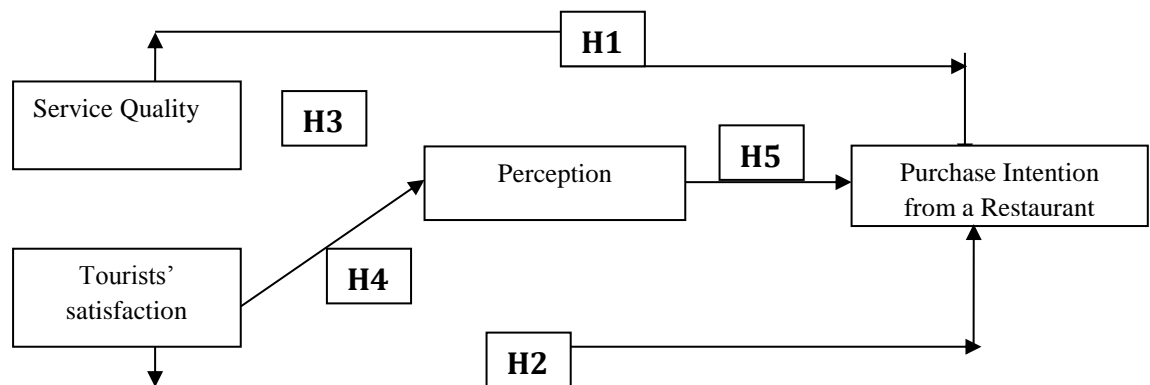
### **Constructs Development**

Service quality and client satisfaction are the two spirits of modern marketing premise and its practices (Spreng & Mackoy, 1996). The key sustainable strategy by the firm (restaurants) is to deliver high quality services as well as customer satisfaction by considering their perception in order to aim them to call their places (Samuel et al., 1998). Nevertheless, customer satisfaction has now become one of the most vital priorities of the managers in order to gain repeat purchase, confident and positive word-of-mouth, customer loyalty towards their restaurants. Gronroos (1984) define service quality by constructing two components, technical qualities and operational quality. The first one explains about the result of service delivery to the customers by the company, whereas the second one refers the way the service need to perform. In addition, numerous authors also discovered that there is a substantial relationship exists between the service quality and consumer's perception (Cronin & Taylor 1994; Zeithaml et. al., 1996). For example, customers may justify the nature of a restaurant's service based on their perceptual experience on the technical process by which the services are delivered on the other hand the surrounding environment where the services have provided to them. To assess service quality Parasuraman et al. (1988) also developed SERVQUAL which consists of five dimensions that are reliability, responsiveness, empathy, assurance, and tangibles. In addition, satisfaction among customers always influence their perception as well as their aim to visit the restaurants (Qin & Prybutok, 2008; Gilbert et.al, 2004; Kara, et. al, 1995). According to Leon & Leslie (2006) the level of satisfaction is provided by the a firm can be quantified by the number of repeat purchase or their intention to travel to the shop again. In further, Micuda and Dinculescu (2010) observed that the perception of the customers towards a firm influenced by various "intrinsic" and "extrinsic" cues. Zeithaml (1996) defines service quality is the consumer's judgment and decision in regards to buying a merchandise or service. In latter part Stevens et al (1995) explained that perceived service quality is a part of the interface among three variables for instance: normative expectations, predictive expectations, and actual service quality. To find out the reasons that clarify the customer satisfied in the restaurant Andaleeb and Conway (2006) used mixed methods in order to build a customer satisfaction model. The results of their research revealed that customer satisfaction is influenced by the responsiveness of the employees, followed by price and good quality. Tam (2004) explores the associations among customer satisfaction, servicequalityand perceived value. The outcome of this research revealed that client satisfaction and perceived value significantly influence customers post-purchasebehavior. However, Markovic et al. (2010) indicated that assessment of service quality in the restaurant industry is rather complicated because of its service process and delivery. Satisfaction is the consequence of a customer's perception of the value they receive from the sacrifice transaction (Levesque And McDougall, 1996; Reichheld and Sasser, 1990; Reichheld, 1996; Hallowell, 1996). Ghosh (1990) explores that measuring consumers' purchase intention is an effective tool to predict their purchasing process. In this regards numerous research also explain that consumers purchase intention influence by the cost, service, quality perception and value perception by the consumers (Zeithaml, 1996 and Grewal et al 1998). Above all the overall behaviour of a consumer is largely influenced by his/ her perception about the object. Consumers' perception can build up through how successfully a product or services has been marketed towards the customers (Dickenson,



1994). Product or service perception also called product/ service understanding by the consumers by considering the value (price, product quality, and variety) (Dillon and Reif, 2004). Perception can be defined as how a human recognize and interpret the stimuli (Parasuraman et. al, 1988). In other words perception is the first intuition that an individual can draw and interpret the information in a meaningful picture (Munnukka, 2008). That's why researchers believed that consumer perception influence the consumer's buying intention as well. Based on the above discussion the following conceptual framework is developed:

**Figure 1:** The Conceptual Framework for Tourist's Intentions To Purchase From A Restaurant



By referring to the discussions made by the scholars, following hypotheses for this research are developed:

**Direct hypothesis:** H1: There is a positive relationship between service quality and tourist's purchase intention from a restaurant. H2: There is a positive relationship between tourists' satisfaction and their intention to select a restaurant. H5: There is a positive relationship between perception and tourist's intention to choose a restaurant.

**Indirect hypothesis:** H3: There is a significant relationship between service quality and tourist's purchase intention to choose a restaurant when perception plays as a mediating role. H4: There is a significant relationship between tourist satisfaction and their purchase intention to pick out a restaurant when the perception play as a mediating role.

## RESEARCH METHODOLOGY

Data were collected from selected places from the Kuala Lumpur area where a significant number of tourists are frequently visited. This research applied convenience sampling procedure through shopping mall intercept technique in collection of information. The researchers picked the Kuala Lumpur city as its nature and characteristics of a multi-cultural city inhabited by three races (Malay, Chinese, Indian and other cultural origins). This cultural diversity makes this city a unique character by itself. Ujang and Muslim (2014) argued that the mega structure of the twin tower and the overall facilities significantly influence the holidaymakers (local and international) to visit Kuala Lumpur as a destination. This research applied survey methods as a tool for collection of data from the tourists who were visited Kuala Lumpur in Malaysia. This research used 200 respondent's responses for further data analysis. The study was conducted from 1st of March 2014 to 30th June 2014. This research included both local and international visitors. The following table explains the distribution of the respondents in terms of gender, age, nationality; preferences of restaurants and marital status. The entire details of the instruments were adapted from various scholars' research work. The variable service quality was measured by six items adapted from Johns & Tyas (1996); Kivela et al., (1999); Raajpoot (2002) Stevens et al.,

(1995) research. The tourists' perception was assessed through six items adapted from Dillon, and Reif (2004) research. In addition, satisfaction variable was measured by five items adapted from Oliver (1997); Oladepo & Abimbola (2014) studies. Lastly, tourist purchase intentions were assessed by five items adapted from Zeithaml et al. (1996); Namkung, Jang, (2007) research. All the details for the constructs were tested through 7-point scale (1 = extremely disagree and 7 = extremely agree). Data were analysed by two stages. In the beginning phase, the researchers performed a confirmatory factor analysis to assess the adequacy of the measurement model for further empirical testing. In the second phase of this research, we applied structural equation modeling (SEM) to discover the causal relationship (direct and indirect) among the variables. This research used chi-square test statistics; goodness-of-fit index (GFI); adjusted goodness of fit index (AGFI); root mean square residual (RMR); root mean square error of approximation (RMSEA) and X<sup>2</sup>/DF to test the overall model fit this research (Bollen, 1989).

### **DATA ANALYSIS**

This research fulfilled the content validity by defining the appropriate scale through depth literature review (Bock and Kim, 2002). In addition, in order to establish the content validity this research also pre-tested the instruments through the academic expertise, explaining definition of the constructs and from past researchers scale. Aside from that this research applied confirmatory factor analysis (CFA) of the individual constructs to make the construct validity of this study (Strub, 1989; Bock and Kim, 2002; Ryu et al., 2003). Congruent validity was achieved through the substantial loading (greater than 0.60) of individual items under each construct (See table 2). The outcome from the inner consistency of the loadings under each construct also explain the composite reliability and variance extracted (See table 2) (Bagozzi and Yi, 1988; Fornel and Larcker, 1981). Nevertheless, all the fit index is acceptable in range in order to proof the overall model fit criteria (See Table 3).

In the second stage of the statistical analysis, this research applied structural equation modeling (SEM) to inspect the proposed relationships on the conceptual framework (see figure 1). The answer from the SEM analysis (See Table 4) summarizes the result of the structural equation model test. This research assumed a confident relationship between service quality and tourist purchase intention to pick out a restaurant (H1), and between satisfaction and tourist intention to pick out a restaurant (H2). This result from the statistical test revealed that there is a significant positive relationship exists between the service quality and tourist intention to choose a restaurant ( $\beta=0.49$ , CR =6.038,  $p=0.004$ ). As a result this research support H1. In addition, the result also revealed that tourists' satisfaction positively related to tourist intention to pick out a restaurant ( $\beta=0.412$ ; CR= 4.708,  $p=0.035$ ). So this result also confirms hypothesis two. Meanwhile, the relationship between perception and intention to choose a restaurant also proved significant and positive. So as a result this research accepted hypothesis five ( $\beta=0.392$ ; CR= 5.708,  $p=0.025$ ).

**Table 2: Measurement Model**

Latent Construct	Items	Loadings	Composite reliability	Variance Extracted
Tourists' Perception (TP)	TP1	0.73	0.90	0.62
	TP2	0.78		
	TP3	0.85		
	TP4	0.78		
	TP5	0.79		
	TP6	0.76		
Tourists' Satisfaction(TS)	TS1	0.89	0.90	0.66
	TS2	0.73		
	TS3	0.81		
	TS4	0.87		
	TS5	0.78		
Restaurant Service Quality (RSQ)	RSQ1	0.74	0.90	0.61
	RSQ2	0.78		
	RSQ3	0.79		
	RSQ4	0.75		
	RSQ5	0.81		
	RSQ6	0.78		
Tourists' Purchase Intention (TI)	TI1	0.80	0.89	0.61
	TI2	0.75		
	TI3	0.82		
	TI4	0.81		
	TI5	0.76		

Note: Factor loadings are from CFA

**Table 3: Overall Fit of the CFA Model**

The model fits Index items	Scores	Recommendation
X <sup>2</sup> /df	372.656/202=1.84	Acceptable for model fit (1 < X <sup>2</sup> /df < 2)
Goodness-of-fit index (GFI)	.827	Close to 1 (Accepted)
Adjusted goodness of fit index (AGFI);	.798	Close to 1 (Accepted)
Root mean square residual (RMR)	0.017	Less than 0.025 (Accepted)
Root mean square error of approximation (RMSEA)	0.056	The value must be 0.05 or less (Accepted)
Comparative Fit Index (CFI)	0.783	Close to 1 (Accepted)

Above all, the outcomes of the present findings also confirmed by the previous research by the scholars (Spreng & Mackoy, 1996; Gronroos, 1984; Cronin & Taylor 1994; Zeithaml et. al., 1996; Micuda and Dinculescu, 2010; Andaleeb and Conway, 2006; Reichheld and Sasser, 1990; Reichheld, 1996; Hallowell, 1996; Munnukka, 2008). To test the mediation effect of customers' perception this researchers calculated indirect, direct and total effect among the constructs. The researchers looked at the nature of indirect effect

with a comparison to the direct effect. This research also compared the chi square values before and after the mediation test (Bagozzi and Yi, 1988). In fact, the Chi-square difference results also reflected that the accession of the customer's perception significantly improves the model fit (Default Model: Chi-square = 275.482; levels of freedom = 107 vs. Revised model Chi-square = 385.746; degrees of freedom = 207). The full effect of Tourists' satisfaction (TS) with their aim to visit a restaurant (TI) is 0.536, where indirect effect is 0.456. Therefore, this research revealed that the indirect effect among the relationship is stronger than direct effects. Thus, this research confirmed that there is a substantial relationship between satisfaction and tourists' intention to choose a restaurant when perception variable play a substantial part. As a result this research accepted Hypothesis 4. On the other hand, the overall effect of service quality (SQ) to tourists' intention to visit a restaurant (TI) is .40, with an indirect effect of 0.090 and a direct of 0.310. Therefore, based along the statistical findings this research also proposed that direct effect is more substantial than the indirect effect in this relationship. As a result this research confirmed that the role of perception in between the service quality and intention to visit a restaurant is partial rather full. As a result this research rejected hypothesis 3. From the statistical result, the researchers agreed that restaurant's managers not only focus on the service quality alone rather also look on the satisfaction of the customers as well to push their perception positively to visit their restaurant. Nevertheless, it is imperative to continuous improvement their service, according to the preferences by the visitors in the restaurants to influence their purchase intentions. .

## **CONCLUSION AND IMPLICATION**

The restaurant industry players in Malaysia need to transform them into consumer centric rather product centric in order to survive in the intense competition and high quality expectation from customers. The research from previous studies also confirmed that the restaurant industry require to look on the perception of their customers to design a quality customer service to achieve their targeted goal. In fact, quality assurance is not only the sole determinant of the purchase intention rather the players need to look on the customers satisfaction as well in their every step of operation (Bandin, 1997; Terry and Vincent, 1998). In fact the significant change of consumer perception in terms of quality services from the tourism related industry have also impacted on the growth of the hospitality industry in Malaysia. As result thoughtful understanding of the tourists unique preference and the satisfaction criteria are very important to gain a competitive advantage in the industry. The Managers in the hospitality industry should also develop closer relationships with their frequent customers through interactive behaviour. Above all, the research also believes that simply focusing on the traditional food, by the restaurant managers is not enough for the job of survival rather they need to concentrate on fast food items to satisfy the young tourists' needs.

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# THE IMPORTANCE OF ECONOMIC VALUATION FOR CONSERVATION IN LOWER KINABATANGAN SEGAMA WETLAND, SABAH

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## Abstract

Lower Kinabatangan Segama Wetland consists of three Permanent Forest Reserve covered a total area approximately 78,803 Ha. Situated in the eastern coast of Sabah and manage by Sabah Forestry Department, LKSW has been designated as Ramsar Site in 2008. The natural ecosystem in LKSW comprised of mangrove and peat swamp vegetation, wet grassland on peat and brackish; it provides habitat to various species of fauna and flora. Villages within and adjacent to LKSW are also depends on the resources available for their livelihood and sustenance. The uniqueness of biodiversity attractions has its potential for ecotourism industry from local and international visitors. The resources in LKSW have its economic important in terms of market value and non-market value creating a significant need for economic assessment. Economic valuation is a powerful tool for quantifying economics importance of wetlands in conservation and development planning. It also aims to quantify the benefits that people obtain from the wetland ecosystem goods and services. This makes them comparable with other economy sector when investments are being appraised and activities are planned. Hence, limited information about wetland values, misallocation of resources substantially can be occurred and immense economic costs will often incurred. This paper will briefly highlight the importance of determination of market and non market value and valuation method approaches for LKSW.

*Keyword: Wetland, Lower Kinabatangan Segama Wetland (LKSW), Goods and services, Economic valuation.*

## INTRODUCTION

LKSW is formed from 3 Forest reserve namely Terusan Kinabatangan (40,471 ha), Kuala Maruap & Kuala Segama (17,650 Ha), both in Class V, Mangrove Forest Reserve and Kulamba (20,682 Ha) in Class VII, Wildlife Forest Reserve. The site was officially designated as Ramsar site on 28th Oct 2008 during Ramsar COP 10 held in Changwon, South Korea

It lies along the eastern coastline of Sabah and currently within the administrative district of Kinabatangan, with the northern tip under the administrative district of Sandakan. LKSW is the largest Ramsar Site in Malaysia which cover an area of 78,803ha. It is also the first Ramsar site in Sabah. With such area, LKSW is the largest forest-covered floodplain in Malaysia, and possibly in Southeast Asia. The site is a particularly good representative

example of natural coastal mangrove, brackish and peat swamp forest systems, characteristic of the Indo-Malayan Realm (Udvardy, 1975).

Due to the multi-functional and the essential role of flora and fauna habitat, Sabah Government has initiated to preserve these Forest Reserve and in year 2008 officially gazette as Ramsar Site.

### **The Importance of LKWS**

LKSW is mostly covered by natural mangrove, brackish, peat swamp forest type and wet grassland on peat. These various vegetation types live many species of wildlife and marine life. These resources of LKSW provides the four functions of an ecosystem which are provisioning, regulating, supporting services and cultural.

The site was recognized as an internationally important wetland for its undisturbed ecosystem such as the mangrove forest, rare peat swamp forest, etc. The provisioning function can be identified in terms of fish stock supplied by the area to the surrounding areas. Villagers adjacent to LKSW depend particularly in fishing activities from marine and freshwater.

The biggest function of LKSW lies in its regulating function. Covering a large coastline of Sabah, it protects the shore from large storms, particularly from waves. The area also holds freshwater and release it slowly during drought season for Sabah state. In terms of supporting services, LKSW provide not only as habitat but also the breeding ground for unique species to LKSW. These contains a number of rare, endangered and threatened species such as the Sumatran rhinoceros *Dicerorhinus sumatrensis harrisoni*, proboscis monkey *Nasalis larvatus*, tembadau *Bos javanicus*, Borneo pygmy elephant *Elephas maximus borneensis*, Storm's stork *Ciconia stormi*, rhinoceros hornbill *Buceros rhinoceros*, Oriental darter *Anhinga melanogaster*, and dipterocarp species. The site was also recognized as ecologically important to provide spawning and nursery grounds for fish and prawns. The cultural service of LKSW lies in its service in education and ecotourism. At the moment LKSW has been receiving tourists, mainly foreigners. The most popular tourism product is river cruising and wildlife observations. There are also homestays within and in adjacent areas. These homestays make use of LKSW as one of their homestay packages.

LKSW natural resource uniqueness provides habitat for fauna and flora; concurrently contribute wealth for human wellbeing.

The biodiversity resources attraction create the recreation and ecotourism activities such as river cruising and jungle tracking. Most of LKSW covered by natural mangrove function as protection to thunderstorm and for future benefit has the role for carbon sequestration as part of climate change phenomenon. LKSW partially preserved as wildlife protection due to the important of the endangered and protected species such as Pygmy Elephant, bird and proboscis monkey.

### **THE ECONOMIC IMPORTANCE OF LKSW**

The economic value of the goods and services has yet to be unknown thus the valuation of such resources both direct and indirect value are uncertainty. Wetland globally classified as one of the valuable ecosystem need to be preserved. It has multi-function and vital to provide sustainable ecosystem to human welfare which irreversible resources that cause negative impact. The Millennium Ecosystem Assessment estimated that wetlands provided



services worth US \$15 T worldwide. The highest benefits are found in Asia with an economic value of \$1.8 B per year. For instance, wetland gazettes as RAMSAR in Johor, Malaysia has been value USD 668,700 million. Therefore, sustaining and conserve the natural resource in wetland must be prioritized and adopted through social perceptive and practices.

From an economic perspective, monetary valuation of the environment can be performed in many ways, by either using market price information or eliciting consumer's preferences or by applying a wide range of non-market valuation methods. In the absence of market prices for environmental services, value estimation is concerned with a change in people's welfare (Nijkamp et al., 2008). The Total Economic Value (TEV) concept has been used by economist to categorized the type of value an ecosystem have, whether it is determined in a market and the services without markets (Kahn, 1995). TEV has been used widely as the framework in determining the four functions of ecosystem especially services without market. The natural resource that has the direct and indirect value will be categorized to ensure the appropriate method of assessment for the particular value.

At the moment there are no assessments of economic value on LKSW, especially in terms of non market values. The valuation of LKSW may be important to LKSW management and policy makers, it is necessary first to review the role of valuation in decisions that concern the use of environmental resources.

## **CONCLUSION**

The economic valuation is crucial especially for an area which cost for conservation is irreversible. Hence, it is important to determine the value of the goods and services of natural resources in LKSW to assist the future planning and implementation for conservation

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# BARRIERS WHICH IMPEDE SUCCESSFUL PLANNING IN JORDANIAN HOTELS

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## Abstract

This paper presents the results of a qualitative study designed to identify major emergencies which have affected Jordanian hotels. This paper investigates hotel preparedness for emergencies and look specifically at the barriers which impede successful planning in Jordanian hotels. 36 face-to-face interviews for managers from three, four and five star hotels in Amman and Petra were undertaken. The conclusion presents a wide range of natural and man-made disasters which have placed Jordanian hotels at risk. Cultural mentality, hotel size, management companies, high turnover rates, financial situations and a security-hospitality paradox were all barriers that have impeded emergency planning in Jordanian hotels. This paper emphasizes the governmental role to adopt proactive planning to mitigate the impact and cope with emergencies effectively.

Keywords: *Barriers, Planning, Emergency, Jordan, Hotel*

## INTRODUCTION

In spite of the growing number of natural and man-made disasters little research has been conducted on disaster management and emergency planning (Ritchie, 2008). The nature of hospitality environment which is often hazardous or offers experience in chaotic situation (Cioccio & Michael, 2007) calls for adequate attention. Regardless of the growing threats of disasters on hospitality industry, few hotels are prepared to handle and overcome the impact of such event. Hystad and Keller (2006) mentioned that yet disaster and emergency planning should be the core competency of hospitality managers. Furthermore, yet more proactive emergency planning approaches to hospitality disaster management have to be proposed (Ritchie, 2004). Ritchie (2008) argued that the lack of focus on disaster planning by researchers and practitioners is a concern, especially considering that reduction and readiness strategies have been the focus of emergency planning field for some time.

There is often a gap between emergency planning and the actual response to disaster. Quarantelli (1988) noted two main reasons for this gap. First, poor emergency preparedness. If plans are too segmented, the implementation will simply be poor. Secondly, planning and management usually follow different principles. Planning may assume that management will automatically occur through the implementation of plans. Good emergency planning involves the formulation of plans to deal with emergencies, but emergency management is based on tactics, which follow the strategy which could be changes due to emergency situation (Ritchie, 2008). If emergencies cannot be prevented then strategies can be used to limit the damages to hotels.

External and internal factors poses barriers impeding successful emergency planning by the hotels. Hystad and Keller (2008) in their study found that the majority of samples suffered from lack of sufficient fund, Lack of knowledge on disaster plan details, inability to make change due to small size business, and a perceived lack of cohesiveness in tourism industry. Scholars suggested that understand current knowledge level, hotels must undertake training

needs analysis on emergency planning and preparedness, in order to indicate barriers to implementing mitigation measures as well training opportunities (Johnston *et al.*, 2007).

The purpose of this paper is to investigate emergency preparedness for disasters and to highlight barriers which impede successful planning in the Jordanian hotels. Furthermore, a future directions for research in the hospitality industry. The paper argues that an understanding of hotel emergency planning is possible by understanding the literature and analysis of previous research alongside with the practical plan implementation, to identify barriers which impede successful planning and find a solution to mitigate the negative impact of emergencies.

## **LITERATURE REVIEW**

### **Barriers to emergency planning**

In the process of emergency planning, there are factors that present themselves and hinder the planning process from moving forward. These can be categorized as social, economic, institutional, and individual barriers, which are associated with creation of emergency planning (Corso, 2012).

#### *Social Barriers*

Social barriers directly relate to the interactions and the relationships between the planning parties and hotels. These barriers can include hotel ignorance and a lack of public support. Ignorance of the issues and process is a significant barrier. Many hotels are unaware of the benefits of emergency planning and believe planning is unnecessary until disaster occur. Most hotels do not view adoption of planning as a tangible concern and therefore do not view it as a priority. To counteract this mentality, adoption planning should be integrated into other plans that the hotel find interesting in order to bring awareness and facilitate the creation of the plans (Glavovic *et al.*, 2010).

#### *Economic Barriers and Facilitators*

One of the most essential resources required to develop an emergency management plan is funded. Funds are needed to support staff members tasked with developing a plan, conducting studies and courses to understand the impact of emergencies, hiring consultants and employees with useful expertise, and ultimately implementing the plan (FEMA, 2010). Unfortunately, adequate funding is simply not available to hotels in many situations. Many times, the amount available to spend is entirely depends on the hotel financial situation and governmental support (Hallegatte *et al.*, 2011).

#### *Institutional Barriers and Facilitators*

Institutional Barriers and facilitators are those that relate to the relationships and interactions between local, regional, and governments and her agencies. When hotels attempts to create their plan, the relationship and interactions with government agencies will be a factor of consideration in the creation of such plan (FEMA, 2008). Hotels are welcome to approach government agencies whilst creating plans for funding and support in order to complete their plans. Relationships and interactions between the members of the emergency management planning committee can either help facilitate or hinder the planning process. The committee is composed of staff members or other government officials. Some studies argue that having a wide range of officials on the committee is necessary to obtain a diverse viewpoint and a wider range of ideas. In some situations while planning, conflicts can arise due to members' priorities, which can cause lengthy discussions that may not bring out a good result with, officials preferring to respond to emergencies whenever they occur rather

than conducting long term planning in order to avoid working with other committee members (Schneider, 2002).

#### *Individual Perception Barriers and Facilitators*

While working in a group, there will inevitably be different opinions. Different opinions which can have a negative impact when members of the group do not agree on priorities because they have different perceptions of the entire situation. This emerging from the various initiator of working plans and goals embedded in the organizational structure within the hotel (i.e. Planning, Emergency Management, Safety, Security, etc.). They are having different experiences, and simply being different people. Individual perception can cause lack of agreement that can harm the creation, the approval, and the execution of any proposed plan and goals (Corso, 2012).

In the case of emergency planning and preparedness, an extreme example would result from different members not agreeing on the existence of emergencies. Some members would argue that it would be beneficial to include emergency planning because they perceive it to be a potential hazard. For those that do not perceive the existence of emergencies, they may argue that it does not worth the time and effort to prepare for something that can't be predictable or affect the hotels. This can ultimately lead to a stalemate in the creation of a plan or substandard plan that does not include considerations for emergencies.

### **RESEARCH METHODS**

This study aims to investigate the impact of emergencies and disasters on the tourism and hospitality industry in Jordan, emergency planning and preparedness. To undertake this study, a qualitative research methodology was considered the most appropriate method to describe the existing issues related to disasters and emergencies affecting Jordan hotels (Chaudhary, 1991). Secondary information was assembled from governmental resources, while in the qualitative approach, semi-structured face-to-face interviews have been used (Riley & Love, 2000). The use of semi-structured interviews conducted between October 2013 to January 2014, with a number of pre-determined questions, facilitated the scientific comparison between the responses of participating interviewees (Walle, 1997). 43 key persons in charge of 36 Jordanian hotels rated three, four, and five star hotels in Amman and Petra were interviewed (Sandelowski, 1995); this sample was selected using the purposeful snowball method. Regarding this method, personal links were used to identify the most knowledgeable persons. The sample size was determined using the 'saturation criterion', mentioned by Patten (2007): "at the point at which several additional participants fail to respond with new information that leads to the identification of additional themes, the researcher might conclude that the data collection process has become saturated" (p. 152). The materials collected in this study were subjected to qualitative thematic analysis aiming to uncover the prevalent themes by identifying, describing and reporting the content of data. Results will be outlined next, featuring direct quotations to support the study's findings.

### **FINDINGS AND DISCUSSION**

#### **Emergencies facing Jordanian hotels**

- Respondents were requested to explain the types and magnitude of emergencies that happened in their hotels in the yesteryear.

The findings revealed that Jordanian hotels were threatened by several emergencies and political instability in the Middle East. The findings also indicated that terrorism, Amman bombings 2005, Libyan patient's profile, financial problems, pandemics, employee turnover, and natural threats were identified as major emergencies facing Jordanian hotels.

This is in consistent with Ali and Ali (2011), Sawalha *et al.* (2013) who found that the unstable situation in the Middle East regarding to the Arab Revolution, Iraqi war, and the Palestinian-Israeli conflict were the major emergencies facing Jordanian hotels and a barrier to a great opportunity to develop the country and enhance peoples' financial situation. This finding likewise revealed that hotels in Jordan generally have been more susceptible to a wide range of disasters and emergencies. This is in conformity with the results of the studies conducted by Paraskevas and Arendell (2007), Ritchie (2004) where it was argued that the precarious global tourism environment brings about high vulnerability of hospital organizations to emergencies and disasters.

The findings also revealed that fires, poor maintenance management, low quality security machines, and weak preparations were among the emergencies facing the hotel industry in Jordan with its attendant impact on hospitality business, related industries, and the country's economy in general. Respondents also showed disappointed over the pacts signed with the Libyan government to host and receive the injured patient's fully on board in the Jordanian hotels, promising to pay them the invoices within 14 days. They concluded that until now they only receive 50% of the money after a series of auditing and discounts from the Libyan committees. Furthermore, the high cost of energy, high tax and pressure on services completed the emergencies facing Jordanian hotels.

#### **BARRIERS TO SUCCESSFUL EMERGENCY PLANNING**

- Respondents were asked to discuss the constraints that their hotels encountered when dealing with emergencies.

The finding shows that several constraints and barriers impede successful emergency planning in Jordanian hotels. Respondents revealed that since September 11, the hotels were forced to follow several procedures, install different security devices, and hire more security employees, which is costly and increase the overheads of the hotel. Hotels also suffer from the paradoxical relation between hospitality and security. One of the major challenges is the issue of recruitment and training of security personnel to manage hotel customers especially those that have military backgrounds. Problems do arise from how to conduct security scrutiny on reluctant guests by the hotel security employees. Some respondents mentioned challenges pertaining to employees resigning their job appointment due to some cultural beliefs and religion whereby it is considered as a sign of indignity for single ladies to be working in a hotel. Some employees are not conscious about the hotel and tourism aspects and education, with a spoiled attitude and conduct. This is in consistent with Sawalha and Meaton (2012) who mention that culture play significant role in the business continuity in the Jordanian Companies. Finally, respondents mentioned that tourism markets are very weak currently and searching for alternative markets in the light of the Arab revolution in the Middle East is very burdensome, since tourist seek safer and cheaper destinations.

- Respondents were asked about factors that impede successful emergency planning in the hotel industry.

Respondents mention lack of sufficient fund and management style could impede emergency planning. Others mention the mentality of guests using the hotels as it's very difficult to convince the Jordanian and Gulf, guests to be subjected to security scrutiny using the security stick or walk-through gates. Hotels, as a commercial company looking for profit, relate to the company and employee culture, a phenomenon which lead to lack of sense of responsibility and ignoring of job with a limited resources and high tax. This is in consistence with Al-Rasheed (2001) who mention that Arab managements lack future vision and short sighted, looking for quick revenue more than spending money on systems. Respondents from five star hotel didn't suffer a lot from such factors comparing with three

and four star hotels. The reason is that five star hotels should meet the international culture of the Management Company and the local government strategy. They further explained that international companies care more about safety and security for hotels and their guests with sufficient fund needed to install necessary devices. More so, professional inspectors visit the hotels to ensure installation and adopting of all necessary devices and procedures, evaluate the systems, and audit properties and employees. This is in consistence with Hofstede (1991) and Sabri (2004) who mention that Arabic culture is different from Western culture. A situation which determine the adoption of emergency management among small local hotels and big International hotels. Also its affect learning from past emergencies to prepare well for future occurrences (De Holan & Phillips, 2004).

## **CONCLUSION**

As this paper has argued, despite the growing threat of disaster and emergencies to the hospitality industry, few hotels are prepared to overcome the impact of such emergencies, yet, emergency planning should be a core competency of hotel managers. Due to the nature of hospitality industry compressing a large number of small and big hotels, stakeholders should change their reactive mindset and develop proactive strategies. Since further research on a number of topics associated with emergency planning and preparedness in hotels are urgently required. Such research can assist hotel managers to develop effective proactive plans. In particular, this paper has identified major emergencies occurred in Jordanian hotels, the current level of hotels preparedness as well as potential and actual barriers in industry emergency planning. The analysis presents disasters and emergencies which have placed hotels at risk. Cultural mentality, hotel size, financial situation, and the paradoxical relation between hospitality and security were all among the barriers that have impeded emergency planning in hotels. Proactive planning should be adopted from hotels with emphasizing the governmental role in order to cope with emergencies effectively.

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# AN ASSESSMENT OF INTERNAL CONTROLS IN BUDGET HOTELS IN MALAYSIA

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## Abstract

Prior studies claim that having effective internal controls creates a competitive advantage, as organizations with effective internal controls will be able to take on additional risk, especially if the services offered are very similar. It is also claimed that having internal controls in place, would lead the organization to have a more effective and efficient operations, enabling them to provide a more reliable financial reporting and create better compliance with law and regulation. Among the industries which offer similar services is the hotel industry. This study attempts to examine the impact of internal controls practices in budget hotels in Malaysia on their performance. The internal controls components outlined by COSO are used to examine the relationship between the variables. Questionnaires were sent to 100 budget hotels in Kuala Lumpur and Selangor; however, only 32 questionnaires were returned and usable for the purpose of the study. Multiple regression analysis was employed to analyze the data.

The findings reveal that control environment, risk assessment and information and communication are significantly related to the performance of the budget hotels in the study. This research contributes to a better understanding of internal control in the budget hotels and provides information to the management of these hotels on the importance of internal control in their daily operations, as well as to remain competitive.

*Keywords: Internal control, budget hotels, monitoring, control environment, risk assessment.*

## INTRODUCTION

Hotel industry is considered as a subset of a broader hospitality and tourism sector (Zampoukos & Ioannides, 2012). It plays an important role towards the economy (Ionnides, Zampoukos, & Jordhus-Lier, 2012), apart from providing services towards the customer, the hotel industry also provides thousands of job opportunities to thousands of people across the countries. Besides the employment opportunities, hotels also provide staff training, and are claimed as significant consumers of locally supplied goods and services. In addition, Australian Hotel Association (AHA) states that hotel industry provides important services such as meeting places for corporate functions or important events, to being entertainment hub for both foreign and local tourist (Industry data, 2013).

Mazumder, Ahmed, & Al-Amin (2009) claim that tourism in Malaysia contributes significantly to the Malaysian economy and is a potential sector to enhance economic growth towards a developed nation by 2020. It is claimed that tourism in Malaysia has a positive effect to the hotel industry, as reflected in the increased in the average occupancy rate (Average occupancy, 2012). Malaysia has been experiencing a steady growth of tourists into the country, which create demands for hotel rooms. This is supported by Auzair (2011) who claims that the key component of the tourism industry is the hotels and the



government's effort to expand the tourism market in Malaysia has resulted in the increasing number of hotels to accommodate domestic and international tourists. The gradual increase in tourist arrivals has led hotel industry to step up its development and upgrading programmes. It can be seen by an upward trend of hotels and rooms supply in Malaysia from the period of 2003 to 2013. By the end of 2013, there were 3,094 hotels with 209,527 rooms available to cater for tourist arrivals, compared to 1,987 hotels with 144, 122 rooms in 2003 (Tourism Malaysia, 2014). The average occupancy rates in Malaysian hotels are also increasing, which is consistent with the increased number of tourist entering the country. In 2003, the average occupancy rate was approximately 53%, compared to about 63% in 2013. The statistics shows a positive relationship between tourism and the hotel industry. It is claimed that the performance of the hotel industry, will impact the country both economically and financially (Average Occupancy Rate of Hotels, 2012).

However, hotels operate in business environment that is characterized by intense competition and high uncertainty (Zigan & Zeglal, 2010), and they offer similar products to their customers. Fraud cases among hotels are also claimed to be increasing (UK: PKF urges 2012). The report also claimed that hotel organisations are not taking enough measures in their internal controls to secure their organisations. A study by Stamford (2012) also finds an increase in hotel insolvencies in UK by 8.6% in 2012 compared to that of the previous year, and this is claimed to be ranked as one of the highest sector with insolvency cases in the UK. Doyle, Ge and McVay (2005) have attributed that scandals in these firms/hotels are due to material weaknesses in internal control. Hence it is important that hotels have proper guidelines and internal control system within their organisations. This is supported by Drogalas, Karagiorgos, Chrisdoulou & Euaggelidou (2005) who posit that internal control systems are important to hotel organisations as it acts and resembles a "human nervous system" of the organisation. Therefore it is important that the firms in the hotel industry practice a better policies and controls. Otherwise, it might create negative impact to the hotel specifically, and to the hotel industry in general.

Previous studies claimed that having internal controls in place, would lead the organization to have a more effective and efficient operations, enabling them to provide a more reliable financial reporting and create better compliance with law and regulation. While there have been several studies done on various sectors in terms of the internal control practices and systems, very limited studies are performed in Malaysian context. Considering the importance of hotel industry to support tourism and hospitality industry in Malaysia, and how internal controls can help the hotels to provide better service to their customers and stay competitive in the industry, which would then lead to better hotel performance, this study will examine the internal control procedures and practices in Malaysian hotels. Specifically, this study will examine the relationship between the internal control components (as outlined by COSO) and hotel performance. There are five components in COSO guidelines, which are Control Environment, Control activities, Risk assessments, Information and communication and Monitoring. This study will examine how these five components of internal control affect the performance of hotels. It is also claimed that most of previous studies on hotels focus on big hotels and limited attention is given to small hotels, thus this study will address this gap by focussing on budget hotels in Malaysia.

## **LITERATURE REVIEW**

According to International Good Practice Guidance (2013) having effective internal controls creates a competitive advantage, as organization with effective internal controls will be able to take on additional risk. This is applicable to the hotel industry, where Ama (2012) wrote

that effective internal policies within hotel organisation is important to have competitive advantage, as in the industry, competitors would be providing services that are almost very similar, and having the same capabilities. Bianco & Ayub (2011) mentioned that by having effective internal controls, it would lead the organisation to have a more effective and efficient operations, enabling them to provide a more reliable financial reporting and create better compliance with law and regulation. With this, the hotel will be managed in a better manner and hence serves their customer better. This will cause better customer satisfactions and loyalty, better hotel branding, which at the end, creating a distinctive and have competitive advantage in the hotel industry, and at last being translated into good performance as well as obtain higher profit.

Stephens (2005) in his article, states that in order to reduce losses due to fraud, management should improve internal controls within the firm. While according to Cuomo (2005), internal controls are needed to facilitate organisation to protect organisations' assets as well as to assist the organisation to proper management. A fraud in a hotel could affect the financial stability of the hotel industry as well as the quality and price of the hostelling service that consumers enjoy (Gee, Burton, & Brooks, 2012). In order to secure a competitive advantage as well as developing business resilience, apart from internal controls, Bharwani & Mathews (2012) through their findings have pointed out that it have been increasingly important for those in the hospitality organisation, which includes the hotel industry to be more proactive in identifying, analysing as well as assessing risk while formulating their business strategies, rather than just focusing on reacting to any crises or emergency situations.

Firms with their internal policies and procedures and systems which are in alignment with the organisational goals tend to perform better than that of firms which do not have one (Crotts, Ford, Heung, & Ngai, 2009). According to Frazer (2012) there is a relationship between internal controls in the hospitality sector, failure rate and profitability of organisations, where based on the study done, positive perceptions towards internal control systems as a whole will lead to increase of profit margin, lower cost of operations and increased of return on investment in the hospitality sector. On the other hand, it was found that organisations with weak internal controls are more likely to be financially weaker, smaller and younger in size. When a business organisation has effective internal controls systems within the organisation, it will help to enhance competitiveness as well as productivity of the organisation as a whole (John, 2011).

## **RESEARCH METHODOLOGY**

Data used in this study was collected using primary source (questionnaire). The questionnaire used in this research was adapted from earlier studies, Muraleetharan (2006), Shanmugam, Ali, & CheHaat (2012), Katou (2008), and Mawanda (2008). Questionnaires were distributed to top management of the hotels, either the general manager, operation manager or the front office manager of the budget hotels. They were selected because they know about hotel operations and the internal controls of the hotels. About 100 questionnaires were distributed to the respective managers at budget hotels which registered with Ministry of Tourism and Culture Malaysia in Kuala Lumpur and Selangor. However, only 32 questionnaires were returned and usable for the purpose of the study.

The data was checked for reliability, validity, normality, and multicollinearity. Multiple regression analysis was employed to analyse the data. The following is the designed

equation model to analyze the relationship between the internal controls components and hotel performance:

$$PERF = \alpha + \beta_1CE + \beta_2RA + \beta_3CA + \beta_4IC + \beta_5MA + \varepsilon$$

Where:

*PERF* = Hotel performance

$\alpha$  = Intercept

*CE* = Control Environment

*RA* = Risk Assessment

*CA* = Control Activities

*IC* = Information and Communication

*MA* = Monitoring Activities

$\varepsilon$  = Error term

## **RESULTS AND DISCUSSIONS**

### **Profile of the hotels and respondents**

From the 32 sample hotels, six hotels are rated as 3-star hotels, ten hotels are rated as 2-star hotels and seven hotels as 1-star hotels. Another 9 hotels are small hotels which are registered with the ministry but have no ranking as they are small hotels. Their occupancy rates range from 40% to 100%, with majority of the them (53%) enjoy the occupancy rate between 60% to 79%. In terms of number of rooms, about 50% of the respondents have between 30-59 rooms. Most of the questionnaires were filled up by managers of the hotels, 75% of them are male and most of them (44%) have diploma or certificate.

### **Reliability, validity, normality and multicollinearity**

The reliability checked of the data indicates that the Cronbach's alpha is 0.83, and acceptable as it is more than the threshold value of 0.70 (Pallant, 2001, p.85). The value of Kaiser-Meyer-Olkin for the data is 0.79 which indicates that factor analysis model is appropriate as the value is greater than 0.5 (Field, 2005).

An examination of the descriptive statistics of the variables used in the study shows that the data appears to be normally distributed as the skewness and kurtosis values are between  $\pm 3.00$  (Kline, 2005, p.50). In addition, the pairwise correlation coefficients of the variables are also checked. The correlations indicate that there is no multicollinearity problem, as the correlations are below the threshold value of 0.8 (Gujarati, 2003, p. 359).

### **Regression analysis**

Table 1 presents the regression result. The result in Table 3 indicates that the adjusted R square for the model used in the study is 0.735 and the F-value is 18.207 ( $p < 0.000$ ). It means that about 74% of the variation in the performance of the hotels can be explained by the model.

Column 3 of Table 1 indicates that three of the independent variables, CE, RA and IC are significant. However, another two independent variables (CA and MA ) are not significant.

**Table 1: Regression Analysis**

	<b>Coefficients</b>	<b>T-stat</b>
<b>Constant</b>	-.084	-.149
<b>Control environment (CE)</b>	.339	2.754**
<b>Risk Assessment (RA)</b>	.288	2.173**
<b>Control activities (CA)</b>	.145	1.171
<b>Information and Communication(IC)</b>	.369	3.196***
<b>Monitoring (MA)</b>	-.124	-1.081
<hr/>		
<b>R Square</b>	<b>: 0.778</b>	
<b>Adjusted R Square</b>	<b>: 0.735</b>	
<b>F</b>	<b>: 18.207</b>	
<b>Significant</b>	<b>: 0.000</b>	

Note: \*\*\*Significant at 0.01 level \*\*Significant at 0.05 level \*Significant at 0.10 level

The results appear to suggest that information and communication (IC) component is of great importance to the budget hotels, as most of them are small organisations and are run by limited number of employees, hence communication between those employees will ensure that the operations of the hotels are run smoothly. Each employee will have a very substantive and unique role, and if they do not communicate properly, they would not be able to know important happenings in the hotel. This result is supported by several prior studies. Brown (1996) argues that key points to success should be communicated to the whole organisation in ensuring better performing organisation. Another study by Auzair (2011) points out that proper information and communication systems within hotels would help the hotel to offer high quality services and improve customers' experience.

Another variable, Control Environment (CE) also has significant relationship with the performance of the hotels. This finding is consistent with earlier studies by Adams et al. (2005), who concluded that top management plays important role in setting the tone of the top and would lead towards a better performing organization. This notion is also supported by Verschoor (1998) and Hill et al. (2010) whose studies show strong relationship between the top management commitments and corporate financial performance. Hill et al. (2010) posit that control environment component has positive impact on hotel performance, if the top management is committed, the performance of the organisation will prosper too.

Prior literature claim that risk management is important for the success of the organisations. It is believed that through risk management organisation will be able to have better competitive advantage (Bharwani & Matthews, 2012), and Ama (2012) points out that risk management will help organisation to reduce any unwanted surprises or failures in future to come, which will then lead to better performance. This study also finds that risk assessment (RI) is an important element and significantly influence the performance of the hotels. This result is also consistent with Muraleeetharan (2006) which claim that risk assessment would provide information to an organisation to safeguard its financial position.

However, another two variables, Monitoring (MA) and Control activities (CA) components are not significant in their relationship with hotel performance. Detail examination of the data reveals a plausible explanation for this results. Monitoring (MA) and Control activities

(CA) are not significant in this study may be because majority of them are family owned businesses, and the owners do not really need to monitor their employees, which are their own relatives. The trust and respect in the family prompt them to perform their job appropriately. In fact some of them are trusted with the authority to make decisions, if needed in the absent of the general managers.

## CONCLUSION

Overall, the result indicates that control environment, risk assessment and information and communication are important components of internal controls which influence the hotel performance of budget hotels in Klang Valley. The results suggest that commitment from the top management, good communication between the employees and risk assessment for the hotels are the recipe and significant factors which influence the budget hotel performance.

However, the conclusions drawn from this study should be interpreted in a limited way, which would potentially represent opportunities for further investigation in future research. Firstly, the samples which are used in this study are quite small, future research can include more samples to represent Malaysian budget hotels. In addition, future study may also be extended and include 4-star and 5-star hotels, thus the importance of internal control to hotel industry as a whole can be examined.

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# **SERVICE CLIMATE AND ITS EFFECT ON ORGANIZATIONAL TRUST IN A TRADING COMPANY**

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## **Abstract**

Service climate plays a vital role in developing employees' perception of trust in organization. This study aims to examine the relationship between service climate and its effect on organizational trust. Data was collected from using a random sample of 250 employees in a trading company using questionnaire as the main data collection tool. The instrument used to measure service climate was developed by Johnson (1996) which comprises dimensions such as service strategy, service support, service systems, rewards and recognition, management service orientation, and employee service orientation, which capture service climate more comprehensively from the context of the study. Organizational Trust was measured using a scale developed by the Institute for Public Relations' (2005). Results of the instrument's Cronbach Alpha measurement show that the score of reliability is above .90 which indicates a high level of reliability. The results of the findings indicate that service climate is strongly and positively correlated with organizational trust. Length of service also had significant influence on organizational trust. This study provides insights on the relationship between service climate and organizational trust in the Trading sector. The findings of this study may help organizations to enhance its service climate and its effect on organizational trust. Limitations and recommendations are also discussed.

*Keywords: Service climate, Organizational trust, trust, service, Trading Company*

## **INTRODUCTION**

Service climate is the quality of the organization's environment as experienced by its members and can be described in terms of values or the meaning of a particular set of characteristics of the environment and how organizational environments importance are perceived and interpreted by employees (James and James, 1989; 1990; Johnson, 1996). Gronroos (2000) proposed the concept of service climate as the internal climate, the picture of how internal relationships function between people in an organization. The organization should play a pivotal role in creating foundations, providing the development of a service climate that supports and encourages teamwork and eliminating barriers between departments (Chung, 1993) this is because an organization's service climate as perceived by customers is the result of interactions among managers, frontline employees and customers (Schneider, 1990). Trust has been described as the "social glue" that can hold different kind of organizational structures together (Atkinson & Butcher, 2003). Shamir & Lapidot (2003) suggest that trust is both an interpersonal and a collective phenomenon. At the individual level, trust is based on interpersonal interaction (Atkinson & Butcher, 2003). By institutionalizing trust through practices at the collective level, trust becomes internalized at the individual level (Kramer, 1999). At the system level, trust is institutional and based on roles, systems or reputation, from which inferences are drawn about the trustworthiness of an individual (Atkinson & Butcher, 2003). Perry & Mankin (2007) showed that organizational trust is an important factor in



shaping employees engagement. Gilbert & Tang (1998) described organizational trust as “a feeling of confidence and support in an employer. They further believed that the determinants of organizational trust are: a) work group cohesion; b) friendship centrality; and c) receiving information through social integration and mentoring (Gilbert & Tang, 1998).

## METHODOLOGY

A survey design was used to reach the research objectives. The specific design was the cross sectional design, where a sample is drawn from a population at a particular point in time (Shaughnessy & Zechmeister, 1997). About 250 questionnaire were distributed to staff of a local trading company in Kuching.. About 200 respondents returned back the questionnaire giving a response rate of 80%. Service climate was measured using a scale developed by Johnson (1996) which comprise dimensions such as service strategy, service support, service systems, rewards and recognition, management service orientation, and employee service orientation, which capture service climate more comprehensively from the context of the study. Organizational Trust was measured using a scale developed by the Institute for Public Relations’ ( 2005). Results of the instrument’s Cronbach Alpha measurement show that the score of reliability is above .90 which indicates a high level of reliability. Results of the instrument’s Cronbach Alpha measurement show that the score of reliability is above .80 which indicates an acceptable level. This is shown in Table 1.

**Table 1:** Reliability test (N=200)

<b>Variables</b>	<b>No. of Items</b>	<b>Cronbach’s Alpha</b>
Service Climate	32	.96
Organizational Trust	19	.95

## DATA ANALYSIS AND RESULTS

The data was analyzed using SPSS version 20 and both descriptive and inferential analysis was performed. The respondents are equally balanced between males and females. About 71 percent of the respondents were aged between 26 to 36 years ago and 50% are married. Majority of the respondents were Chinese (42 percent) followed by Malays (33 percent). About 75 percent of the sample has either Degree or Diploma qualifications. As for length of service 50 % of the respondents had served for 3 to 6 years. About 29 percent of the respondents were Project Managers followed by Administrative Professionals (25 percent). About 75 percent of the respondents earned between RM2, 000 to RM5, 000. This is summarized in Table 2.

**Table 2:** Profile of respondent ( N=200)

<b>Profile</b>	<b>No. of Respondents</b>	<b>Percentage (%)</b>
<b>Gender:</b>		
<b>Male</b>	100	50
<b>Female</b>	100	50
<b>TOTAL</b>	200	100
<b>Age:</b>		
<b>26 – 30</b>	73	36.5
<b>31 – 36</b>	69	34.5
<b>37 – 45</b>	30	15.0
<b>46 – 50</b>	18	9.0
<b>Others</b>	10	5.0
<b>TOTAL</b>	200	100
<b>Marital Status:</b>		
<b>Single</b>	99	49.5
<b>Married</b>	101	50.5
<b>TOTAL</b>	200	100
<b>Race:</b>		
<b>Malay</b>	66	33
<b>Chinese</b>	84	42
<b>Others</b>	50	25
<b>TOTAL</b>	200	100
<b>Length of Working:</b>		
<b>1 – 3</b>	57	28.5
<b>3 – 6</b>	100	50
<b>6 – 10</b>	43	21.5
<b>TOTAL</b>	200	100
<b>Monthly Income:</b>		
<b>RM1001 - RM2000</b>	30	15
<b>RM2000 - RM3000</b>	66	33
<b>RM4001 - RM5000</b>	74	37
<b>RM5001 - RM6000</b>	30	15
<b>TOTAL</b>	200	100
<b>Education:</b>		
<b>SPM</b>	16	8.0
<b>STPM/ DIPLOMA</b>	71	35.5
<b>DEGREE</b>	79	39.5
<b>Others</b>	34	17.0
<b>TOTAL</b>	200	100

Table 2 shows the result of descriptive statistic. The mean for the Service climate is 3.71 indicating a high level of service climate. As for the dimensions of service climate the dimension which has the highest mean is management service orientation (mean 4.00) and the lowest is for service support (mean 3.53). And for organizational trust the mean is 3.53 indicating a moderate level of organizational trust. In addition, the study found a strong positive relationship between service climate and organizational trust ( $r = 0.868$ ;  $p < 0.01$ ). This indicates that service climate had a positive effect on organizational trust. This is shown in Table 3. The study also investigated the influence of demographic factor such as length of working experience on organizational trust. The One way ANOVA test showed significant difference in organizational trust indicating that respondents who worked longer had higher levels of organizational trust. This is summarized in Table 4.

**Table 2: Means of Main Constructs & Dimensions (N=200)**

Construct	Mean	Standard Deviation
<b>Service Climate</b>	<b>3.71</b>	<b>.45</b>
<input type="checkbox"/> Service Strategy	3.72	.50
<input type="checkbox"/> Service support	3.53	.51
<input type="checkbox"/> Service systems	3.66	.49
<input type="checkbox"/> Training	3.67	.51
<input type="checkbox"/> Reward	3.61	.57
<input type="checkbox"/> Employee Service Orientation	3.78	.62
<input type="checkbox"/> Management Service Orientation	4.00	.59
<b>Organizational Trust</b>	<b>3.53</b>	<b>.48</b>

**Table 3: Correlation between Service Climate and Organizational Trust**

Variables	Organizational Trust ( r value)
Service Climate	.868**

**Table 4: ANOVA: Organizational Trust and Length of Working Experience**

Demographic Factor	F	Sig
Length of working experience	7.50	.001

## DISCUSSION

The findings of this study confirm that service climate has an important impact on organizational trust in the selected trading company. Majority of staff perceive that the level of service climate in their company as high and organizational trust as moderate. In terms of correlation, high level of service climate may lead to higher levels of organizational trust amongst the staff. This study supports previous findings by

Whitener et.al (2005) who suggests that organizational factors such as structure, policies and procedures would affect employees' perception of trust.

The study presents two major implications: theoretical contribution and practical contribution. In terms of theoretical contribution, the results of this study confirm that service climate as an important determinant of organizational trust and hence contributes to research on service climate and organizational trust in the trading sector. In terms of practical contributions, the findings of this study can be used as a guideline by the trading company to enhance service climate and use it to increase its staff level of trust towards the organization,

## **CONCLUSION**

This study confirmed that service climate can influence organizational trust. The study used valid and reliable measurement scales were used to measure the relationship between service climate and organizational trust. The correlation test revealed a positive relationship between service climate and organizational trust. Furthermore the study also found significant influence of length of working experience on organizational trust. Therefore, current research and practice within service climate needs to understand service climate as a related to organizational trust. This study further suggests that a satisfactory level of service climate will strongly enhance and promote higher levels of organizational trust

This study acknowledges several limitations. First, a cross-sectional research design was used to gather data at one point within the period of study. This may not be able to capture the developmental issues and/or causal connections between variables of interest. Second, the survey questionnaires relied heavily on the respondents' self-responses that were selected based on random sampling technique. Finally, the samples were taken from one trading company in Kuching via survey questionnaires. These limitations may decrease the ability of generalizing the results to other trading companies in Malaysia.

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# **DETERMINING ANTECEDENT OF MUSLIM TRAVELERS' OVERALL SATISFACTION FOR HALAL HOSPITALITY IN MALAYSIA**

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## **Abstract**

Islamic tourism in Malaysia is growing rapidly year by year. The demand of Islamic tourism products has also gained significant recognition based on the increasing number of Muslim tourists to Malaysia in recent years, albeit a few hotels claimed to provide Islamic tourism products. However, researches on Halal hospitality industry from the perspective of the travelers in Malaysia are still lacking. The paper is written to offer a framework that attempts to investigate the dimensions of Islamic attributes of hotels that may be important to the segment of travelers for Halal hospitality in Malaysia. A total of 250 responses were collected and the data was analyzed by using SPSS Version 20. The finding of the study shows that some of the items were deemed to be both reliable and valid, even though they fell under different loadings. It is hoped that the study provides clearer understanding about Halal hospitality and the religious needs of tourists from the travelers' standpoint in order to develop marketing strategies to attract Muslim travelers and to ensure the expansion of the industry particularly in Malaysia's tourism.

*Keywords: Halal hospitality; Islamic Attributes of Destination (IAD); satisfaction; Behavioral Intention*

## **INTRODUCTION**

Tourism is multi-sector industries that include sectors such as hospitality, travel and visitor services (Mohamad et al, 2011). Tourism industry is the one of the important sectors expected to generate revenues and will contribute a lot to Malaysia's economic growth. As stated by Osman & Sentosa (2013), tourism sector contributes about 7.9% to the GDP of Malaysia. In 2012, a total of 25.03 million tourists had been visited to Malaysia compared to 24.71 million tourists which an increase of 1.3% from 2011. This is contributed from RM58.3 billion in 2011 to RM60.6 billion in 2012 (Tourism Malaysia Annual Report, 2012).

In recent years, the growing interest in new concepts of Halal tourism, Halal Hospitality, and Halal friendly travel have been seems but there are have limited empirical research to addresses about this area (Battour et al, 2013). According to Eid (2013), religious play a large influence in determining consumption experience such as hospitality and tourism choices among Muslim travelers. Moreover, Battour et al (2011) pointed out that religiosity is known as a factor that can influenced behavior in social setting and it is important to ensure that Islamic religious attributes are available to all destinations and will lead to tourist satisfaction and encourage Muslim tourists to come again.

Consideration about the availability of Islamic attributes is very important when a Muslim tourists' decides to travel around the world. They will not select a particular destination if

these attributes does not exist. Islamic attributes describe the availability of Islamic practices that are related to tourism (Battour et al, 2011).

## **LITERATURE REVIEW**

### **Behavioral Intention**

Behavioral intention refers to the tourist's judgment about likeliness to revisit to the same destination or the willingness to recommend the destination to other people (Chen & Tsai, 2007).

Past research has been done already uses Behavioral intention as a dependent variable (Bosque & Martin, 2008). As stated by Chen and Chen (2010) attempted to examined the visitor experience of heritage tourism and explore the relationships between the quality of those experiences, perceived value, satisfaction, and behavioral intention. The data were collected from 447 respondents at four main heritage sites in Tainan, Taiwan. The results of the study revealed that the direct effects of the quality of experience on perceived value and satisfaction. However, it is the indirect effects of the quality of experience that impact on behavioral intentions when mediated by perceived value and satisfaction.

### **Islamic Attributes of Destination (IAD)**

Islamic Attributes of Destination (IAD) consists of Availability of Halal Food and Worship facilities, Immoral Activities and Dress code. The first IAD were used as an independent variable is availability of Halal food and worship facilities. Halal food can be defines as a food that can be legally consumed and the preparations of the food met with Islamic regulation (Battour et al, 2011). According to Din (1989), at the first class hotel at the city of Kuantan, Malaysia need to provide prayer rooms or prayer space that fully equipped of prayer mats, the Quran, Surah Yasin and Tasbih and the direction of Qiblat (facing Mecca).

The second IAD were used as an independent variable is immoral activities. As cited by Din (1989), the Malaysian authorities have been strict in regulating the tourism industry. The regulations of control activities such as gambling, consumption of pork, alcohol, eating during Ramadan and provision against Khalwat clearly apply only to Muslim.

The third IAD that were used as an independent variable is dress code. According to syariah, dress code can be defined as Muslim women must not expose their body and hair to society. Most of the women say that, their attire is reflective of their level of development, even though some of them say personal or cultural reasons for not covering. They also claim that attire Islamic because of they held religious conviction deeply and can protect them from unrelated male attention. They also indicate that attire properly allows them to share specially about them only with their husband that not has been seen by other men (Koop, 2002).

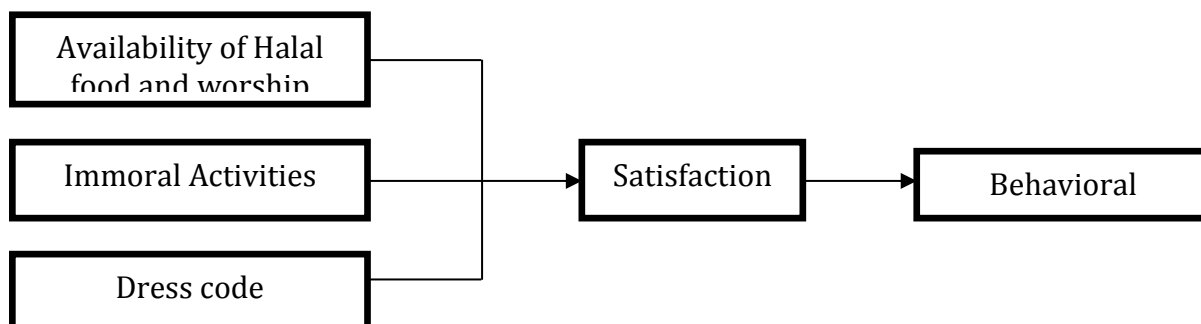
### **Satisfaction**

Satisfaction defined as a consumer's fulfillment response. It is a judgment about the product or service provided and as a level of consumption that related to fulfillment including level of under or over-fulfillment (Oliver, 1997).

Many past research have been done to test satisfaction as a mediator (Battour et al, 2012; Osman & Sentosa, 2013; Eid, 2013) and as a dependent variable (Battour et al, 2013). Battour et al., (2012) attempted to investigate the mediating effects of overall tourist satisfaction between push and pull motivations and destination loyalty. The data were collected from 508 respondents in international hotels and tourism sites in four Malaysian cities include Kuala Lumpur, Kuala Terengganu, Penang and Johor Bahru. The finding revealed that tourism motivations positively related to tourist satisfaction. The findings also supported that tourist satisfaction positively associated to destination loyalty.

## Research Framework

### Islamic Attributes of Destination (IAD)



**Figure 1:** Research framework

Based on the figure 1 above, the research framework is developed based on the result of Exploratory Factor Analysis (EFA) and the past research. The result of factor analysis show that Islamic attributes of destination provided three distinct principal components that will be act as independent variables was labeled Availability of Halal food and worship facilities, immoral activities and dress code. Other than that, based on the past research, satisfaction will act as a mediator and behavioral intention will act as a dependent variable.

## METHODOLOGY

### Research Instrument

The instrument in the questionnaires will be divided into five parts which are Part 1 until part 4. Part 1 covers hotel attributes which include 37 items will be measured by using five-point Likert scale, 1 indicating 'not at all important' and 5 indicating 'very important'. Part 2 covers satisfaction which includes 3 items will be measured by using semantic differential scale, the first item of the questionnaire, 1 indicating 'completely dissatisfied' and 5 indicating 'completely satisfied', the second item, 1 indicating 'much less than expected' and 5 indicating 'much more than expected' and the third item, 1 indicating 'very far away' and 5 indicating 'very close'. Part 3 covers behavioral intention include 6 items will be measured by using semantic differential scale, 1 indicating 'least likely' and 5 indicating 'most likely'. Part 4 includes eight general information questions, such as gender, marital status, and so on.

### Sample and sample size

A total of 250 responses were collected as a sample for the pilot test. The data were collected randomly among Muslim travelers' from all country that comes to Malaysia at Kuala Lumpur International Airports (KLIA) by using quantitative method as well as self administrated questionnaires.

## FINDINGS

Analysis of the pilot data revealed that most of the tourists visited Malaysia were male tourists (70.4%) and most of them were single (53.0%). Majority of respondent either have a



bachelor degree (43.6%) or Master Degree (28.8%). Most of the tourists were comes from Middle East Countries (28.8%). The highest length of stay was 1 – 6 days (40.0%). Their range of age is between 20 years old and 30 years old (56.8%). Majority of the tourists visiting Malaysia for vacation (48.8%) and most of the tourists have the first time experience visiting Malaysia (37.2%).

Pilot test was conducted to test the reliability and validity of the instrument. The cronbach's alpha will be measure of internal consistency or reliability of the study. For the current study, the cronbach's Alpha for the all variable are Availability of Halal Food and Worship Facilities (0.826), Immoral Activities (0.722), Dress Code (0.787), Satisfaction (0.702) and Behavioral Intention (0.879). As cited by DeVellis (2003), a cronbach's alpha more than 0.70 is considered acceptable, but if a cronbach's alpha more than 0.80 is preferred and is considered 'good reliability'. In this case, we can conclude that the entire variables have acceptable internal consistency and all of the instruments can be used for the actual data collection.

## **CONCLUSION**

In conclusion, the study come out to test the reliability and validity of the instrument used in the questionnaires and to offer the framework that attempted to investigate the dimensions of Islamic attributes of hotels that will be the influenced to the tourists' behavioral intention. Even though many research have been done to investigate the factor influencing the tourist behavioral intention, but on this study it focus on the dimension of Islamic attributes. At the same time, the study will explore the role of tourists' satisfaction as a mediating factor among variables.

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# WORK PERFORMANCE AMONG FEMALE WORKFORCE IN MALAYSIA

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## Abstract

Individual job performance has been proven very important to overall performance of organization. In Malaysia, it is undeniable that female workforce has contributed a lot to national economic development. However, questions remain to be answered. Despite their role as a mother and a wife, can female employee perform as expected? If the answer is yes, what are the factors that contribute to their work performance? And in what sector or career can they perform the best. The paper aims to propose the framework and to confirm the reliability and validity of measurement items. A sample of 110 female employees from manufacturing, education, hospitality and health sectors in Terengganu, Malaysia involved in the pilot test. The findings of the pilot study are believed to be significant to proceed with the actual study.

*Keywords: Work Performance, Personality, Motivation, Organizational Climate, Time Management*

## INTRODUCTION

Human resources are very important for economic growth and for social, political and technology advancement. Individual work performance is an issue that has not only faced by companies but also various research fields including management, occupational health, organizational behavior and organizational psychology (Koopmans et al., 2011). It is a common assumption that what constitutes individual work performance differs across professions, settings and samples. Numerous studies on individual work performance have been conducted and with different approaches, variables and measures. However, none of them captures the complexity and the full range of what really constitutes individual work performance. Job performance has become as a critical consideration for manager to evaluate employee performance. Individual job performance directly reflects on company performance and core of the work as well as organizational psychology. As performance is very important to the organization a manager should consider employees' performance in their firm to make sure that the employees complete their job and duties with competent (Aarabi et al., 2013).

According to ESTA Ali (2012), Malaysian women have made great strides since the country's freedom in 1957 and professionally women have achieved many important milestones too. As he said in 2015 the country target at least 30 percent of women are employed in decision-making positions in a public sector will be signified achievement. This women's abilities and opportunities to lead, and regularly implicates diverse social and cultural hurdles as well as gender gap issues. According to (UNDP) United Nations Development Program, in Malaysia, various studies have shown that the participation of female capital lead to economic growth, a decline in poverty, better business performance and innovation, and more cost-effective health and social programs. Uddin (2010) stated women also play a main role in social and economic development of the countries in which it can be seen through the contribution of women in the labor market and their participation in the labor force can help increase economic growth stronger. The increasingly important

role of women in the economy leads to the need to increase their participation in the workforce and economic activities to enable the achievement of sustainable economic and social development as well as operating at a high level.

## **LITERATURE REVIEW**

### **Job Performance**

Work performance was identified as the major key to gain a competitive advantage and greater productivity in organization (Shaffril & Uli, 2010). Job performance refers to the people action toward their job that can contribute to organizational goal and it is under the individual power (Rotundo, 2002). Berghe (2011) mentioned that job performance refers to effort of someone performs their task or jobs.

Bashir & Ramay (2010) in their study revealed that there is a negative significant linking between job stress and job performance. A study by Boon et al., (2012) also found that there are significant factors that influenced employees' job performance which are work-family factor and personality. Organizational culture also directly influenced employee performance (Resubun et al., 2013). Past researchers also revealed that there is a positive relationship between job involvement and job performance (Hussain et al., 2012). Even though, the literature suggested that there are many factors influence job performance, this study would only focus on five variables which are personality, motivation, organizational climate, personal engagement and time management.

### **Personality**

Personality refers to hierarchical organization of personality that are organized into five dimensions which are extraversion, agreeableness, conscientious, neuroticism, and openness to experiences, (Campbell-Bridges, 2013). There are already several studies use personality to predict job performance. Mkoji and Sikalieh, (2012) found that the dimension personality of conscientiousness is the most predictive of job performance followed by openness to experience, agreeableness, and extraversion . Allahmed, (2012) found that job performance is influenced by personality traits. In fact, most of the researcher concluded that personality influenced on job performance.

Askarian and Eslami, (2013) stated that a major component that influence job performance is personality. The finding revealed that there was a significant connection between personality traits and job performance. The study aimed to observe the connection between personality traits and job performance in the education department of Kerman region. Skryme et al, (2005) found a significant relationship among conscientiousness, emotional stability, and agreeableness on efficiency of serving outbound call centre commissioners.

### **Motivation**

Several studies have been done to investigate the connection between motivation and employee job performance. According to AWOSUSI et al, (2011) in his study showed that that the level of job performance and job satisfaction among nurses in the area of study were poorly motivated and have a negative relationship. The result of the study conducted by Salleh et al, (2011) showed that all the job motivation and job performance were not significantly with propose that employees who have low and high motivation showed equally same performance. Mary (2010) concluded that insufficient motivation is still contribute to the performance of a good teacher. The study also found a positive significant relationship between intrinsic and extrinsic motivation and job performance among teachers in Kimaanya-Kyabakuza division.

### **Organizational Climate**

Putter (2010) defined organizational climate as a global construct and covering a broad series of climate aspects which included innovation, responsibility, standards, rewards, and clarity. According to Kanten and Ulker (2013), organizational climate can be defined as the characteristics of the organizational environment that practiced by employees that will influenced on their attitudes and behaviours. The finding revealed that there is positive and negative link between organizational climate and counterproductive behaviours. The study also showed that counterproductive behaviours affected by intimacy environment, organizational support and structure. Past study conducted by Kanten and Ulker (2013) used organizational climate as independent variable showed that there is positive and negative link between organizational climate and counterproductive behaviours.

To prove that organizational climate has an effect on job performance, a research was done by Selamat et al., (2013) and the result showed that there are significant factors from organizational climate that could affect teachers' job performance. Another study was conducted by Vashdi et al., (2012) found positive relationship existed between multiple climates in the school surroundings with teachers satisfaction and organizational citizenship behaviour.

### **Personal Engagement**

Engagement refers to a positive, rewarding, work-related that characterized by vigor, dedication and absorption (Schaufeli et al., 2002). Personal engagement refers to the person who are highly engaged will feel eager with their task and find it is easy to stay focused and invite other to participate in the organization activity (West & Dowson, 2012). According to Macey and Schneider (2008) personal engagement or employee engagement refers to psychological circumstances that are characterized as absorption, attachment, and passion to the work and organization and is often an umbrella term for aspects of organizational commitment, job satisfaction and job contribution.

Personal engagement has been conducted as dependent variable predicted by employee welfare, empowerment, employee growth and interpersonal relationship (Mani, 2011). Result of the past study showed that there is a significant dissimilarity between job engagement and organization, with co-workers support as a basic individual factor that influences both instrument of engagement and the job outcomes (Andrew & Sofian, 2012).

### **Management**

According to Pehlivan, (2013) time management refers to capability, actions and other activities of persons direct to their self and the ways they use their time effectively. Past study use time management to predict job performance showed that positive influence between time management and job satisfaction. Njagi and Malel, (2012) stated that referring to the theories that have been made by past researchers about time management will help others to know about the importance of time management. Researcher also claimed that the future persons job performance depends on an amount of control time is desirable and needed. Previous study found positive relationship exists between time management and job performance. A result from study by Abduljabbr et al., (2012) showed that there is a positive relationship between the time arrangement and time manner with the job performance. However, the finding of the study done by Hosseini et al., (2013) revealed that there is negative links between time management and job stress among employees in a sport organization.

## Research Framework

Based on literature review, below is the proposed framework for the study.

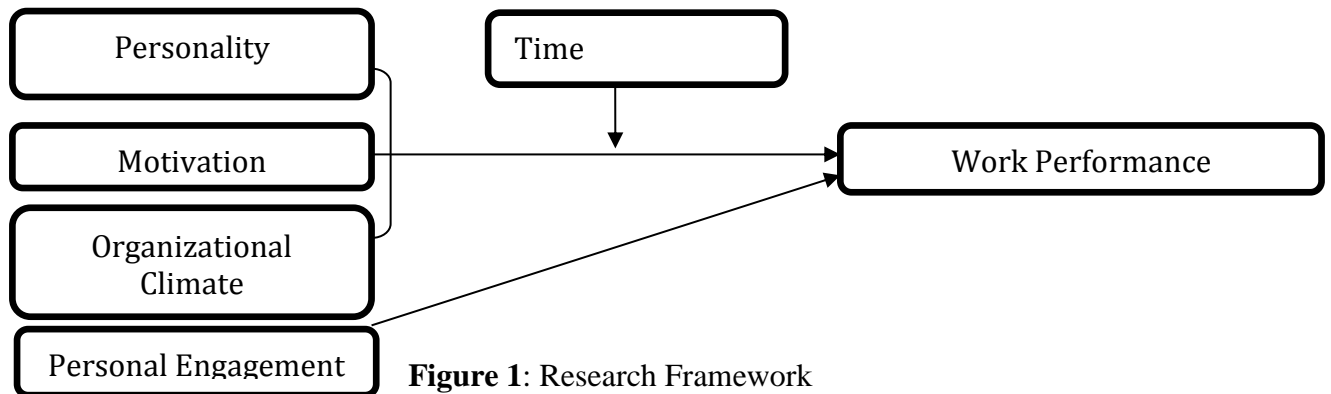


Figure 1: Research Framework

Based on figure 1, framework for the current study was proposed. It consist of four independent variables which are personality, motivation, organizational climate and personal engagement. Whereas time management acts as a moderator and job performance as an dependent variable. In addition, it is expected that all four independent variables like personality, motivation, organizational climate will have a positive relationship with job performance which may be moderated by time management. This framework also will illustrate or explain the relationship among the different variables involved.

## METHODOLOGY

Data for pilot study were collected randomly from operating companies focused on four sectors which are education sector, manufacturing sector, hospitality sector and health sector that are located in the east coast of Malaysia which is Terengganu. All four sectors were chosen because these sectors are dominated by women. This research applied quantitative method by using a survey questionnaire to gather the needed information with regard to this study.

The questionnaire was used as a research instrument for the study because it is cause, and effect based study, and the factors evaluated based on employees' perception. Pilot study was conducted to test whether the questionnaire is easy to understand by respondents.

The structure of questionnaire consists of two sections which are Part A and Part B. The first part is about the six variables which are personality, motivation, personal engagement, organizational climate, time management and job performance. The second part request the information about the respondent demographic such as age, race, religion, marital status, educational level, income level, tenure (organization), tenure (job position), and location of the company. Survey design for respondents used Five Point Likert Scale to rate their level of personality, personal engagement, organizational climate, time management and job performance based on self-reporting. The scale ranges from 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree/ Neither Agree), 4 (Agree) and 5 (Strongly Agree).

The sample of the study was female workforce working from four identified sectors and for pilot study purpose, 110 female workers involved. All of them were from four sectors which are education, manufacturing, hospitality and health sectors since these sectors dominated by women.

## FINDINGS

The variables for the current study are personality, motivation, organizational climate, personal engagement, time management and job performance. Pilot test was conducted to know the level of respondent understanding about the items asked to them. Table 4.1 showed the descriptive analysis and table 4.2 showed the reliability analysis. The Cronbach alpha for personality is 0.722, motivation 0.857, organizational climate 0.863, personal engagement 0.727, time management 0.844 and job performance 0.910 which showed that the scale are reliable to be used in the study. According to DeVellis (2003) the alpha that is above 0.7 is respectable, 0.8 is good and 0.9 is very good.

**Table 4.1:** Descriptive Analysis

<b>Demographic Characteristics</b>		<b>Frequency</b>	<b>Percentage(%)</b>
<b>Age</b>	21-25 Years	48	43.6
<b>Religion</b>	Islam	109	99.1
<b>Ethnic</b>	Malay	108	98.2
<b>Marital Status</b>	Single	60	54.5
	Married	50	45.5
<b>Education</b>	Degree	59	53.6
<b>Working Period</b>	1-5 Years	48	43.6
<b>Position</b>	1-5 Years	57	51.8
<b>Income Level</b>	Below Rm2000	44	40.0
<b>Sector</b>	Education	45	40.9
<b>Company Location</b>	Terengganu	110	100

**Table 4.2:** Result of Reliability Analysis

<b>Variables</b>	<b>Number of Items</b>	<b>Items Dropped</b>	<b>Cronbach Alpha</b>
<b>Job Performance</b>	8	-	0.910
<b>Personality</b>	11	5	0.722
<b>Motivation</b>	10	-	0.857
<b>Personal Engagement</b>	11	4	0.727
<b>Organizational Climate</b>	13	-	0.863
<b>Time Management</b>	5	-	0.844

## CONCLUSION

In conclusion, this study attempts to propose the framework and to confirm the reliability and validity of measurement items of variables. Although past research showed many factors affect job performance, this study will focus on four factors that might influence job performance and at the same time will investigate the role played by time management as a moderating factor.

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# MEASURING SERVICE QUALITY IN THE PULAU TINGGI AND PULAU SIBU MARINE PARK AREA (MPA): VISITOR'S PERSPECTIVE

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## Abstract

The Marine Park Area (MPA) in Malaysia is an attractive place to visit especially for the international visitors who seek for the natural beauty on the island. Due to the richness of coral species, the MPA was established in Malaysia since 1994 to protect these natural heritages and conserve the marine ecosystem. The number of visitors of MPA in Malaysia has increased for the last 12 years, from 10.22 million to 25.03 million between year 2000 and 2012. The overwhelming number of visitors visiting the MPA requires the management of MPA to increase the quality of services and facilities to meet the high expectation from the visitors. This study was aimed at measuring the level of visitor's satisfaction on service quality at the Pulau Tinggi and Pulau Sibul Marine Park Area located in Mersing, Johor. The total respondents who responded through face-to-face interviews in June 2014 involving 165 visitors. The data of this study were analyzed using descriptive analysis, gap analysis and Expectation-Perception Analysis (EPA). The results of this study revealed that there are negative gaps between expectation and perception from the visitors' perspective towards service quality provided by the MPA. Overall, the visitors of the islands were not quite satisfied with the services provided by the MPA. Therefore, the management of MPA needs to improve the quality of their services to attract more visitors visiting the islands.

Keywords: *Service quality, tourism, Marine Park Area, Pulau Sibul, Pulau Tinggi*

## INTRODUCTION

Malaysia, one of the important tourist destinations and become popular due to its richness in flora and fauna especially the coral reefs. Coral reef is among important marine species because it plays a role as nursery grounds for marine organisms and fish. The coral reefs cover almost 4,000 km<sup>2</sup> of coastal area in Malaysia (State of the Coral Triangle, 2012). According to Reef Check Malaysia (2013), the coral reefs are an important economic resources to the government and local community who live surround island. Tourism is one of the sectors on the islands and brings a significant revenue for the community. According to Masud *et al.* (2014) the development of Marine Park Area (MPA) as a tourist destination, has become popular as the tourists have changed their preference towards eco-tourism contributing to the increased in demand.

The establishment of MPA in Malaysia has started in 1983 (Department of Marine Park, 2011). The MPA can be defined as "extraction of living and non-living resources in marine environment is strictly prohibited" (Jones, 2007). The goal of MPA is to protect the entire

biodiversity, promoting scientific research, education and improve economic status of local community in the island through the promotion of tourism (Petrosillo, 2007). Today, Malaysia has 42 islands that have been gazetted into the MPA of Malaysia and these islands are grouped into five centres which located in Kedah, Terengganu, Pahang, Johor, and Federal Territory of Labuan (DOF, 2011). Pulau Tinggi and Pulau Sibul are the islands in Johor that have been gazetted as Marine Park in 1994. According to the Department of Marine Park (2014), statistics on tourist arrivals to Mersing Marine Park, Johor showed an increasing trend, from 63,226 tourists in 2000 to 185,541 tourists in 2013 both from local and foreign countries.

Visitors visit their desire destinations in order to fulfill and satisfy their needs (Arabatzis, 2010). Visitors' satisfaction in a tourism destination is necessary to improve products and services provided. Satisfaction can be defined by subjective (customer needs and emotions) and objective factors which are products and service features (Sapari *et al.*, 2013). Tourist is considered satisfied if the overall performance, while or after visiting a destination, exceeds or meets initial expectation (Akama and Kieti, 2003). The service quality (SERVQUAL) model has been widely applied in measuring customer satisfaction developed by Parasuraman (1985). Gap analysis is the research instrument to measure the level of satisfaction whether there exist any gaps (positive or negative) between visitors' expectation and perceptions of the service quality offered in Pulau Tinggi and Pulau Sibul. This study was initially proposed to examine the visitors' expectation and perception of service quality and their level of satisfaction of the Pulau Tinggi and Pulau Sibul Marine Park, Johor.

## **METHODOLOGY**

The primary data was obtained based on face-to-face interviews to collect the data on the visitors' perspective towards service quality in the Pulau Tinggi and Pulau Sibul Marine Park. Pulau Tinggi is located about 32 km from southeast of Mersing, while Pulau Sibul lies about 35 km from Mersing, Johor. A total of 200 structured questionnaires were distributed using convenient sampling to visitors who visited Pulau Tinggi or Pulau Sibul as their destination. A total of 165 completed questionnaires were received with 85.5% response rate. The field surveys were conducted in June 2014 and four trained enumerators were involved to collect the data.

The structured questionnaires were used for the study and organized into three sections. The first section of the questionnaire consisted of questions on visitors' socio-demographic characteristics including age, income level, country of origin, and education level. The second and third sections were designed to obtain information on visitors' expectation and perception towards service quality on Pulau Tinggi and Pulau Sibul Marine Park by using 25 statements. The questions that developed in the questionnaire were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was also designed in two languages, both the English and Malay versions because of the target respondents for this study comprised both the local and international visitors.

The data collected were analyzed using descriptive analysis that describes the basic features of the data in terms of percentage and frequency distribution. A reliability test (Cronbach's Alpha) was used to test the reliability of each attribute and this study has included 25 items of the statements to conduct the reliability test based on the expectation and perception. The level of service quality would be determined by using gap analysis. This analysis compared

the differences between perception and expectation (P-E) of the respondents on the 25 items of the attributes. Expectation-Perception Analysis (EPA) was used to identify the attributes that need to be prioritized for any improvement.

## RESULTS AND DISCUSSIONS

### Visitors' Socio-Demographic Profiles

The socio-demographic profiles of visitors who visited Pulau Tinggi and Pulau Sibul Marine Park were shown in Table 1. The result showed that male comprised 64.2% of the respondents, while female constituted only 35.8%. The highest percentage of visitors was from 31-40 years age group (33.9%) and the lowest was in the age group of below 20 years old (8.5%). In terms of education level, it was revealed that 58.2% had completed their higher education, while 38.2% and 3.6% had completed secondary school and primary school respectively. A large majority of respondents (70.3%) were married. The results also indicated the percentage of respondents according to their origin with majority were domestic visitors that form about 66.1% while the remaining were international visitors (33.9%). Lastly, the result indicated the percentage of respondents according to their occupation with the largest group (34.5%) dominated by private sector followed by government sector (26.1%) and run their own business (21.8%).

**Table 1:** Socio-Demographic Profile of Respondents

	<b>Variables</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	106	64.2
	Female	59	35.8
<b>Age (year)</b>	≤ 20	14	8.5
	21-30	48	29.1
	31-40	56	33.9
	41-50	32	19.4
	> 50	15	9.1
<b>Education Level</b>	Primary school	6	3.6
	Secondary school	63	38.2
	Higher education	96	58.2
<b>Marital Status</b>	Married	116	70.3
	Single	49	29.7
<b>Origin</b>	Domestic	109	66.1
	International	56	33.9
<b>Occupation</b>	Own Business	36	21.8
	Government sector	43	26.1
	Private sector	57	34.5
	Student	29	17.6

n=165

The result of reliability test is shown in Table 2. Cronbach's Alpha was used to measure the reliability and validity of 25 items of the statements. The alpha values for the expectation and perception variables were 0.783 and 0.935 respectively. The result was identified to have sufficient internal reliability consistency as the values exceeded 0.70.

**Table 2:** Reliability Test on Expectation and Perception of Visitors

	<b>Cronbach's Alpha Scores</b>	<b>No. of Items</b>
<b>Reliability of Expectation</b>	0.783	25
<b>Reliability of Perception</b>	0.935	25

**Visitors' Expectation and Perception towards Service Quality**

As seen in Table 3, it revealed the mean values and differences of expectation (E) and perception (P) towards the service quality in the Pulau Tinggi and Pulau Sibul Marine Park. Mean gap showed the differences between expectation and perception and indicated the level of visitors' satisfaction. The positive gap value indicated the level of satisfaction while the negative gap value indicated dissatisfaction. Based on Table 3, visitors' expectation score for the 25 items were mostly ranged between 3.91 and 4.61. Visitors had highest expectations on 'very clean and hygiene food court' with mean score of 4.61 and the lowest expectation was 'comfortable accommodation facilities' with mean score of 3.91. However, the perception scores were found lower than expectation scores. The visitors' perception were mostly ranged between 3.12 and 4.50. Visitors had highest perception on 'clean, unpolluted and beautiful beaches' with mean score of 4.50 and the lowest perception score was 'good monitoring and enforcement' with mean score of 3.12. The overall mean gap showed the negative value of -0.46 (P - E; 3.91 - 4.37 = -0.46). This results showed that the visitors were not satisfied with the service provided by the Marine Park Areas. The biggest negative gap value was related to the statement 'good monitoring and enforcement' (-1.41). It showed that most of the visitors dissatisfied with the bad monitoring from management of the Marine Department. Conversely, most of the visitors satisfied with the statement 'clean, unpolluted and beautiful beaches' with the positive gap value of +0.44.

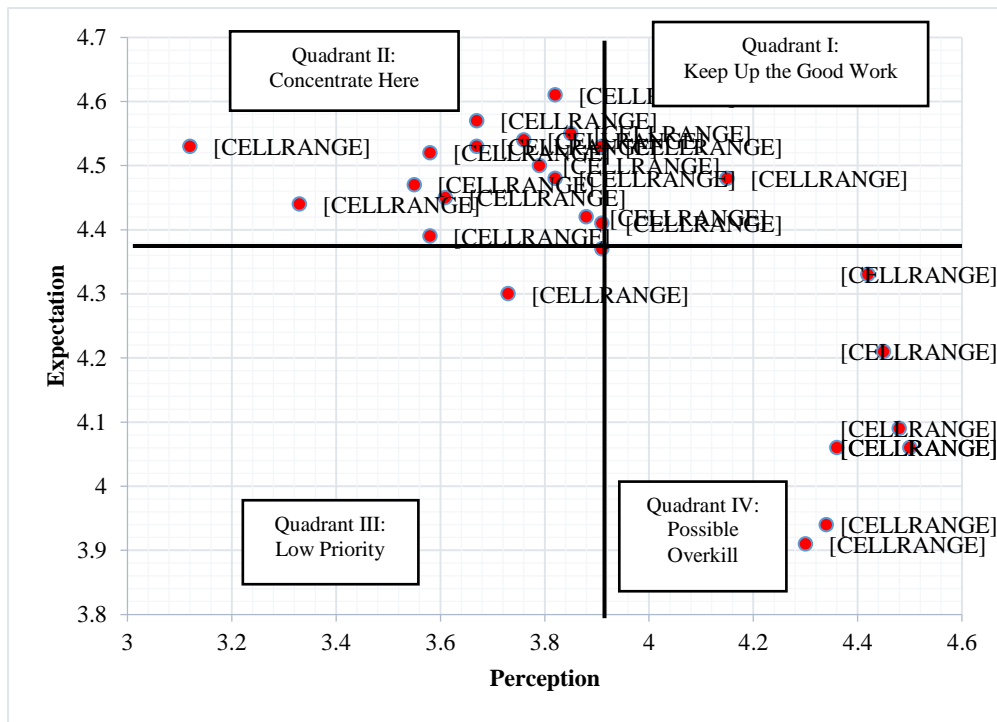
**Table 3:** Mean Values and Differences between Expectation and Perception of Visitors

<b>No.</b>	<b>Statements</b>	<b>Mean Expectation (E)</b>	<b>Mean Perception (P)</b>	<b>Mean Gap (P- E)</b>
1.	Abundance and variety of fishes	4.52	3.58	-0.95
2.	Open sea fishing activity	4.47	3.55	-0.93
3.	Good monitoring and enforcement	4.53	3.12	-1.41
4.	Abundance and variety of corals	4.57	3.67	-0.90
5.	Peaceful island	4.33	4.42	+0.09
6.	Fast service by the staff at the information counter	4.53	3.67	-0.86
7.	Excellent overall security level	4.45	3.61	-0.85
8.	Adequate number of Marine Park authorities	4.44	3.33	-1.10
9.	Various of activities	4.39	3.58	-0.82
10.	Very clean and hygiene food court	4.61	3.82	-0.79
11.	Attractive natural beauty	4.21	4.45	+0.24
12.	Clean, unpolluted and beautiful beaches	4.06	4.50	+0.44

13.	Beautiful scenery of fishermen's village	4.54	3.76	-0.78
14.	Comfortableness of the facilities	4.50	3.79	-0.71
15.	Comfortable accommodation facilities	3.91	4.30	+0.39
16.	Good communication system	4.55	3.85	-0.70
17.	Staff are helpful to the specific needs of tourists	4.06	4.36	+0.30
18.	Availability island information counter	4.48	3.82	-0.67
19.	Tasteful food and beverages	3.94	4.34	+0.40
20.	High level of willingness of staff to help	4.53	3.91	-0.62
21.	Attractive recreational activities	4.30	3.73	-0.58
22.	Very helpful and knowledgeable staff to help	4.09	4.48	+0.39
23.	Very clean tourist destinations	4.42	3.88	-0.55
24.	Honesty of staff to listen and provide accurate information	4.48	4.15	-0.33
25.	Services provided are fair and worth being charged for	4.41	3.91	-0.50
<b>OVERALL MEAN</b>		<b>4.37</b>	<b>3.91</b>	<b>-0.46</b>

### Expectation-Perception Analysis (EPA)

Expectation-Perception grid analysis was used in this study to identify which attributes need to be prioritized in improving MPA management performance. The intersection in the EPA uses the mean level of expectation that is located on the Y-axis (4.37) and the mean level of perception located on the X-axis (3.91). As shown in Figure 1, there were 25 attributes fall under Quadrant 1 to Quadrant 4. Quadrant I was labeled as “Keep up the Good Work” with high perception and high expectation, which indicated that tourists were satisfied with the performance. This quadrant comprised only one attribute (Item 24) that showed staff had the honesty of listening and providing accurate information and therefore must continue the good work. Quadrant II was labeled as “Concentrate Here” with majority of the attributes fall into this quadrant (Items 1, 2, 3, 4, 6, 7, 8, 9, 10, 13, 14, 16, 18, 20, 23 and 25). These items required some improvement and should be treated as the top priority which needed immediate actions. Quadrant III was labeled as “Low Priority” with low expectation and low perception. Items 21 was located in this quadrant and it was not important and did not pose any threat to the MPA management. Meanwhile, there were 7 attributes fall into Quadrant IV (Items 5, 11, 12, 15, 17, 19 and 22). This quadrant indicated that tourists were satisfied with the service and this had encouraged them to revisit the MPA. Therefore, the management should consider to allocate resources efficiently especially in the “Concentrate Here” quadrant to get a higher return.



**Figure 1:** Grid of Expectation-Perception Analysis

## CONCLUSIONS

In this study, we investigated the visitors' level of satisfaction towards service quality provided by the Marine Park Area in Pulau Tinggi and Pulau Sibul. The study revealed that most of the visitors indicated that they had a dissatisfactory experience in Pulau Tinggi or Pulau Sibul Marine Park as the gap analysis showed the negative values. Majority of the visitors had a higher expectation rate rather than their experience on service quality. Based on this study, the weak points of service quality should be addressed by the management of Marine Park Area. More specifically, the findings suggested an upgrading of the service quality on security level of the island. This would ensure more satisfactory results to the visitors.

## ACKNOWLEDGEMENTS

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# LOCAL COMMUNITIES' SATISFACTION TOWARDS TOURISM AROUND KINABALU PARK, SABAH

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## Abstract

Studies to determine local communities' satisfaction in tourism are important as they can serve as early warning or indicators of potential incidents or hostility and provide information on the problems arising before they become more serious (WTO, 2004). The purpose of this study was to determine the level of satisfaction of local communities towards tourism around Kinabalu Park, Sabah. Data collection was conducted via questionnaire survey in group discussion with the participation of 18 members from local communities around Kinabalu Park. The questionnaire was adapted from WTO (2004) comprising 40 items to measure communities' satisfaction towards tourism mainly related to economic, social, and environmental aspects. Local communities are most satisfied with the economic aspect in terms of job opportunities which scored the highest rating (mean score of 4.28 on a 5 point Likert scale) as they believe tourism can provide them additional income. Whether tourism disrupts local community activities received the lowest rating (mean score of 2.17) indicating their disagreement on this statement. Generally, the findings imply that the community believes that tourism is a good thing. However, they indicate that tourism development, with their involvement, should provide mutual benefits. These findings on local communities' satisfaction could be used as one of the indicators for sustainable management of Kinabalu Park as a World Heritage Site and a tourism destination.

Keywords: *Community satisfaction, Sustainable management, Group discussion, WTO*

## INTRODUCTION

Tourism is one of the most important assets in developing countries and has been one of the largest sectors contributing to economic growth in Malaysia (Dayang *et al.*, 2013). One of the most renowned tourism attraction in Malaysia is the Kinabalu Park, which is gazetted and later on declared as a World Heritage Site (WHS) in the Outstanding Universal Value (OUV) category, in the year 2000. The World Heritage Centre (WHC), (2013) stated that OUV represents the exceptional cultural and/or natural significance which transcend national boundaries and be of typical importance for present and future generations of all humanity, in which the Kinabalu Park constituted. As one of the WHS, a sustainable tourism management is very important as it concerns the preservation of resources for future generations where tourism could contribute to environmental protection, limiting negative impacts on socio-economic aspects and benefit the local community economically and socially (Pedersen, 2002). Throughout the sustainable development of tourism, certain sustainability issue may occur such as the inconsistencies of satisfaction from the local communities. Therefore, the purpose of this study was to determine the level of satisfaction of local communities towards tourism around Kinabalu Park, Sabah, in which sustainability baseline issues under the well-being of host communities aspect were discerned. According to WTO (2004), local communities' satisfaction in tourism are

important as they can serve as early warnings or indicators of potential incidents or hostilities and would provide information on the problems arising before they fluctuated.

## **METHODOLOGY**

Data collection was conducted via questionnaire survey and interview in group discussion with the participation of 18 members from local communities around Kinabalu Park. They were divided into two discussion groups in order to best meet the requirement set by Morgan (2013) on the ideal size of a group discussion which is between 6 to 10 members per group. Members of the communities were invited by the Kinabalu Park management. Selections of participants were based on their involvement with tourism activities around Kinabalu Park as well as the role they play in their own villages. Group discussion helps to add richness to the data that could not be achieved through individual interviews (Innovation Center for Community and Youth Development, 2005). The questionnaire was adapted from the guidebook of indicators of sustainable development for tourism destinations (WTO, 2004) that comprised of 40 items to measure the communities' satisfaction towards tourism of which mainly relates to economic, social, and environmental aspects. The group discussion was applied to aid in the interpretation of the quantitative results followed by the semi-structured interview which further assist in clarifying the responses. Data obtained from questionnaire were then statistically analysed using Statistical Package for Social Science (SPSS) while data from interviews were qualitatively analysed using method of focusing on the 'meaning units', which is equivalent with the content analysis (Burnard, 1994). The first stage of analyzing the content of the interview transcripts is a text cleaning, which eliminates repetitions and oblique references, followed by categorization into meaning units and coded. The coding were then used to support the items asked in the questionnaire in which a total of 15 items were selected to be presented as the result of this study based on the mean score value of the five highest, medium and lowest.

## **RESULTS & DISCUSSION**

Before analyzing the data for satisfaction rating, item's reliability measurement was performed using Cronbach's Alpha reliability coefficient. The value of Cronbach's alpha shows that the reliability coefficient for all items was 0.859 indicating a good internal consistency among the items (George and Mallery, 2003). Elimination of any item will not increase the alpha value much.

### **Demographic**

The participants for this study comprised of 83.3% male and 16.7% female respondents from four different villages around Kinabalu Park which includes Bundu Tuhan, Kiau Nulu, Kiau Tiburi and Mesilau. The age of the respondents ranged from 16 to 67 with a mean of 36.67 years with an average household size of 7 people. The most common form of employment is farming (33.3%) and mountain guide (33.3%), followed by community researcher (22.2%), tourist guide (5.6%) and taxi driver (5.6%).

### **Level of Satisfaction towards Tourism**

Table 1 reports the level of satisfaction towards tourism around Kinabalu Park, where overall it can be seen clearly that the participants are aware of the socio-economic benefits, which include social and economic development. As stated by Ezebilo and Mattsson, (2010), in most developing countries, local communities living around the park perceived that it should also contribute to social and economic welfare of the people. Social

development indicators provide information about income, poverty, employment, employment security, education, health, crime and civic participation in that area, whereas the economic development is a process of increasing the standard of living through increased production, distribution and consumption of goods and services (Fritz, 2005).

Local communities are most satisfied with the economic aspect in terms of job opportunities, which scored the highest rating (mean score of 4.28 on a 5 point Likert scale), as they believed that tourism activities around Kinabalu Park can provide additional income for them. The participants also perceived that tourism creates job opportunities, as some of them are directly involved in tourism sectors as taxi driver, mountain guide and tourist guide. The finding is parallel to Hong (2007) who stated that the employment and capacity building in tourism-related businesses in the Kinabalu national park is one of the direct contributions to the community. The most common employment form is farming which is also a tourism-related business in Kinabalu Park where local community can sell their vegetables to the tourist.

It is also apparent that the communities are happy with the presence of tourists, which contributes to their social aspect, with a mean score of 4.22. The participants in their group discussion revealed that they believe that tourism is beneficial as it improves knowledge and social relationship. The result is shown in item "Tourism is a good thing" (4.11), as their knowledge and social skills increased due to the impact of tourists mobility. Through tourism, the local communities could also stimulate their local culture and crafts product development (4.06). Group discussion data revealed that because of tourists arrival they could produce more handicrafts and hold exhibitions showcasing cultural products such as musical instruments and so forth. In fact, the local communities believed that they themselves as the local communities around Kinabalu Park could also be one of the tourist attractions, because of their rich and unique culture. Tourism activities around Kinabalu Park also satisfy the communities in the economic aspect, where local youths were employed as mountain guides and porters (4.00) and therefore believed to reduce the unemployment rate.

Five items with intermediate mean score values are mostly from social aspect as can be observed in Table 1, where three of the items share identical mean score value of 3.67. The items could be associated to the power of the communities in controlling tourism activities, the communities involvement in tourism activities through invitations by the park authorities and the communities' perception that tourism brings more good than harm. Group discussion on this aspect revealed that the local communities perceived that the park does not exist without the community as they are the ones who give mandate to the park to manage the area. They reasoned that they also have control over tourism around the park as they are also part of the park. They insist that development of tourism-related business within their village must be fully managed by them.

**Table 1:** The Summary Results of the Questionnaire Survey in Group Discussion

Items rating/ Aspects	Economy	Social
<b>Highest mean score</b>	Employment opportunity (4:28)	
		Happy with the presence of tourists (4.22)
		Tourism is a good thing (4.11)
	Stimulate local culture and crafts (4.06)	
	Employs local youth (4.00)	
<b>Medium mean score</b>		The Community has control over tourism (3.67)
		The Kinabalu Park invited local people to engage in activities (3.67)
		Tourism brings more good than harm (3.67)
		Good communication(3.61)
	The standard of living rise (3.50)	
Items rating/ Aspects	Social	Environment
<b>Lowest mean score</b>	Stops locals from park, trail or similar access (2.50)	
	Increased crime rate (2.44)	
	Harms moral standards (2.39)	
		Harms the environment (2.39)
	Disrupts local activities (2.17)	

Mastura *et al.* (2013) states that involvement of local community in tourism planning as well as their participations in the implementation and operational aspects of the development is one of the most important elements. However, there are also some activities organised by the Kinabalu Park that did not get much responses by the community as the information was not widely available to them. In such case, the participants suggest that it might be good to have an occasional dialogue with the community leaders and the park management to aid a two-way communication, as they indicated that there is a lack of interaction between the park management with the locals. Other item from social aspect with moderate mean score value is regarding their communication with the tourists (3.61). In the economic aspect, the item to indicate improvement in the communities' standard of living also receive moderate mean score value (3.50).

Among the items with the lowest mean score values are regarding tourism activities around the park that “stops locals from park, trail or similar access” (2.50), which shows low agreement with the statement, indicating that tourism does not stop them from using the park. However, the communities also perceived that the park authority should give priority to prioritize the locals living nearby the park in terms of involving them in the enforcement activities and to have special access to the park. They reasoned that they also have the understanding regarding the park regulations and that they could help assist the park management in reporting if there are intrusions by outsider or any other illegal activities inside the park area.

Other items with low mean score values are “increased crime rate” (2.44), “harms moral standards” (2.39), “harms the environment” (2.39), and “disrupts local activities” (2.17), which show low agreement on the statements. The communities however expressed their opinion that tourism would only bring harm to the environments when the number of tourist exceeds the limit of carrying capacity. There were also views from the communities that tourism might disrupt the activities of the locals when the event organizer prioritizes only the tourists without considering the locals.

## **CONCLUSION**

Generally, the findings infer that the communities believe that tourism is a good thing. The communities are satisfied with the socio-economic aspects around Kinabalu Park, especially in terms of job opportunities. However, they indicate that tourism developments, with their involvements, should provide mutual benefits. Development of natural areas into a tourism destination such as the Kinabalu Park need to be sustainable, both in terms of the well being of the environment and the local communities (Mastura *et al.*, 2013). These findings on the local communities’ satisfaction could be used as one of the indicators for sustainable management of Kinabalu Park as a World Heritage Site and as a major tourist destination. Future research on this would be to conduct the study with a larger sample size.

## **ACKNOWLEDGEMENT**

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# THE IMPACT OF LARGEST SHAREHOLDER OWNERSHIP ON DEBT POLICY OF THE PUBLIC LISTED FIRMS IN RESTAURANT, HOTEL AND TOURISM INDUSTRY: EVIDENCE FROM INDONESIA

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## Abstract

The restaurant, hotel and tourism industry is one of the industries that exists in Indonesian Stock Exchange. Every firm in industry including the restaurant, hotel, and tourism industry needs debt to finance its activity. The agency theory states that the debt can facilitate the expropriation. This study intends to know whether the debt can facilitate it by testing the relationship between the largest shareholder and debt policy. The sample is taken by simple random sampling method. The study uses the pooled data regression model as data analysis method. The result of this study show that the largest shareholder ownership has negative impact on debt policy. That means there is no expropriation in this industry.

*Keyword: debt policy, bankruptcy, expropriation.*

## INTRODUCTION

Financing policy is one kind of firm policy besides investment policy and dividend policy (Kaaro, 2003). This policy relates to determine the decision of specific mixture of debt and equity (Abor & Biekpe, 2005). Debt is a contract in which a borrower gets some funds from lender and promises to make a pre-specified stream of future payment to lender (Shleifer & Vishny, 1997).

The use of debt has two opposite effects. Debt gives benefit to the firms. According to Fosberg (2004), tax shield is benefit of the debt. This benefit may encourage firms to employ more debt. Besides benefit, the use of debt can increase bankruptcy risk of the firms (Abor, 2008). If managers issue debt, they will give the shareholder who receive the debt the right to take the firms into bankruptcy court if they do not maintain their promise to make the interest and principal payment (Jensen, 1986).

The threat caused by failure to make debt service payment serves as an effective motivating force to make such organizations more efficient (Jensen, 1986). This threat will prevent managers to enrich themselves with perks and other financial benefits such as buying luxury corporate jets, expensive corporate apartments, and doing resort vacations. As the consequence, stockholders might prefer that firms use more debt financing to pressure the managers to show their performance at high level (Titman, Keown & Martin, 2011:10-11). External debt serves as bonding mechanism for managers to convey their good intentions to shareholders (Megginson, 1997:335). In other word, the debt can overcome the conflict between managers and shareholders. This conflict happens in countries where dispersed ownership structure exists in their public listed firms (Mutamimah & Hartono, 2010).

The firms with concentrated ownership structure can be found in Indonesia. In this type of ownership, majority shareholders have power to control the managers to make a decision

(Mutamimah & Hartono, 2010). The majority shareholders must be the large shareholders. According to Zeckhauser & Pound (1990), the large shareholders hold a sizable fraction of all voting shares in publicly held corporations. Shareholders, who control the firm, are expected to choose the investment and financial decision to maximize their own wealth (Kalay, 1982) by shifting their business risk to the debtholders (Ismiyanti & Mahadwartha, 2008). This condition is also called the expropriation facilitated by debt (Ismiyanti & Mahadwartha, 2008).

Some previous researchers such as Sheikh & Wang (2012), Gul, Malik, Siddiqui, Razzaq (2013) confirm the expropriation facilitated by debt. They use the largest shareholder ownership to measure ownership concentration to be related to debt policy and find that largest shareholder ownership has positive impact on debt policy. On the contrary, the other research evidences show that largest shareholder ownership has negative impact on the debt policy (Liu, Tian, & Wang, 2011; Din, Javid, Imran, 2013; Yuxuan & Wenlin, 2014). In his research, Abor (2006) finds the insider shareholders tends to reduce the proportion of debt that they use to finance their firms. Besides two opposite findings, the rest show that largest shareholder ownership does not impact on debt policy (Hassan, Naughton, & Posso, 2013; Moussa & Chichti, 2014). Agyei & Osuwu (2014) also finds that institutional shareholders who hold large fraction of firms' ownership do not impact on debt policy.

Because of the inconsistency of previous research evidences, this research is conducted. The restaurant, hotel and tourism industry is used in this research because the debt ratio at this industry tends to fluctuate during 2007 to 2012 (see Table 1). This condition also supports to make sure that fluctuation of debt in this industry does not come from the expropriation effect conducted by the largest shareholder on the debtholder.

**Table 1. The Average of Debt Ratio at Restaurant, Hotel and Tourism Industry**

At The End Period of 2007-2012						
Year	2007	2008	2009	2010	2011	2012
The average of debt ratio	0,5076	0,5315	0,4856	0,4620	0,5482	0,3932

**Source: Processed Indonesian Capital Market Directory Data of 2008-2013**

This research also uses investment opportunity and profitability as the control variable. The investment opportunity is used to know whether firms take advantage from use of debt to enrich their controlling shareholders by increasing the amount of debt. The profitability is used to know how profit allocation decision is made by the firms related to debt policy.

### **Conceptual Framework and Hypothesis**

#### *The Largest Shareholder Ownership and Debt Policy*

The largest shareholder is a derived concept from large shareholder. Large shareholders is defined as the unique group of shareholders who hold voting power. Therefore, their investments are sensitive to firm decisions (Al-Kuwari, 2012). Large shareholders have strong incentive to put pressure on managers or even to oust them through a proxy fight or a takeover. Investors with large ownership stakes have strong incentives to maximize their firms' value. They are able to collect information and oversee managers and so can help overcome one of the principal – agent problems in the modern corporation – that is conflict of interest between shareholders and managers (Claessens, Djankov, Fan, & Lang, 2002).



There are two effects related to the presence of large shareholders. Firstly, the positive effect. The positive effect is large shareholders mitigate the free rider problem of monitoring a management team, and hence reducing the agency costs. Shareholders with large stakes have incentive to bear monitoring costs because gains from investing in monitoring activities exceed the costs (Claessens, et al., 2002). Secondly, the negative effect. There are some negative effects mentioned by Wiwatanakatang (2001):

Controlling shareholders can obtain benefits by employing companies' assets as collateral for their personal bank borrowing, and borrowing companies' funds for their personal purposes on favorable terms.

Controlling shareholders may invest sub-optimally since the cost of the investment, if it fails, will be shared by the other investors.

Largest shareholder ownership is usually used as ownership concentration measurement (see Sheikh & Wang, 2012; Hassan, Naughton, & Posso, 2013; Yuxuan & Wenlin, 2014). There are two perspectives of the agency theory that are used to predict the relationship between ownership concentration and debt policy. The first perspective is leverage decreasing effect (LDE) and the second is leverage increasing effect (LIE) perspective (Siregar, 2008).

Based on LDE perspective, ownership concentration has negative impact on debt policy. The controlling shareholders are afraid about bankruptcy risk if they still use debt (Siregar, 2008). Bankruptcy occurs when the firm cannot meet a current payment on a debt obligation or one or more of the other indenture provision providing for bankruptcy is violated by the firm (Jensen & Meckling, 1976). When bankruptcy risk occurs, controlling shareholders are the parties who suffer the worst impact of bankruptcy risk (Siregar, 2008). They will lose all claims on the firms if the firms are bankrupt (Jensen & Meckling, 1976). Therefore, based on LDE perspective, the hypothesis 1a can be formulated as follows.

H1a. The largest shareholder ownership has negative impact on debt policy.

Leverage increasing effect (LIE) perspective occurs when controlling shareholders want to defend their control in the firm. The use of the external fund via equity will decrease the control of controlling shareholders in the firm. Controlling shareholder will attempt to impact debt policy to maintain their high control to be unchanged. To keep the high control, they prefer to use the debt (Siregar, 2008). Another explanation that supports LIE perspective comes from Easterbrook (1984) and Harris & Raviv (1991). Shareholders have more preference regarding to the risk of using debt whereas managers do not have preference about that. The risk-averse managers may choose projects that are safe but have a lower expected return than riskier ventures. In the shareholders perspective, riskier ventures enrich themselves at the expense of creditors (Easterbrook, 1984). When the risky project is successful (where investment yields large return above the face value of debt), equity holder capture most of the gain. When risky project is not successful (where investments are failed), debt holders get the consequences (Harris & Raviv, 1991). Therefore, shareholders induce managers to take more risk by increasing the amount of debt (Easterbrook, 1984). Therefore, based on LIE perspective, the hypothesis 1b can be formulated as follows.

H1b: The largest shareholder ownership has positive impact on debt policy.

### **Investment Opportunity and Debt Policy**

Underinvestment is one major source of conflict which arise between bondholders and stockholders. Underinvestment occurs when the firms with outstanding bond have incentives to reject projects which have a positive net present value (NPV). This action happens because the firms do not let the benefits from accepting the projects go to

bondholder in the future (Smith & Warner, 1979). To overcome this underinvestment problem, Lang, Ofek & Stulz (1996) suggests that managers of the firms with valuable growth opportunity should choose lower leverage because firms might not be able to take this advantage of their investment opportunities if they raise outside funds. The research of Bae (2009), Fatmasari (2011), and Yu (2012) confirm that investment opportunity has negative impact on debt policy. Based on these explanations, the hypothesis can be formulated as follows.

H<sub>2</sub>: Investment opportunity has negative impact on debt policy.

### **Profitability and Debt Policy**

Profitability describes an ability of the firm to generate the amount of profit (Hanafi, 2004:42). To explain the relationship between profitability and debt policy, I use the pecking order theory perspective. According to Gitman & Zutter (2012), pecking order is a hierarchy of financing that begins with retained earnings, followed by debt, and finally new stock issues.

When managers want to finance a new project, they will first do so using retained earnings (Gitman & Zutter, 2012:524). Retained earning comes from the accumulation of profit that the firms have got (Hanafi, 2004:313). From a pecking order theory perspective, profitable companies are able to use retained earnings instead of debt or external equity. Therefore, an inverse relationship between profitability and debt ratio is usually expected (Çıtak & Ersoy, 2012).

Besides that explanation, Fischer, *et al.* (1989) in Frank & Goyal (2003) analyze the effect of having fixed costs associated with actively adjusting leverage. When a firm earns profits, debt gets paid off and leverage falls automatically. Abor (2006), Ardianto & Wibowo (2007), Ezeoha & Ofakor (2010), Agyei & Osuwu (2014) confirm profitability has negative impact on debt policy. Based on these explanations, the hypothesis can be formulated as follows.

H<sub>3</sub>: Profitability has negative impact on debt policy.

### **RESEARCH METHOD**

The type of this research is causal research. According to Zikmund, Babin, Carr, and Griffin (2010:57), causal research seeks to identify cause-and-effect relationship. Variable is empirical assessment of a concept (Zikmund, et al., 2010). In this research, I use two type variables, i.e. dependent variable and independent variable. The debt policy acts as the dependent variable. Largest shareholder ownership and investment opportunity as well as profitability are used as the independent variable. Debt policy is measured by debt ratio (DAR) at the end of the year. Largest shareholder ownership (LRGST\_SH) is measured by the largest ownership proportion value at the end of the year. Investment opportunity is measured by price to book value (PBV) at the end of year. Profitability is measured by return on asset (ROA) at the end of year.

### **POPULATION, SAMPLING, AND SAMPLING METHOD**

The population in the research is public listed firms which exist in restaurant, hotel, and tourism industry in 2007-2012. The consistency of the existing firms is essential because I find the firms that have already appeared, delisted, and moved into other sectors in this period. Because of the three reasons, the sampling frame is needed. According to Zikmund, et al. (2010:393), sampling frame is a list of the elements from which the sample may be

drawn. It is also called the working population because these units will eventually provide units involved in analysis.

After the sampling frame is determined, the next step is choosing the firms as samples. The research uses the probability sampling because every element in the population is known (see Zikmund, *et al.*, 2010:395). The simple random sampling is used as sampling method. The simple random sampling is sampling procedure that ensures that each element in the population will have an equal chance of being included in the sample (Zikmund, *et al.* 2010:398).

The number of sampling frame in this research is 16 firms. To get the number of samples, I use the formula developed by Isaac & Michael with 90% confidence level. The formula that is used to calculate the number of samples can be seen in Sugiyono (2010:124). After calculating samples based on this formula, I find 13 firms (rounded) as number of the samples. The names of the firms as the samples are as follows.

PT Bayu Buana, Tbk. (BAYU)  
PT Fast Food Indonesia, Tbk. (FAST)  
PT Graha Mas Citrawisata, Tbk. (GMCW)  
PT Hotel Sahid Jaya International Tbk. (SHID)  
PT Indonesian Paradise Property, Tbk (INPP)  
PT Island Concepts Indonesia (ICON)  
PT Jakarta Setiabudi Internasional Tbk. (JSPT)  
PT Pembangunan Graha Lestari Indah Tbk (PGLI)  
PT Pembangunan Jaya Ancol Tbk. (PJAA)  
PT Pioneerindo Gourmet International Tbk. (PTSP)  
PT Pudjiadi & Sons, Tbk. (PNSE)  
PT Pudjiadi Prestige Limited Tbk. (PUDP)  
PT Pusako Tarinka Tbk. (PSKT)

In this research, I use the archival method as the data collection method. According to Hartono (2009: 117), the archival method is used to get the secondary data. The secondary data used in this research is taken from Indonesian Capital Market Directory 2008-2013, annual report of the firms downloaded from [www.idx.co.id](http://www.idx.co.id).

The research employs the pooled data regression model as method of data analysis. Pooled data means combining time series data and cross-section data. By combining both of them, this research gives more informative data, more variability, less collinear among variables, more degree of freedom and more efficiency (Gujarati, 2003:636,637). According to Gujarati (2003:641), pooled data regression model disregards the space and time dimension of panel data and just estimate the usual ordinary least square regression. In this research, the pooled data regression model equation can be written as follows.

$$DAR_{it} = \beta_0 + \beta_1 LRGST\_SH_{it} + \beta_2 PBV_{it} + \beta_3 ROA_{it} + e_{it}$$

Where DAR = debt ratio of firm at the end of the year t; PBV = price to book value of the firm at the end of the year, ROA = return on assets at the end of the year. e = errors term or residuals, i = cross section unit, t = time series unit.

Because the ordinary least square is used as the estimation method, several classical assumption tests must be fulfilled before the test of regression coefficients are conducted.

Several classical assumptions tests consist of normality test (Gujarati, 2003:147), multicollinearity detection (Gujarati, 2003:341), heteroskedasticity test (Gujarati, 2003:397), autocorrelation test (Gujarati, 2003:442).

Normality test is used to find out whether the errors term follow the normal distribution (Gujarati, 2003:151). Jarque-Berra (JB) Statistic test is used as normality test. If probability value of JB statistic is greater or equal to significance level ( $\alpha$ ), the errors term are normally distributed, and vice versa and the significance level is 1%.

Multicollinearity refers to the situation where there is either an exact or approximately exact linear relationship among independent variables (Gujarati, 2003:374). Variance inflation factor (VIF) of each explanatory variable is used to detect the multicollinearity. If the VIF of a variable exceeds 10, the variable is said to be highly collinear (Gujarati, 2003:362).

Heteroscedasticity test. The purpose of heteroscedasticity test is to test the homogeneity of residuals from one observation to the other residual observation (Ghozali, 2011:139). To do this test, Glesjer test is conducted to examine the heteroscedasticity problem (Ghozali, 2011:143). If probability value of Chi-Square is greater or equal to significance level ( $\alpha$ ), heteroscedasticity problem does not occur in the regression model. The significance level that I use is 1%.

Autocorrelation test. The purpose of autocorrelation test is to test the existence of errors' correlation in period t and errors in previous period (t-1) (Ghozali, 2011:110). The LM test is conducted to examine the autocorrelation problem (Ghozali, 2011:113). If probability value of Chi-Square is greater or equal to significance level ( $\alpha$ ), autocorrelation problem does not occur in the regression model. The significance level that I use is 1%.

## RESULTS

### Descriptive Statistic Summary

Table 2 provides a summary of the descriptive statistic of all research variables. The mean of debt ratio (DAR) is 0.420427. It means 42.04% of firm assets as the samples are financed by debt. The minimum and the maximum value of DAR is 0.0178 and 0.934, respectively. The average of (PBV) as the proxy of investment opportunity is 5.1969 with the minimum and the maximum value is 0.11 and 82.35, respectively. The mean of return on assets (ROA) as the profitability proxy is 12.887% with the minimum and maximum value is -9.43% and 28.23%, respectively.

**Table 2. Descriptive Statistic of The Research Variables**

Variable	N	Minimum	Maximum	Mean	Standard. Deviation
DAR (decimal)	78	.0178	.9343	.420427	.2027713
LRGST_SH (%)	78	17.12	90.01	48.3290	16.88344
PBV (decimal)	78	.11	82.35	5.1969	12.60244
ROA (%)	78	-9.43	28.23	5.6571	7.36909

**Source: Output of SPSS Data Processing Program**

### Test Results of Classical Assumptions

Table 3 shows normality test result. Based on normality test result, I find that the residuals or errors term are normality distributed. This condition is supported by probability value of Jarque-Berra statistic that is greater than significance level ( $\alpha$ ) = 0.01.

**Table 3. The Result of Normality Test (Jarque-Berra Test)**

Description	Unstandardized Residuals/Errors	Intepretation
Jarque-Berra Probability	2.166664 0.338466	Probability value of Jarque-Berra is 0.220281. It means residuals value are normality distributed because this probability value is less than $\alpha = 0.01$ .

**Source: Output of EViews Program**

Table 4 presents muticollinearity detection result. Based on this detection, I find that variance inflation factor of LRGST\_SH, PBV, ROA is 1.063, 1.051, 1.109, respectively. Because there is no explanatory variable that has variance infation factor value that exceeds 10, the multicollinearity problem does not exist in the regression model.

**Table 4. The Result of Multicollinearity Detection**

Explanatory Variable	VIF	Intepretation
LRGST_SH	1,063	Variance inflation factor of each explanatory variable is less than 10. It means the multicollinearity problem does not exist in the model.
PBV	1,051	
ROA	1,109	

**Source: Output of SPSS Program**

I find heteroskedasticity problem in the regression model (see Table 5 Panel A). This condition is supported by probability value of Chi-Square(3) that is less than  $\alpha = 1\%$ . In addition, I also find the autocorrelation problem in the regression model (see Table 5 Panel B). This condition is confirmed by probability value of Chi-Square (1) that is less than  $\alpha = 1\%$ .

**Table 5. The Result of Heteroskedasticity Test and Autocorrelation Test**

Panel A. The result of Heteroskedasticity Test (Glesjer Test)			
F-statistic	6.481028	Prob. F(3,74)	0.0006
Obs*R-squared	16.22978	Prob. Chi-Square(3)	0.0010
Panel B. The Result of Autocorrelation Test (Breusch-Godfrey Serial Correlation LM Test)			
F-statistic	32.66455	Prob. F(1,73)	0.0000
Obs*R-squared	24.11249	Prob. Chi-Square(1)	0.0000

**Source: Output of EViews Program**

It is essential to solve heteroskedasticity and autocorellation problem. When these problems occur in regression model, the OLS estimators are no longer efficient (Gujarati, 2003:454). The inefficiency of OLS estimator will cause t and F test produce inaccurate result (Gujarati, 2003:398).

To handle the autocorellation problem, the difference form equation method can be used (Gujarati 2003:478). To conduct the difference form equation, rho ( $\rho$ ) must be indentified by this formula,  $\rho \approx 1 - \frac{d}{2}$ , where d is the statistic value of Durbin-Watson. After that, the difference form for each variable and each firm can be made as follows.

For DAR, the formula is  $DAR_t - \rho * DAR_{t-1}$ . After that, the symbol is changed into DART

For LRGST\_SH transformation, the formula is  $LRGST\_SH_t - \rho * LRGST\_SH_{t-1}$ . After that, the symbol is changed into LRGST\_SHT.

For PBV r, the formula is  $PBV_t - \rho * PBV_{t-1}$ . After that, the symbol is changed into PBVT

For ROA the formula is  $ROA_t - \rho * ROA_{t-1}$ . After that, the symbol is changed into ROAT.

In differencing procedure one observation does not exist anymore because the first observation has no antecedent. To avoid this loss of one observation, the first observation on dependent variable (Y) and independent variable (X) is transformed by Prais-Winsten transformation as follows.  $Y_1\sqrt{1 - \rho^2}$  and  $X_1\sqrt{1 - \rho^2}$  (Gujarati, 2003:478).

To overcome the heteroskedasticity problem, I use the plausible assumptions about the heteroskedasticity pattern. One assumption that Gujarati (2003:420) states is the error variance must be proportional to the expected value of dependent variable. Referring to this assumption, I attempt to transform the regression model so that the autocorrelation problem can be overcome by making the following equation:

$$\frac{DART}{E(DART_{it})} = \frac{\beta_0}{E(DART_{it})} + \beta_1 \frac{LRGST\_SHT_{it}}{E(DART_{it})} + \beta_2 \frac{PBV_{it}}{E(DART_{it})} + \beta_3 \frac{ROA_{it}}{E(DART_{it})} + \frac{uit}{E(DAR)_{it}}$$

After the two steps are done, I find no autocorrelation and no heteroskedasticity problem in the regression model. These results can be seen in Table 6. Panel A shows the result of heteroskedasticity test. In this panel, probability value of Chi-Square is 0.0229. Because this value is greater than  $\alpha = 1\%$ , it means there is no heteroskedasticity problem in the regression model. Panel B shows the result of autocorrelation test. In this panel, probability value of Chi-square is 0.0625. Because this value is greater than  $\alpha = 1\%$ , it means there is no autocorrelation problem in the regression model.

Panel A. The result of Heteroskedasticity Test (Glesjer Test)			
F-statistic	3.436765	Prob. F(3,74)	0.0211
Obs*R-squared	9.538610	Prob. Chi-Square(3)	0.0229
Panel B. The Result of Autocorrelation Test (Breusch-Godfrey Serial Correlation LM Test)			
F-statistic	2.755539	Prob. F(1,73)	0.0703
Obs*R-squared	5.545840	Prob. Chi-Square(1)	0.0625

**Table 6.** The Result of Heteroskedasticity and Autocorrelation Test After The Treatment to Overcome The Problems

Source: Output of EViews Program

After the classical assumption tests are fulfilled, the next step is estimating regression equation model and conducting the hypothesis test. Table 7 presents the result of regression model estimation.

Dependent Variable: DART/DARTF  
Method: Least Squares  
Date: 01/15/15 Time: 10:50  
Sample: 1 78  
Included observations: 78

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.659224	0.234403	7.078518	0.0000
LRGSTSHT/DARTF	-0.004288	0.001911	-2.244159	0.0278
PBVT/DARTF	-0.016937	0.001447	-11.70828	0.0000
ROAT/DARTF	-0.005591	0.002827	-1.977775	0.0517
R-squared	0.813835	Mean dependent var	1.192234	
Adjusted R-squared	0.806288	S.D. dependent var	1.557973	
S.E. of regression	0.685706	Akaike info criterion	2.133186	
Sum squared resid	34.79430	Schwarz criterion	2.254043	
Log likelihood	-79.19426	Hannan-Quinn criter.	2.181567	
F-statistic	107.8325	Durbin-Watson stat	1.708412	
Prob(F-statistic)	0.000000			

**Table 7.** The Result of Regression Model Estimation  
Source: Output of EViews Program

### The Test of Hypothesis

Each research hypothesis is tested by t-test. This test is conducted by comparing probability value (Prob.) for each variable to significance level ( $\alpha$ ). The level of significance that I use is 10%. If the probability value exceeds 10%, research hypothesis is rejected. If probability value is less than or equal to 10%, the research hypothesis is accepted.

The first hypothesis is divided into two parts, part a (H1a) and part (H1b). H1a states that largest shareholder has negative impact on debt policy whereas H1b states that largest shareholder has positive impact on debt policy. In Table 7, the estimation sign of LRGST\_SHT/DARTF is negative and its probability value is 0.0278. Because the probability value of this variable is less than 10% and the estimation sign is negative, this research confirms the first hypothesis part a (H1a).

The second hypothesis ( $H_2$ ) states investment opportunity has negative impact on debt policy. In Table 7, the estimation sign of PBVT/DARTF is negative and its probability value is 0.0000. Because of the probability value of this variable is less than 10% and the estimation sign confirms the direction of hypothesis, the second hypothesis is accepted.

The third hypothesis ( $H_3$ ) states profitability has negative impact on debt policy. In Table 7, the estimation sign of ROAT/DARTF is negative and its probability value is 0.0517. Because the probability value of this variable is less than 10% and the estimation sign confirms the direction of hypothesis, the third hypothesis is accepted.

### DISCUSSION AND MANAGERIAL IMPLICATION

The acceptance of first hypothesis part a (H1a) supports LDE perspective and proves that largest shareholder existence in each firm does not expropriate the debtholders because largest shareholder in each firm is afraid to be bankrupt because of debt. If bankruptcy occurs, the largest shareholder in each firm will lose all claim of the firm. The acceptance of H1a confirms previous results of Liu, Tian, & Wang (2011) Din, Javid, Imran (2013), Yuxuan & Wenlin (2014).

The acceptance of second hypothesis (H2) shows that firms attempt to avoid the underinvestment problem. The managers prefer to choose lower leverage when they have valuable growth opportunity (Lang, Ofek & Stulz, 1996). When managers choose lower leverage in that condition, they will not reject project which have positive net present value because the benefit from accepting project is not transferred to bondholder in the future (Smith & Warner, 1979). In addition, the acceptance of H2 supports previous research results of Bae (2009), Fatmasari (2011), Yu (2012).

The acceptance of third hypothesis (H3) support pecking order theory perspective (Çıtak & Ersoy, 2012). The firms with the large amount of profit must have large amount of internal financing so that they will reduce the amount of the external financing to fund their investment opportunity (Adrianto & Wibowo, 2007). In addition, the research supports previous research results of Abor (2006), Ardianto & Wibowo (2007), Ezeoha & Ofakor (2010), Agyei & Osuwu (2014).

The suppliers of fund, especially bondholders or creditors' candidate should not be afraid to offer their money to the firms in restaurant, hotel, and tourism industry at Indonesian Stock Exchange, because the shareholders who have the largest ownership in this industry will be responsible to use the funds that they have got. Their responsibility is reflected by their action in decreasing the amount of debt that they have borrowed.

## **CONCLUSION**

This research concludes three things based on hypotheses test. Firstly, the largest shareholder ownership has negative impact on debt policy. Secondly, investment opportunity and profitability have negative impact on debt policy. Finally, profitability have negative impact on debt policy. The recommendations are addressed to the next researchers who have an interest in debt policy topic research area. The recommendations that I mean are as follows.

The limitation of this research is the research only uses 6 (six) years as the observation period. The next researchers are suggested to make the longer period, for example 10 (ten) years to capture debt policy behavior in this industry.

The other limitation of this research is the research only uses 1 (one) main variable and 2 (two) control variables to be related to debt policy. The next researchers are suggested to add more main variables into debt policy model. The main variables that can be considered are board size, independence board, and board duality. For the control variables, the next researches can use asset growth, tangibility, firm size, systematic market risk or market beta, liquidity, business risk, firm age, non-debt tax shields.

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# ENVIRONMENTAL PRACTICES IN MALAYSIAN RESORTS: IMPLEMENTATION AND CHALLENGES

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## Abstract

The present study investigates the present levels and types of environmental practices (EPs) among Malaysian resorts and the challenges they face. Semi-structured interviews are conducted with managers of eight resorts in Malaysia. Results indicate that the levels and types of EPs vary between resorts and depend on the level of knowledge and support of managers, financial and non-financial capability of the resorts, and location of the resorts, which affect the availability of resources and efficiency of EPs. Energy consumption practices are the most common EPs among Malaysian resorts because Malaysia is a tropical country with hot and humid weather conditions. However, resorts face direct and indirect challenges when implementing EPs. Direct challenges arise from the profitability of the practice, adequacy of financial resource, availability of resource and service providers, and adequacy of skilled human resource. Meanwhile, indirect challenges are caused by public infrastructure barriers, economic barriers, and political barriers. These findings may help government policymakers recognize issues that should be addressed in motivating resorts to implement EPs.

Keywords: *Environmental Practices, Resorts, Challenges, Malaysia*

## INTRODUCTION

While Malaysia has been experiencing fast economic growth and industrial development, the country has also been suffering from various environmental problems, such as air and water pollution and energy inefficiency (Zailani et al., 2014). As a major actor in the hospitality industry, hotels and resort activities strongly impact the environment. At the same time, tourists are becoming increasingly aware of the damage to the environment caused by detrimental business activities (Yusof et al., 2014). Activities that negatively affect the natural environment can be lessened by implementing environmental practices (EPs). As the demand for EPs gradually increase in the tourism industry (Page & Dowling, 2002), the market share of resorts will be influenced by the types and levels of EPs that are implemented.

Despite the large ecotourism market and the importance of EPs in addressing environmental issues, EPs in Malaysian resorts remain limited. This limitation is primarily attributable to the challenges in implementing EPs. Therefore, determining the present level of EPs and the challenges faced by resorts when implementing EPs is necessary. However, available information on these issues is insufficient. The present study investigates the present EPs in Malaysian resorts and the challenges faced by resorts when implementing EPs. An understanding of the present EPs and challenges may provide a guideline for policymakers to address issues and consequently promote EPs among Malaysian resorts. The findings may give better insights into the challenges of EP adoption in resorts, especially in developing countries.

## **ENVIRONMENTAL PRACTICES**

Environmental practices are practices that are friendly and responsible to the environment (Han et al., 2009). Public attention is continually attracted by environmental protection (Chan & Wong, 2006). Thus, similar to manufacturing operations, EPs in service industries, such as hospitality industry, can serve as a means of reducing costs, improving employee satisfaction and retaining customers, and enhancing competitiveness (Graci & Dodds, 2008).

Differentiation in product can be realized through the implementation of EPs in the hotel industry. For example, an improvement in pollution levels will lead to an increase in demand from environmentally sensitive tourists (Chan & Wong, 2006). Pressure from tourists has coerced resort managers to adapt to new preferences and tastes and to provide greater respect to the environment. Given the strength and growth of the demand for EPs in tourism (Page & Dowling, 2002), EPs employed by hotels should have a significant effect on the environment, which subsequently affects tourist selections of hotel or resorts (Millar & Baloglu, 2011). According to Han et al. (2009), selecting a green hotel may be more expensive, but a trend showing the willingness of customers to pay for environmentally friendly services and products is increasing. Thus, some hotels even go the extra mile by providing private tour of the environmental operations around the hotel. In Han and Kim's (2010) opinion, this effort may encourage visitors to revisit and recommend to friends and relatives.

## **CHALLENGES OF PRACTICING EPS**

While the challenges of practicing EPs have attracted wide academic attention, studies on the tourism context are lacking. Vernon (2000) investigated the barriers of sustainability in micro-firms in the tourism industry and revealed that apart from time and effort, managers found the impact of EPs negligible. Furthermore, Berry and Ladkin (1997) found lower levels of awareness on environmental footprint as a major barrier to practicing EPs. The perception that EPs equate to costs was another barrier to EPs identified by Vernon (2000). Therefore, the low adoption of EPs is attributed to the inability to recognize the commercial benefits of EPs. In many cases, the environmental policies of the government can be perceived as a threat to business survival and success because of the costs that businesses have to bear. Hence, environmental regulation is regarded as a blunt instrument in a free market (Bramwell & Alletorp, 2001). Conversely, customers play a vital role in encouraging businesses to avoid environmental damage because they influence the market and profit of businesses. The lack of customer demand is another recognized barrier to practicing EPs (Chan & Wong, 2006).

## **CASE STUDY METHODOLOGY**

The present study used a qualitative approach based on a case study analysis because of its exploratory nature (Aastrup & Halldórsson, 2008). As suggested by Voss et al. (2002), case studies are an appropriate method for collecting in-depth information. Companies were selected from the list of resorts in the accommodation list provided by Tourism Malaysia (2013).

## **Interview Protocol**

Interviews were conducted using a semi-structured data collection principle, which was designed based on literature review and tested by industry experts and researchers in the field of environmental tourism. The interview material primarily involved queries on (1) general resort information, (2) present EPs in resorts, and (3) challenges of implementing EPs in resorts.

## **Data Collection**

Interview surveys were sent in advance to the respondents to familiarize them with the topic. Managers of eight resorts in Malaysia were interviewed. These individuals were interviewed because of their experience in resort EPs and familiarity with the challenges associated with this practice. Each interview lasted for about 45 minutes. All interviews were facilitated by a researcher with EPs knowledge. The interviews were conducted in English, which did not pose a problem to the participants. The names of contributing individuals and companies are omitted to encourage openness of response.

## **Data Analysis**

All interviews were recorded by a voice recorder with prior consent from the participants. The conversations were then transcribed and summarized for analysis. The interview transcripts were analyzed based on two approaches, namely, content analysis and grounded analysis, as suggested by Easterby-Smith et al. (2012).

## **FINDINGS**

### **EPs in Malaysian Resorts**

Most Malaysian lake resorts take energy consumption into consideration. Given that Malaysia is a tropical country with hot and humid weather conditions, energy consumption has become a critical aspect of sustainability. However, according to the interviewees, different resorts implement different initiatives. Almost all resorts have their own power generator, which mostly uses diesel fuel in accordance with their energy demand. Similarly, they try to minimize the amount of energy needed by either removing unnecessary devices or replacing them with potential substitutes. For instance, resorts replace air-conditioners with fans in open areas, like lobbies, in addition to replacing old-generation bulbs with new energy saving lamps, like LED.

Furthermore, resorts have been gradually shifting to more environmental friendly fuel because diesel fuel is an air polluting type of natural resource. In this regard, resorts have been transforming their energy supply algorithms from traditional methods to new ones. Some resorts only alter the fuel into more friendly ones like gas to fill up their power generators, while very few resorts with strong financial capacity have changed energy supply methods like wind or solar systems, which have the least negative impact on the environment.

Moreover, some resorts successfully sustain energy consumption by adopting the principles of green-building. Redesigning buildings to use fresh air enables resorts to minimize energy consumption. Low-budget resorts implement this method even in rooms. In addition, resorts with strong financial capacity provide rooms with a central switch to automatically change the status of energy consuming devices to standby mode if the room is not occupied, while financially weak resorts, like guesthouses, put a person in charge to ensure all energy consumption devices is on standby status when the room is empty.

Regarding water consumption, resorts located on islands do not see water as a main concern because they are surrounded by clean water, whereas resorts located in tropical forests place water-related concerns at the center of attention and initiate practices to sustain water consumption. Regardless of business characteristics, every resort has a degree of concern, especially during dry seasons, when they suffer from lack of rain. In this regard, resorts initiate different practices to sustain water consumption in an environment friendly manner. While some resorts simply use small water pumps to bring lake water to the place, other resorts treat the water before making it available for guests. In addition, to sustain water consumption, especially during dry seasons, resorts have water tanks for water harvested or pumped.

Waste management is another EP that is being intensively considered by resorts. In terms of water sewage management, each resort has a central tank for dirty water collection. Again depending on financial capacity, different resorts differently treat sewage. While some resorts filtrate dirty water and then return clean water to the lake, others mostly outsource sewage elimination to external contractors sucking up tanks and have sewage delivered to the nearest industrial centers for sewage treatments. In terms of food wastage, although estimating food consumption has been reported to be best practice to avoid wastage generation, some resorts sell waste materials, like oil, in alternative forms, such as soaps. In some cases, creative resorts feed native birds and animals with waste food, resulting in not only eliminating wastage, but also attracting visitors.

In terms of resource usage, most resorts establish maintenance teams to inspect and repair damages. Other resorts use existing resources to fulfill their objectives. For instance, as boating and fishing are two activities appreciated by tourists, resorts prefer to use existing Asli boats instead of buying new ones. Moreover, coastal resorts mostly depend on lakes to supply water, which enables resorts to reduce the level of dependency on external sources of water and reduce consequential risk.

### **Challenges for EPs**

Malaysian resorts understand the importance of EPs, but some challenges make the implementation of EPs difficult and even impossible in some cases. Potential challenges can be categorized as direct or indirect challenges. Direct challenges arise from the profitability of the practice, adequacy of financial resource, availability of resource and service providers, and adequacy of skilled human resource. Indirect challenges are mostly caused by public infrastructure barriers, economic barriers, and political barriers. Furthermore, managers of resorts believe that the location of the resort has an effect on the practicality of EPs.

Although some resorts are capable of implementing actions that are evidentially practical, resorts sometimes ignore these practices because of the absence of sufficient market demand for managers' point of view. When EPs implemented by the resort are not appreciated, resort avoid these practices. Meanwhile, profitability of action is a very critical factor in the decision making process, as most resorts belong to the private sector. A sustained action is more possible if the return does not exceed the cost. This issue is much notable for resorts suffering from demand shortage. Demand shortage reduces revenue, which directly restricts the financial capacity of resorts to initiate EPs.

Lack of resource is another consideration that challenges the implementation of resorts of any environmentally friendly action. Coastal resorts are worried about managing their

wastage in the absence of a reliable supplier providing a systematically efficient method to collect wastage, while resorts located in cities are less likely to face this problem as they are engaged in urban managing schemes. The scenario is similar for water supply. Lack of knowledge is another internal barrier that restricts resorts in practicing EPs. Most resorts are run with a few number of staffs and face problems searching for new technologies. The staffs' lack of knowledge on EPs make the situation worse.

Besides direct obstacles, resorts are challenged by indirect barriers. Public infrastructure is one of the main indirect barriers that restrict resorts to initiate EPs. The absence of appropriate public transportation systems is the most mentioned infrastructural obstacle by interviewees that negatively influences the number of visitors, which results in reduced revenue. Less revenue consequently reduces the financial capacity of firms to implement EPs initiatives. The absence of appropriate road systems as another infrastructure dimension reduces accessibility that enables service providers to regularly serve resorts. In this regard, resorts located in remote areas mostly struggle with service-related challenges, such as waste management and water supply.

Economic barrier is another indirect matter that discourages resorts to take EPs. The lack of financial support from government agencies is an obstacle for EPs implementation, especially among resorts classified as small-to-medium enterprises and suffering from lack of financial capacity and operative capabilities. Further, the interviewees found political factors as a critical factor to implement EPs. The lack of collaboration between resorts and policymakers is a barrier to initiating appropriate regulations for facilitating resorts with a set of proper guidelines.

## **CONCLUSION**

In summary, although the horizon of EPs is relatively shiny, as most Malaysian resorts understand the importance of sustainability to the success of the business, resorts are struggling with a bunch of challenges. While some of these challenges can be overcome in the short-term, others call for more attention. However, as Malaysia is a developing country that faces numerous problems and difficulties, where sustainability needs the attention of both business management and national government.

As many resorts complain about the absence of close cooperation, the absence of support and collaboration of national associations leads to many resorts being hardly able to implement EPs. In this regard, the role of the government is very crucial. As the government and its relevant entities, like ministries, are in charge in the initiation of regulations, they would guide tourism practitioners to walk into EPs to provide an appropriate set of regulations. As a case in point, resort rating system could impact the willingness of a resort to practice sustainability. The number of resorts that practice sustainability increases in parallel with the degree to which the government scores resorts accordingly. In addition, the government should come with an incentive scheme to support significant EPs in the form of grants, tax rebate, or subsidy. The government should look into the needs of this industry by providing efficient supportive services, including waste collection mechanism in remote areas. Furthermore, although providing sufficient infrastructures, such as roads and transportation systems, interpretative signs, public service, and business centers, needs heavy investment and sounds logically impossible in the short run, it can be followed through a well-organized urban planning with accurate prioritizations in terms of time, operation, and cost.

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# **DINESERV: A TOOL FOR MEASURING SERVICE QUALITY IN HOTEL RESTAURANTS - A CASE STUDY OF FOUR AND FIVE STAR HOTELS IN JORDAN**

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## **Abstract**

Service quality researchers to date have paid scant attention to the issue of the dimensions of service quality. Much of the earlier work accepted the content measured by the SERVQUAL instrument. Following the argument that SERVQUAL only reflects the service delivery process, the analysis results (reliability, confirmatory factor analysis and descriptive statistics) from hotel restaurant sample revealed that Parasuraman's model is a more appropriate representation of service quality for this study. The survey conducted was distributed to 700 customers who dine in hotel restaurants' within six cities Amman, Irbid, Madaba, Dead Sea, Petra and Aqaba in Jordan. Of these 700, 460 surveys were returned and 30 of these surveys had more than 25% of the items unanswered, resulting in an effective sample of 430 usable completed questionnaires. Five constructs, tangibility, reliability, responsiveness, assurance and empathy were operationalized in order to test the research model. The current study seeks to extend our understanding of service quality by assessing a five- dimensional model based on a first wave of researchers.

Keywords: *Dineserv, Service Quality, Hotel Restaurants, Jordan.*

## **BACKGROUND**

In the 1980s, a first wave of researchers defined the frontier in service quality, these pioneers include Gronroos (1990) who established a research agenda for service quality measurement; Parasuraman *et al.*, (1985) who devised an influential service quality rating scale and Shostack (1977) who argued successfully that managing services was very different from managing products. These first wave researchers have had an unusually large impact on management and several are "household names" in the business community.

SERVQUAL is an instrument for measuring the gap between the services that customers think should be provided and what they think actually has been provided. Customers rated the importance of more than a hundred aspects of service, which the researcher divided into ten categories, or dimensions. The customer rating defined service quality. The scholars and researchers then narrowed the items down to 31 and the dimensions down to five (Listed in Table 1).

**Table 1: The Five Dimensions of Service Quality**

<b>Hotel Restaurant's Service Quality Dimensions</b>	
<b>Tangibility of the hotel restaurant's service.</b>	This presents the tangible aspects related to services such as equipments needed to present service like buildings, materials of communications, furniture`s, appearance of (Personnel) officers and employees, and so on (Su & Sun, 2007; Hyun & Kim, 2011).
<b>Reliability of the hotel restaurant's service</b>	It is ability to perform the promised service dependably and accurately (Stevens <i>et al.</i> , 1995; Su & Sun, 2007).
<b>Responsiveness of the hotel restaurant's service</b>	Willingness to help customers and provide prompt service (Stevens <i>et al.</i> , 1995; Dubé, & Renaghan, 1994).
<b>Assurance of the hotel restaurant's service</b>	Knowledge and courtesy of staff and their ability to convey and confidence (Stevens <i>et al.</i> , 1995; Records & Glennie, 1991; Magnini <i>et al.</i> , 2013).
<b>Empathy of the hotel restaurant's service</b>	The Personal care presented and individualized attention by the hotel for its customer (Stevens <i>et al.</i> , 1995; Parasuraman <i>et al.</i> , 1985; Gracia <i>et al.</i> , 2011; Swimberghe & Wooldridge, 2014)

Developed by Parasuraman *et al.*, (1988)

Knutson *et al.*, (1990) drafted LODGSERV to be used in defining and measuring service quality for lodging properties. Used confirmatory factor analysis, as developed by Hunter and Gerbing (1982) to purify the scale and confirm the five dimensions of service quality. Further testing by Stevens *et al.*, (1995) showed that ten of the 36 items didn't contribute to the index. The final version of LODGSERV had 26 items and the same five dimensions as SERVQUAL. As later found with the generic SERVQUAL, reliability is the most important of the five dimensions. Listed in descending order of importance to lodging customers, the other dimensions are assurance, responsiveness, tangibles and empathy. They participated in a group that analyzed the statistical methodology itself, comparing the uses of exploratory versus confirmatory factor analysis in index testing and refinement. Then they studied customer's expectations about economy, mid price, and luxury hotels and found that the five dimensions had the same ranking in all three segments and that the higher the price category, the higher customer expectations of restaurant's service quality. As well as translated LODGSERV into other languages and tested it, and found that the instrument worked equally well in other cultures. Boulding, Kalra, Staelin, and Zeithaml (1993) conducted a study that supported earlier findings about perceptions, clarified the issues about expectations, and established the relationship between perceptions and behavioral intentions. They distinguished between two types of expectations one is a prediction of a future events, or, an expectation of what will happen. The other is a normative expectation, or, an expectation of what should happen. Service quality literature up to that point, typically dealt with normative expectations. The conclusion was that an instrument for measuring service quality should comprise statements about perceptions. Additional, perceptions result from a combination of expectations of both what will and what should happen and the reality of service encounters. The lower the expectation of what should happen; and the higher the expectation of what would happen, the higher the perception of

what did happen. Lastly, the researchers found that the higher the perception of service quality, the greater the intention to return and to recommend. Dube, Renaghan, and Miller (1994) used the generic five dimensions to measure customer satisfaction about the food service and noted that the concept of service quality is still absent from the food and beverage service in hotel industry .

### **Drafting Dineserv**

Adapting the instrument SERVQUAL to the restaurant at the hotel industry and using the lessons learned in developing and refining LODGSERV, and drafted DINESERV (Knutson *et al.*, 1995; 1992). The instrument contained 40 statements of what should happen. For instance, one statement was “The restaurant has a visually attractive dining area”. There were also a few respondents’ profile questions. And used DINESERV to conduct a questionnaire is reformulated written set of questions for respondents to record their answers such as “Number of hotels Visited in Last year, Reasons for Dining, How did you hear about this hotel restaurant?, How long have you been a customer at this hotel restaurant?, How often do you come to this hotel restaurant?, What was the star rating of the last hotel you experienced restaurant service in?”. Consequently, this study used a suitable measurement with its own operationalised variable. Based on the background of this study, item from previous studies were adopted according to the literature in this study. As for measurement, this study utilized a 5-point Likert scale to measure the independent, mediating and dependent variable. So, each respondent must choose a response pertaining to the extent of agreement or disagreement for each statement, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire was divided into three main sections. The first contains questions devoted to gain defining data and information from respondents. This part includes seven of the questionnaire items. The second part tackles the questions that are related to the customer experience. These include seven items. The third part covers the questions of the relations of the study variables. These are 65 of the total items of the questionnaires.

### *Reliability of Hotel Restaurants’ Service Quality Result*

Using the approach of Hunter and Gerbing (1982) this research employed the internal consistency technique to test the scale reliability for hotel restaurants’ service quality with 36 items (As shown in table 2), Cronbach’s alpha value for the service quality scale is above 0.7, it means that this scale is reliable.

**Table 2:** Item-Total Statistics Hotel Restaurants’ Service Quality

	N	Cronbach's Alpha if Item Deleted
<b>Restaurants’ Service Quality</b>	430	
<b>Tangibles</b>	430	.967
<b>Responsiveness</b>	430	.968
<b>Reliability</b>	430	.967
<b>Assurance</b>	430	.966
<b>Empathy</b>	430	.968

### **Confirmatory Factor Analysis**

Confirmatory factor analysis was used to reduce the number of items to a smaller set of factors (Hair, *et al.*, 1998). It is worth mentioning that some items represent the same idea of cretin items that were going to be explored, so some items were omitted if they are redundant or unnecessary. The number of participants in the current research is 430. According to Hair, *et al.* (2006) if the number of samples in factor analysis is 100 or larger, factor loading in the range of  $\pm .30$  to  $\pm .40$  are considered to meet minimal levels of interpretation of structures. Loading  $\pm .50$  or greater are considered practically significant and loadings exceeding  $\pm .70$  are considered indicative of a well defined structure and are the goal of any factor analysis. The adequacy of the sample size is confirmed by both the Kaiser-Meyer Olkin's (KMO) test sampling adequacy and Barlett's test of Sphericity. In fact, KMO for hotel restaurants' service quality (0.971), we're exceeding the satisfactory value. The retention decision of each item was based on factor loadings were greater than or equal to 0.50 and cross loading with the other factors generally smaller than 0.35. Exploratory factor analysis was performed separately for each studied variable: hotel restaurants' service quality (40 items), the factor analysis results of these studied variables are discussed below.

*Factor Analysis of Hotel Restaurant's Service Quality Dimensions*

As mentioned earlier, the hotel restaurant's service quality construct in this study is a multidimensional construct which consists of five primary dimensions, namely Tangibles (11 items), Reliability (8 items), responsiveness (7 items), Assurance (7 items) and Empathy (7 items). Exploratory factor analysis was performed simultaneously on all of these dimensions. The results of the factor analysis on hotel restaurants' service quality are presented in (Table 3) and all of the items is found to be five dimensional construct with 40 items of hotel restaurant's service quality produced four factors with Eigenvalues above one and the total variance explained was (.637) of the total variance . The Kaiser-Meyer-Oklin KMO measure of sampling adequacy was (.97), indicating sufficient inter –correlations while the Bartlett test of sphericity was significant at (Chi square= 11485.497,  $p < 0.001$ ). Bartlett's test of sphericity indicates whether correlation matrix is an identity matrix, which would indicate that variables are unrelated. The Chi square significant level was less than .01. Therefore, a value higher than about 0.10 or so, many indicates that data are not suitable for factor analysis. Communities for 37 hotel restaurants' service, quality items were above 0.50 and therefore those with lower commonalities were deleted. These four items were Tangibles7, Tangibles 8, Tangibles10, and Tangibles11. After these items were removed, the factor analysis was run again. And the factor loadings for these remaining 36 restaurants' service quality items were above the recommended cutoff point value of 0.3 for practical and statistical significance. Overall, all the variables were loaded significantly on five factors as conceptualized; therefore the same label was used to label these factors.

**Table 3:** Factor Analysis for Hotel Restaurants' Service Quality

<b>Total Variance Explained</b>	<b>.637</b>	
KMO Measure of Sampling Adequacy	.971	
Bartlett's Test of Sphericity	Chi-Square	11485.497
	df	630.000
	Sig	.000

## DESCRIPTIVE STATISTICS FOR VARIABLES

The descriptive procedure is useful for obtaining summary comparison of approximately normally distributed scale variables and for easily identifying unusual cases across those variables by computing Z scores. The questions in the independent and dependent variables were measured based on a 5-Likert scale. Descriptive statistics are applied to all the 3 variables (Hotel Restaurants' Service Quality, Customer Satisfaction and Customer loyalty). It is done in order to find out the importance of the statements used to evaluate factors that develop service quality, customer satisfaction and customer loyalty. Following is (table 4) having all the descriptive statistics applied to the 3 variables. Based on the result below, the mean of all variables ranges from (4.051) to (4.065). The highest mean was assurance (4.94) and the lowest was responsiveness (3.943). However, the Standard Deviation for all variables ranges from (0.520) to (0.645) with responsiveness, having the highest standard deviation (0.666). Looking at the results after application of descriptive statistics on all the 3 variables, it can be seen that all 3 out of the 3 variables (100 %) scored above 4 on a 5-point scale indicating that respondents have above average agreement towards the statements related to these variables. It shows that customers have positive perceptions about hotel restaurants' service quality and their satisfaction levels.

**Table 4:** Results of Descriptive Statistics

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Results</b>
<b>Restaurants' Service Quality</b>	430	4.051	0.520	Agree
<b>Tangibles</b>	430	4.065	0.410	Agree
<b>Responsiveness</b>	430	3.943	0.666	Agree
<b>Reliability</b>	430	4.127	0.587	Agree
<b>Assurance</b>	430	4.094	0.618	Agree
<b>Empathy</b>	430	4.065	0.645	Agree

## CONCLUSIONS

The study showed that is important to work on improving the perception score, because the higher the score, the more likely it is that the customer will return and will recommend the hotel restaurants to others. Conversely, according to Plymire (1991) 91 percent of a restaurant's dissatisfied customers will never come back, and they will typically tell eight to ten others about their negative experiences, as when the customer returns the profits will rise. Such as Bill Marriott once said that it cost \$10 to get a customer to come to a Marriott hotel the first time and \$1 in special effort to get one to return. Along with customers' relationship with lengthen, their contribution to restaurant profits increases significantly. If the restaurants can increase the percentage of customers who plan to return from 76 percent to 81 percent, then the restaurant's net profit will likely double. Gallup (1986) report that how important is word-of-mouth advertising and showed that of customers going to a restaurant for the first time, 44 percent went because of a recommendation and another 10 percent went with someone who had been before. For that reason, DINESERV is valid, reliable, and cost effective. The DINESERV. Per interview is easy to administer and easy to respond to and using it will be well worth the effort, it would be also useful for restaurants to survey their competitors' customers with DINESERV. Per. Competitive advantage is, after all, necessary for success. According to the result, there are therefore three ways to

improve customers' perceptions about service, improve the restaurant service quality, lower the expectations of what should what happen, and raise the expectations about what will happen.

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# CUSTOMERS' SATISFACTION TOWARDS COUNTER SERVICE AT GOVERNMENT HOSPITAL

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## Abstract

Malaysia considered health tourism as one of its major drivers in approaching its vision to become a developed country by 2020. Both private and government hospitals were invited and listed to participate in the health tourism program. Hence, the government had issued a series of Development Administration Circulars (DCA) to implement quality improvement in all public sector agencies. Nevertheless, issues concerning services delivered by government healthcare centers are still commonly raised up by the general public. The mass media too had often highlighted service delivery in government hospitals. There are many issues related and one of them is counter service. Counter service is the main important part of an organization. It reveals the first impression of an organization. Counter service is the front line of an organization and it represents the image of the organization. With much effort laid by the government to enhance quality service delivery particularly in its agencies, a study was conducted with its main purpose is to determine the quality of counter service at a government hospital based on its customers' satisfaction towards the effectiveness of service delivered to them by the hospitals. In this study, customers are referred to the outpatients of a hospital. The hospital chosen for this study is a government hospital in Kuching, Sarawak. The customers' satisfaction are measured based on the main components of counter service. Findings and recommendations are discussed in this paper.

Keywords: *Counter service, Government hospital, Quality counter service, Components of counter service*

## INTRODUCTION

Malaysia considered health tourism as one of its major drivers in approaching its vision to become a developed country by 2020. The Malaysian government started to give prominence to medical tourism after Asian Financial crisis as an economic diversification (Chee 2007). It started in 1995 when the Ministry of Health (MOH) was entrusted to form The National Committee for the Promotion of Medical and Health Tourism. Then, in 2009 the Ministry of Health Malaysia set up Malaysia Healthcare Travel Council (MHTC) to be the primary agency to promote and develop the country's health tourism industry as well as position Malaysia as a healthcare hub in the region. Various private and government hospitals were invited and listed to participate in the health tourism program after satisfying the MOH criteria. These have resulted in increasing visitors arriving Malaysia for treatments. Medical tourists were observed



to increase steadily in Malaysia due to the governments' promotion of Malaysia as an international healthcare destination, resulting in increased revenues for the country.

However, there are more medical tourists seek treatment in the private medical centre compare to the governments. Issues concerning services delivered by government healthcare centers are still commonly raised up by the general public (Haron & Talib 2012). Malaysian government had introduced several reforms and a series of circulars to achieve its national objective to institutionalizing quality culture not only in its healthcare centres but in all its agencies. Hence, the government had issued a series of Development Administration Circulars (DCA) to implement quality improvement in all public sector agencies. Nevertheless, the mass media had often highlighted service delivery in government hospitals. There are many issues related and one of them is counter service. Counter service is the main important part of an organization. It reveals the first impression of an organization and customers' moment of truth (MoT). MoT is the moment when a customer first comes in contact with the employee of an organization, people, systems, procedures or products of an organisation. This will lead to the judgment about the quality offered and delivered by the organization. Success depends in many instances upon the moment when customers and employees interact. Thus, it is best to strengthen government healthcare centers' counter service as it is the front line and defines the image of government healthcare centers

#### **AN OVERVIEW OF COUNTER SERVICE**

Counter service is an important part of an organization. It shows the first impression of an organization. Counter service also refers to personnel that deal with first impression of customer and the process of directly communicating with customers. The main features of counter service are (1) knowledgeable counter service personnel in charge, (2) accurate, familiar and informative notice board, (3) established data base & technology, (4) enquiry counters and (5) waiting area and enough space to complete the job at the counter. Counter service consists of three components, there are in- front of the counter, counter section and behind the counter.

Evans & Lindsay (2005) suggested several ways to improve the quality of counter service components. They suggested notice boards, directional signs, enquiry counters, comfortable waiting area and queuing system at in-front of the counter. Whereas for counter section, they propose four main stages to ensure a systematic process. It started with preparation as the first stage, followed by reception stage, processing stage and finally completion of service stage. They further indicate that qualified customer-oriented personnels should be stationed at the counter section. They must be mentally and physically prepared and emotionally stable too. At reception stage, the personnels must start communication with customer by greeting and welcoming every guest, making eye contact and smile, displaying approachable body language and be professional by always focusing on the positive aspects. Personnels must undergone appropriate training that will enable them to process customers' needs, queries and complaints effectively. Once all transactions are done, the personnel must make sure that all customers' documents returned, thank the customer and set mind with new situation for new customer. Evans & Lindsay (2005) further specify behind the counter should be cleared from any forms of obstructions. Attractive and proper posters are displayed on the wall. While officers-in- charge are easily reach should their assistance are needed.

## METHODOLOGY

A survey design was employed for this study. Its sample was drawn based on combination of cluster and random sampling as commonly medical centres would have two main types of patients which are the in-patient and out-patient. For the purposes of this study, the out-patients were chosen. They were chosen because these patients deal and experience more frequently with counter service. About 150 questionnaires were distributed to patients who visited a government hospital in Kuching. About 12 questionnaires returned and valid for analysis, giving a response rate of eighty percent. Counter service was measured based on three main dimensions with 21 items which denote the three main components that are in-front counter, counter section and behind the counter, which is accordance to Evans & Lindsay (2005) model. Three different locations were sampled. They were registration, pharmacy and clinic. Results of the instrument's Cronbach Alpha measurement show that the score of reliability is within .80. It is an acceptable level as the results of the instrument's Cronbach Alpha measurement show that the score of reliability is above .70. This is shown in Table 1.

**Table 1:** Reliability test (N=120)

<b>Variables</b>	<b>No. of Items</b>	<b>Cronbach's Alpha</b>
In front of counter	8	.72
Counter section	8	.86
Behind the counter	5	.83

## DATA ANALYSIS AND RESULTS

The data was analyzed using SPSS version 20 and both descriptive and inferential analysis was performed. The respondents were comprised of 40 percent males and 60 percent females. Majority of the respondents are Malay (49 percent) followed by Bidayuh (22 percent). The rest of the respondents are Iban, Chinese, Melanau, Indian and others. About 78 percent of the sample attended tertiary education.

The overall mean score of customers' satisfaction towards counter service at the sampled government hospital is 3.45 which is at moderate level. Based on counter service components, the customers are most satisfied with the service delivered at behind the counter. However, there was less satisfaction among the respondents at in-front of the counter. This is shown in Table 2. As shown in Table 3, customers' satisfaction level by location is mostly at the clinic, where its mean score is at 3.58. While the least mean score is 3.05, which is at the pharmacy.

**Table 2:** Mean scores of customers' satisfaction by counter service components (N=120)

<b>Components</b>	<b>Mean</b>
In-front counter	3.22
Counter section	3.55
Behind the counter	3.58
<b>Overall Mean Score</b>	<b>3.45</b>

**Table 3:** Mean scores of customers' satisfaction by locations of counter (N=120)

Locations	Mean
Registration	3
Pharmacy	3
Clinic	3

**Table 4:** Mean scores of customers' satisfaction by items (N=120)

Items	Mean
<b>In-front of counter</b>	
Sufficient numbers of chair provided at the waiting areas	2
Waiting area at the counter service is spacious	3
Clear directional signs	3
Suggestion box at in front of the counter	3
Brochure at in front of the counter regarding the organization and health's information	3
Patient's name can be heard clearly when called by the personnel on duty at the counter	2
Patient's name is pronounced correctly	2
Counter serving system is efficient	3
<b>Counter section</b>	
Knowledgeable	3
Greets politely	2
Keeps good eye contact with patients when serving them	2
Counter section staff keeps positive body gesture when serving patients	3
Response to your needs timely	2
Return all documents	3
Good communication skills	3
Provides clear information requested regarding fees	3
<b>Behind the counter</b>	
The medical staff conduct medical physical examination with right manner	3
The medical staff examine patient thoroughly while conducting medical physical examination	3
The medical staff provides patient's with sufficient details regarding their illness	3
The medical staff treats the patient with respect	3
The medical staff explains the medical treatment clearly to the patients	3

There are items recorded mean score below moderate level. This is notice particularly for in-front counter section and counter section as shown in Table 4. The respondents indicate that there were insufficient numbers of chair provided at the waiting area. Patients' name were less clear when called and were also pronounced incorrectly. The respondents also

claimed that the personnel on duty did not greet them politely and did not keep good eye contact with patients when serving them. The respondents further specify the personnel also failed to respond to their needs timely. However, it also seems that the respondents were quite satisfied with the service delivered behind the counter section.

## **DISCUSSION**

The findings of this study confirm that claims made by the general public concerning services delivered by government healthcare centers particularly in the context of this study which is counter service is valid. This is supported by the moderate mean score of customers' satisfaction towards counter service at the sampled government hospital. Even mean score by location also reveal the level of customers' satisfaction towards government hospital's counter service is moderate. This study presents two major implications: theoretical contribution and practical contribution. In terms of theoretical contribution, the results of this study confirm that there are a lot of rooms for improvement for government healthcare centres. Nevertheless, this does not mean that they are unqualified to participate in medical tourism. In terms of practical contributions, the findings of this study can be used as a guideline by the government healthcare centres to enhance its service delivery particularly pertaining to counter service.

## **CONCLUSION**

This study reveals that there is a lot of room for improvement in the government's healthcare centres which first starts with its front line. This study further suggests that improvements at counter service will strongly and higher of healthcare centres image. Thus making it a good start for government healthcare centres in Malaysia to be actively involve in medical tourism. This study acknowledges several limitations. First, the survey questionnaires relied heavily on the respondents' self-responses that were selected based on random sampling technique. Secondly, the samples were taken from one government hospital in Kuching via survey questionnaires. These limitations may decrease the ability of generalizing the results to other government healthcare centres in Malaysia.

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# CONCEPTUALIZING PRACTICE OF CORPORATE SOCIAL RESPONSIBILITY (CSR)

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## Abstract

Corporate social responsibility (CSR) has gained extensive attention among the researchers and there are various reasons for practices CSR. Yet, there is little understanding of the practices of CSR by oil and gas company in Malaysia. The purposes of this study are to examine the practice of corporate social responsibility (CSR) and conceptualize involvement of oil and gas companies in sustainable tourism development in Malaysia. The study also identifies the key CSR motivation drive in practices CSR. It conceptualizes Organization reputation and goodwill with external stakeholders as the mediating effect of CSR (independent variable) and sustainable tourism development (dependent variable). CSR is perceived as a multidimensional construct which consists of stakeholder pressure represent institutional level, economic, legal, ethical and philanthropic, charity and stewardship represent organizational level and management commitment represent individual level. Respectively, sustainable tourism development is the dependent variables and model from UNEP (2001) is adopted and adapted into the study framework which consists of economic, social and environments. The mixed method approach is adapted as research method. The reason of choosing mixed method in this study is that mixed method is able to answer research questions that other methodologies unable to answer; provide better and stronger inferences; maximizing the strength and reducing the limitation of single method research.

Keywords: *Corporate Social Responsibility, Sustainable Tourism Development, Oil & gas,*

## INTRODUCTION

The past two decade has seen the rapid development of Corporate Social Responsibility (CSR). CSR has been a subject of intense debate among academicians and practitioners (Caroll, 1999). Several attempts has been made to identify the reasons why firms develop CSR strategies for instance competitive advantages, reputation improvements, stakeholder pressure, top management pressure and government reputation (Hall and Vredenburg, 2004; Kassinis and Vafeas, 2006).

A survey had been conducted by Economist Intelligence Unit together with Oracle Corporation (2010) and 65% investors responded to the survey. Finding shows that 85% agreed that CSR is important consideration in deciding and making investment decision. The three most important aspect of CSR are bottom lines (80%), ethical behavior of staff (67%), brand elements (61%), better staff morale (67%), good corporate governance (58%) and transparency of corporate dealing (51%). Oil and gas company makes strong impact towards business ethics and CSR. Their contributions encompass human rights, employees' rights, stakeholder rights, transparency, corruption, product stewardship, environment protection, community relations, principles and code of conducts (Frynas, 2005).

## **CONCEPTUALIZATION OF LITERATURE REVIEW**

There are a myriad of definition for corporate social responsibility, including the terms “Corporate citizenship”, “The ethical corporation”, “Good corporate governance”, “Corporate responsibility”. Some companies consider CSR as pure corporate philanthropy and Shell defines CSR as a new corporate strategic framework.

Previous researcher asserted that business has an obligation to work and function for social betterment (Frederick, 1994). On the other hands, CSR is perceived as a corporation is only social responsibility is its fiduciary duty to maximize shareholder wealth, while obeying the law and basic canons of ethic (Friedman, 1996). Subsequently researcher introduced the pyramid of CSR which consists of economic, legal, ethical and philanthropic responsibilities (Carroll 1979, 1999, 2000, and 2001). Economic responsibility is to be profitable for shareholder and provide good jobs for employees and provide quality products to customers. A legal responsibility is when a firm complies with law and play by rules of the games. For Ethical responsibilities is for a firm to conduct business morally, doing what is right, just and fair and avoid harm whereby Philanthropic responsibilities is to make voluntarily contribution to society, giving time and money to good works (Carroll 1979, 1999, 2000, and 2001).

In conceptualization of CSR, the best definition that represents the Oil and gas environment in Malaysia is definition termed by researcher Carroll, 1999. Based on Carroll four layers Corporate Social Responsibility pyramid consists of economic, legal, ethical and philanthropic. Oil and Gas Company in Malaysia is label as business entity. Their primary goal is to add values and maximize profit and they are responsible to their shareholder and employees. Oil and Gas Company comply with legal responsibility by performing exceeding the minimum obligations to stakeholders through regulations and corporate governance. Through establishment of local and international law, support on human rights, protect the environment and bring benefit to the company theirs operates.

Oil and Gas Company in Malaysia is experiencing the increasing levels and stringent environmental control and regulation. For instance, organization performing above current requirements will not need to inject additional investment, while organization defaulting the current minimum will have to reinvest to conform to the tightened standard in the future. Accordingly, Porter (1991 & 1995) argued that strict environmental regulations give organization competitive advantages. Moreover, Dowell et.al, 2000 stressed that an organization that have high CSR standard on global scale have higher market values. Therefore, oil and gas companies have indirectly contributes to sustainable tourism. By enhancing their stringent environment requirement, this may help in reducing environment issues.

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# FORECASTING TOURIST ARRIVALS TO SABAH USING FUZZY TIME SERIES

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## Abstract

The number of tourist arrivals is an important factor to predict the tourism demand so that the government, industries and other stakeholders can plan effective strategies on maintaining and boosting tourism industry in a country. This paper presented the application of a fuzzy time series method to forecast the number of tourist arrivals to Sabah. The method consists of several steps which include defining fuzzy sets based on the universe discourse, fuzzification, establishing fuzzy logical relationship groups, assigning appropriate weights, defuzzification and computing the forecasted results. The forecasting accuracy was determined based on average forecasting errors. Results showed that the fuzzy time series can be considered as a suitable tool for tourist arrivals forecasting problem as compared to conventional time series forecasting methods which require the assumption of large sample, linearity and stationarity.

Keywords: *Forecasting, Tourist arrivals, Fuzzy time series*

## INTRODUCTION

Forecasting plays an important role since prediction of the future events will help to improve decision making process. Better forecast would also help investors and stakeholders make proper plan in their strategic decision. For example, government agencies which relate directly to tourism industry will face a crucial planning to provide the accommodation, transportation, incentives, etc if the tourism demand forecast cannot be estimated accurately.

Generally, there are two main types of forecasting method available. It can be divided into conventional method and modern method. According to Song (2008), although more advanced forecasting techniques has resulted in improved forecast accuracy under certain circumstances, but still there is no clear evidence showing that any one of the model can consistently outperform other models in forecasting.

Obviously, the conventional time series such as Autoregressive Integrated Moving Average (ARIMA) and Box-Jenkins method have been used for a long time. However, they provide only reasonable accuracy which may suffer from assumptions of stationarity and linearity (Lee et al., 2012). Moreover, the method requires more historical data and the data itself must be normal distribution to get a better forecasting performance (Cheng et al., 2006). Since these conventional methods have a lot of equations, thus it is seen very difficult to understand deeply the theoretical part especially for the general users (Chou et al., 2010). Due to above obstacles, Song and Chissom (1993a, 1993b) proposed the fuzzy time series (FTS) to solve the real problems of conventional time series when dealing with the uncertainty and vague data. They introduced the definitions of FTS and develop the models by using fuzzy relation equations and approximate reasoning.

Since then, FTS has attracted many researchers from various fields, and the methods have been continuously developed. Chen (1996), for instance, improved the approach proposed by Song and Chissom in reducing the computational time. Then, he proposed a simple

operation instead of complicated matrix operation for establishing steps of the fuzzy relationships. In order to overcome recurrence and weighting problems in FTS, Yu (2005), however, have developed the weighted fuzzy time series.

Other than that, Cheng et al. (2008) proposed a FTS based on adaptive expectation model to produce forecasted values. They proposed the weights which are focused on the probability of its appearance and totally ignored the importance of chronological fuzzy logical relations. Suhartono et al. (2011) and Lee and Suhartono (2012) had also made significant effort to improve weighted fuzzy time series to deal with the same issues in FTS, namely recurrence and weighing. Their methods differ from one another with regard to determining the appropriate weight models.

Furthermore, Egrioglu et al. (2013) proposed a hybrid approach FTS which applies the concept of fuzzy c-means method and artificial neural networks. These two methods are employed for fuzzification and the purpose of defining fuzzy relationship process. However, Bas et al. (2014) applied genetic algorithm into FTS to derive a good performance results. They modified the method to find the optimal interval lengths which showed their new approach can improve the forecasting performance as compared to other methods.

In this study, we presented the application of a weighted fuzzy time series to forecast Sabah tourist arrivals based on 10 years dataset (i.e., 2002-2012). Generally, the method consists of three stages, namely, fuzzification, determination of fuzzy relations, and defuzzification process. The proposed method has a great potential in terms of their ability to derive more accurate forecasted values. Since the conventional time series such as ARIMA, which require the assumptions of large sample, linearity and stationarity, have difficulties to obtain the accurate values, thus our proposed method seems to give a promising alternative to overcome the issues.

To do so, this paper will be structured as follows. In section 2, we define the problem identification followed by a brief fuzzy time series method including the proposed algorithm and in Section 3. Then, in section 4, we provide the numerical example via a case study in Sabah for validation purposes, before the conclusion is made in Section 5.

## **PROBLEM STATEMENT**

Since the tourism industry has grown rapidly over the decades and brought many benefits to the country economic sectors, the need for accurate forecast is particularly crucial. Generally, the issue of tourism demand forecasting in Malaysia is nothing new and a number of significant literatures have been found recently, but most of the studies have only focused on the traditional methods. Many researchers only provide the reasonable accuracy and suffer from assumption of stationarity and linearity. Moreover, the traditional fuzzy time series requires more historical data and the data itself must be normal distribution to obtain a better forecasting performance. Therefore, in this study we develop a short term forecasting method using the fuzzy time series to enable the agencies which are related to tourism industry in Sabah to gain the benefit in terms of their precision forecasting planning.

## MATERIALS AND METHOD

In this section, we provide the basic concept and definitions which are related to our proposed method. These concepts will be used throughout this paper unless otherwise stated.

### Basic concept of fuzzy time series

Song and Chissom (1993a) and Chen (1996) have introduced the definition and properties of fuzzy time series as follows.

**Definition 1.** Let  $Y(t) (t = \dots, 0, 1, 2, \dots)$ , a subset of real numbers, be the universe of discourse by which fuzzy sets  $f(t)$  are defined. If  $F(t)$  is a collection of  $f_1(t), f_2(t), \dots$  then  $F(t)$  is called a fuzzy time series defined on  $y(t)$ .

**Definition 2.** If there exists a fuzzy logical relationship  $R(t - 1, t)$ , such that  $F(t) = F(t - 1) \circ R(t - 1, t)$ , where  $\circ$  represents the max-min composition operator,  $F(t - 1)$  and  $F(t)$  are fuzzy sets, then  $F(t)$  is said to be caused by  $F(t - 1)$ . The logical relationship between  $F(t)$  and  $F(t - 1)$  can be represented by  $F(t - 1) \rightarrow F(t)$ .

**Definition 3.** Let  $F(t - 1) = A_i$  and  $F(t) = A_j$ . The relationship between two consecutive observations,  $F(t)$  and  $F(t - 1)$ , referred to as a fuzzy logical relationship (FLR), can be denoted by  $A_i \rightarrow A_j$ , where  $A_i$  is called the left-hand side (LHS) and  $A_j$  is called the right-hand side (RHS) of the FLR.

**Definition 4.** All the fuzzy logical relationships in the training data set can be further grouped together into different fuzzy logical relationship groups according to the same left-hand sides of the fuzzy logical relationship. For example, there are two fuzzy logical relationships with the same left-hand side ( $A_i$ ):  $A_i \rightarrow A_{j1}$  and  $A_i \rightarrow A_{j2}$ . These two fuzzy logical relationships can be group into a fuzzy logical relationship group.

**Definition 5.** Suppose  $F(t)$  is caused by  $F(t - 1)$  only, and  $F(t - 1) = F(t - 1) \times R(t - 1, t)$ . For any  $t$ , if  $R(t - 1, t)$  is dependent of  $t$ , then  $F(t)$  is called a time-invariant fuzzy time-series, otherwise a time-variant fuzzy time series.

### Weighed fuzzy time series

The weighted fuzzy time series proposed by Yu (2005) is applied in this study. The steps of the algorithm of the model are briefly described as follows.

**Step 1.** Define the discourse of the universe and subintervals. Based on mix and max values in the data set,  $D_{min}$  and  $D_{max}$  variabes are defined. Then choose two arbitrary positive number which are  $D_1$  and  $D_2$  in order to divide the interval evenly,  $U = [D_{max} - D_1, D_{max} - D_2]$ .

**Step 2.** Define fuzzy sets based on the universe of discourse and fuzzify the historical data.

**Step 3.** Fuzzify observed rules.

**Step 4.** Establish fuzzy logical relationships (revise Chen's method). The recurrent FLRs are taken into account by revising Step 4 in Chen's method. For example, there are 5 FLRs with the same LHS,  $A_1 \rightarrow A_2, A_1 \rightarrow A_1, A_1 \rightarrow A_1, A_1 \rightarrow A_3, A_1 \rightarrow A_1$ . These FLRs are used to establish fuzzy logical relationship group (FLRG) as  $A_1 \rightarrow A_2, A_1, A_1, A_3, A_1$ .

**Step 5.** Forecasting process use the same rule as Chen's method.

**Step 6.** Defuzzification. Suppose the forecast of  $F(t)$  is  $A_{j1}, A_{j2} \dots, A_{jk}$ . The defuzzified matrix is equal to a matrix of the midpoints of  $A_{j1}, A_{j2} \dots, A_{jk}$ :

$$(1) \quad M(t) = [m_{j1}, m_{j2} \dots, m_{jk}],$$

where  $M(t)$  represents a defuzzified forecast of  $F(t)$ .

**Step 7.** Assigning the weights. Suppose the forecast of  $F(t)$  is  $A_{j1}, A_{j2} \dots, A_{jk}$ . The corresponding weights for  $A_{j1}, A_{j2} \dots, A_{jk}$  saying  $w'_1, w'_2, \dots, w'_k$  are specified as

$$(2) \quad w'_i = \frac{w_i}{\sum_{h=1}^k w_h},$$

where  $w_1 = 1, w_i = w_{i-1} + 1$  for  $2 \leq i \leq k$ . Then, the weight matrix is obtained as

$$(3) \quad W(t) = [w'_1, w'_2, \dots, w'_k] = \left[ \frac{1}{\sum_{h=1}^k w_h}, \frac{2}{\sum_{h=1}^k w_h}, \dots, \frac{k}{\sum_{h=1}^k w_h} \right],$$

where  $w_h$  is the corresponding weight for  $A_{jk}$ .

**Step 8.** Calculating the final forecast values. In the weighted model, the final forecast is equal to the product of the defuzzified matrix and the transpose of the weight matrix:

$$(4) \quad \hat{F}(t) = M(t) \times W(t)^T,$$

where  $\times$  is the matrix product operator, and  $M(t)$  is a  $1 \times k$  matrix and  $W(t)^T$  is a  $k \times 1$  matrix, respectively.

## A NUMERICAL EXAMPLE VIA CASE STUDY

To demonstrate the applicability and validity of the proposed method, we use the tourist arrivals data to Sabah, Malaysia for 10 years, 2002 to 2012 (Sabah Tourism Board, 2013) as a case study as shown in Table 1.

**Table 1:** Tourist arrivals to Sabah

Year	Number of tourists
2002	1 107 356
2003	1 251 454
2004	1 773 271
2005	1 828 771
2006	2 091 658
2007	2 478 443
2008	2 300 428
2009	2 246 068

2010	2 504 669
2011	2 844 597
2012	2 875 761

Step 1: For preliminary study, we choose  $D_1 = 7356$  and  $D_2 = 4239$ , thus the universe  $U = [1000000,3000000]$ . We then simply divide U into five equal length and denote as  $u_1, u_2, u_3, u_4$  and  $u_5$  : For each interval  $u_1 = [1000000,1400000]$  ,  $u_2 = [1400000,1800000]$  ,  $u_3 = [1800000,2200000]$  ,  $u_4 = [2200000,2600000]$  and  $u_5 = [2600000,3000000]$

Step 2: We define fuzzy sets based on the universe of discourse data. In this study, the linguistic values of  $A_1 = \text{Low}$ ,  $A_2 = \text{Medium Low}$ ,  $A_3 = \text{Medium}$ ,  $A_4 = \text{Medium High}$  and  $A_5 = \text{High}$  are considered. This is an agreement with Chou et al. (2010).

Step 3. Fuzzify the historical data. The fuzzified tourist arrivals are shown in Table 2. The values of 0, 0.5, and 1 in the table indicate the grade of membership of the  $u_1, u_2, u_3, u_4$  and  $u_5$  in the fuzzy set  $A_j$ . If the maximum membership of one year tourist arrival is under  $A_k$  then the fuzzified tourist arrival for this year is treated as  $A_k$  .

**Table 2:** Fuzzified tourist arrivals to Sabah

Year	Actual tourist arrivals	$u_1$	$u_2$	$u_3$	$u_4$	$u_5$	Fuzzified tourist arrivals
2002	1 107 356	1	0.5	0	0	0	$A_1$
2003	1 251 454	1	0.5	0	0	0	$A_1$
2004	1 773 271	0.5	1	0	0	0	$A_2$
2005	1 828 771	0	0.5	1	0	0	$A_3$
2006	2 091 658	0	0.5	1	0	0	$A_3$
2007	2 478 443	0	0	0.5	1	0	$A_4$
2008	2 300 428	0	0	0.5	1	0	$A_4$
2009	2 246 068	0	0	0.5	1	0	$A_4$
2010	2 504 669	0	0	0.5	1	0	$A_4$
2011	2 844 597	0	0	0	0.5	1	$A_5$
2012	2 875 761	0	0	0	0.5	1	$A_5$

Step 4: Establish fuzzy logical relationship (FLR) which can be obtained from Table 2. The FLR  $A_j \rightarrow A_k$  means “If the enrolment of year  $i$  is  $A_j$  then that of the year  $i + 1$  is  $A_k$ , where  $A_j$  is called the current state and  $A_k$  is the next state. The FLRs is shown in Table 3. Furthermore, we divide the FLRs into groups based on the current states of the tourist arrivals. Thus, we obtain five fuzzy logical relationship groups (FLRGs) as shown in Table 3.

**Table 3:** FLRs and FLRGs

Fuzzy Logical Relationships (FLRs)		Fuzzy Logical Relationship Group (FLRSs)
$A_1 \rightarrow A_1$	$A_4 \rightarrow A_4$	$A_1 \rightarrow A_1, A_2$
$A_1 \rightarrow A_2$	$A_4 \rightarrow A_4$	$A_2 \rightarrow A_3$



$A_2 \rightarrow A_3$	$A_4 \rightarrow A_4$	$A_3 \rightarrow A_3, A_4$
$A_3 \rightarrow A_3$	$A_4 \rightarrow A_5$	$A_4 \rightarrow A_4, A_4, A_4 A_5$
$A_3 \rightarrow A_4$	$A_5 \rightarrow A_5$	$A_5 \rightarrow A_5$

Step 5 and 6: Forecasting and defuzzification process. For example, we consider  $A_4 \rightarrow A_4 A_4 A_4 A_5$ . Using the definition 3 and 4, since  $F(t - 1) = A_4$  then the forecast of  $F(t) = A_4 A_4 A_4 A_5$ . Therefore based on the equation (1), the defuzzified matrix,  $M(t) = [2400000, 2400000, 2400000, 2800000]$ .

Step 7. For example, when the forecast of  $F(t)$  is  $A_4 A_4 A_4 A_5$ , using equation (2), the corresponding weights are specified as  $w_1 = 1$ ,  $w_2 = 2$ ,  $w_3 = 3$  and  $w_4 = 4$ . From the equation (3), the weight matrix is

$$W(t) = \left[ \frac{1}{10}, \frac{2}{10}, \frac{3}{10}, \frac{4}{10} \right].$$

Step 8. Finally, using equation (4), the final forecast is given by

$$\hat{F} = [2400000, 2400000, 2400000, 2800000] \times \left[ \frac{1}{10}, \frac{2}{10}, \frac{3}{10}, \frac{4}{10} \right]^T.$$

Using the step 1-8, the results are summarized in Table 4. In order to determine forecasting accuracy, we compute the forecasting error and average forecasting error using the following equations and the results are also shown in Table 4.

$$\text{Forecasting Error (FE)} = \left( \frac{[\text{Forecasted Value} - \text{Actual Value}]}{\text{Actual Value}} \right) \times 100\% \quad (5)$$

$$\text{Average Forecasting Error (AFE)} = \frac{\text{Sum of FEs}}{\text{Total number of FEs}} \quad (6)$$

**Table 4:** Forecasted tourist arrivals to Sabah

Year	Actual tourist arrivals	Forecasted tourist arrivals	Percentage Forecasting error (FE)
2002	1 107 356	1 466 667	32.45
2003	1 251 454	1 466 667	17.20
2004	1 773 271	2 000 000	12.79
2005	1 828 771	2 266 667	23.94
2006	2 091 658	2 266 667	8.37
2007	2 478 443	2 560 000	3.29
2008	2 300 428	2 560 000	11.28
2009	2 246 068	2 560 000	13.98
2010	2 504 669	2 560 000	2.21
2011	2 844 597	2 800 000	1.57
2012	2 875 761	2 800 000	2.63
Average Forecasting Error (AFE)			10.88%

## CONCLUSION

In this paper, the application of fuzzy time series for forecasting Sabah tourist arrivals is presented. As the number of tourist arrivals to Sabah is expected to experience continued growth, it is crucial to forecast correctly tourism demand. The accurate and reliable forecast of international tourist arrivals would contribute to the development of sustainable tourism activity in this state, which assisting in sensible tourism policy development, planning and investment decision-making both the private and government sectors. Hence, this study is expected to benefit tourism-related industry in Sabah to make appropriate decisions. It is clear seen that the advantage of this method is that the procedures do not require the assumptions of large sample, stationarity and linearity as well as normal distribution. From the empirical results, it showed that that the average forecasting error (AFE) of this study is 10.88% which is considered high. Therefore, to reduce the errors and improve forecasting accuracy, the weight fuzzy time series method which applied in this study need to be revised. Thus, the next effort is to investigate more deeply how we can manage to reduce the AFE percentages occurred in the results analysis. This is because the smaller AFE values obtained the more accurate forecasted results close to the actual values. The initiative will be the subject of our future research work.

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# **SUSTAINABLE VISITOR MANAGEMENT AND MARKETING HERITAGE SITE: COMPONENTS, FRAMEWORK AND PRINCIPLES**

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## **Abstract**

Visitor impact management and sustainable marketing of heritage site have become vital issues for managing heritage sites worldwide. Visitor attractions and heritage sites are faced with a host of external and internal threats. Review of literature shows that the concept of visitor management in protected areas or heritage sites is multi-faceted, with no clear consensus in terms of sustainability on the modelling components. Likewise, marketing is an important concept in the management of a heritage site; and it should be consistent with the existing heritage attractions/sites, taking into consideration sustainable pillars – social, economics, cultural and environmental. This paper presents the key components of a visitor management model and principles in marketing sustainable heritage sites that could be applied to the Kinabalu National Park management, which is part of the research work on Environmental Responsible Rural Tourism Framework-Visitor Management and Marketing Sustainable Heritage Site of Kinabalu National Park in Sabah. It points out the relevant components and practices that can be considered for park management by facilitating the promotion of natural and cultural heritage at the Kinabalu National Park. The principles of marketing heritage sites are deemed useful guidelines for heritage site managers and planners to market and promote heritage sites sustainably. Sustainability is part of the business operations for the private sector and as a means towards community benefits.

*Keywords: Visitor management model, principles of marketing sustainable heritage site, Kinabalu National Park, heritage site, sustainability*

## **INTRODUCTION**

Increasing attention has been given to the management of protected areas and parks as well as heritage destinations in terms of its management and sustainability. Visitor attraction management and marketing sustainable heritage sites have become key issues especially for managing heritage sites worldwide (Burns and Cardoza- Moreira, 2013). Simply, visitor attractions and heritage sites are faced with a host of external and internal threats. Research has demonstrated that visitation to heritage sites or protected areas has numerous positive and and negative impacts on the sites and the communities in which they are located (Shackley, 2001; Teo & Huang, 1995). Therefore, sustainability has become an important consideration in these areas in terms of development and makerting, and as such, destination managers must balance the benefits of tourism with the negative consequences to ensure long term sustainability. Evidently, there are several factors that influence sustainable heritage sites: environment, social, economic, government policy, legal, technology, ecological and socio-cultural aspects and the support of the local community. Likewise, it is expected that heritage sites, just like any other tourist destination, is anticipated to generate benefits to the local community and other tourism business operators. The Kinabalu National Park as a world heritage site icon is appreciated for its natural, scenic and educational benefits and serve as a source of local, national, or ethnic identity

and pride; it is also a key attraction for mountain climbing and recreational and leisure activities. It generates economic benefits for local communities and the tourism industry. Evidently, the degree to which a protected area or heritage tourism site can sustain a viable tourism and recreation presence is dependent on the physical environment, the behaviour of visitors, and appropriate management and resourcing.

Visitor impact management is an approach to deal with the negative impacts caused by human use on the heritage site. Since the mid-1970's, a number of visitor impact models have been developed for protected areas, which can be adopted for managing heritage sites. Some examples of visitor impact models that have been used in Australia and internationally include the Recreation Behaviour Simulator (RBSim), the Visitor Impact Model (VIM), and Visitor Experience and Resource Protection (VERP). Another management strategy is to implement sustainability processes, e.g. Limits of Acceptable Change (LAC) or the Tourism Optimisation Management Model (TOMM). Literature documents numerous models and processes developed in response to the needs of protected area managers to minimise the impact of visitor use in parks and reserves, while providing quality visitor experiences. These have been successfully used in many ecotourism sites to sustain protected areas. Review of literature shows that the concept of visitor management in protected areas or heritage sites is multi-faceted with no clear consensus on the most important modelling components for sustainability. As a result, a numerous range of approaches are available to manage visitor attraction in protected areas or national parks. These different approaches vary in their scope, focus, application and effectiveness. Likewise, marketing is an important concept in the management of heritage site; and it should be consistent with the existing heritage attractions/sites, taking into consideration sustainable pillars – social, economics, cultural and environmental as well as matching the existing attractions and infrastructures to meet the visitor expectations (Burns and Cardoza-Moreira, 2013). Yet there has been a relatively little attention on visitor attraction management in tourism literature (Garrod, Fyall and Leask, 2002) and also limited understanding of the marketing of sustainable heritage sites, especially in the case of park management as a heritage site.

Managing visitor attraction and its impacts is a complex task, since the impacts that result from tourism are diverse and not always easily identified. Visitors act as agents of change, impacting sites, both directly and indirectly as well as positively and negatively. While visitors might be better able to recognise and therefore control their direct impacts at a site, indirect impacts are equally important to the overall well being of the site. According to Winkle (2005), the impacts can be categorised as environmental, social/cultural and economic, as reflected in Table 1 below, which shows the agents of change and the impacts of tourism at heritage sites which can be applied to Kinabalu National Park, adopted from Winkle (2005, p. 3). The changes resulting from tourism identified in the literature are widely categorised as social, environmental, and economic and have been identified through expert opinion, residents' perceptions and visitors' perceptions of impacts (Hillery, Nancarrow, & Griffin, 2001; Ibitayo & Virden, 1996; Perdue, Long & Allen, 1987; Roggenbuck, Williams, & Watson, 1993). Many of these studies explore the specific impacts that affect a particular community or destination. As a result, each study presents a different set of impact items relevant to the area of study. It is uncertain if the impacts on Kinabalu National Park are similar or different from those studies. More importantly, there has been a rapid increase of visitor arrivals and visitations at the park as recorded since 2001 which led to a substantial revenue generated through tourism activities in the park. Nevertheless, this raises the question of balancing visitor use, resource protection and park

sustainability in relation to visitor management decision –making. Hence, the paper aims to present key components of visitor management and principles of marketing sustainable heritage sites with reference to the Kinabalu National Park.

**Table 1:** A Sample of Typology of the Agents of Change and Impacts of Tourism at Heritage Sites

Agent of change	Impact Outcome		
	Physical /Environmental	Social/Cultural	Economic
Physical /Environmental Vandalism	Damage to the resources	Diminished quality of visitors' experiences	Cost of repairs
Social/Cultural Visitor learning	Visitor support for restoration	Visitors gain local perspective	Expense of programs to meet visitors' learning needs
Economic Visitor Expenditure	Additional funds for restoration	Changes to social roles of residents	Income to preserve the site

## METHODS

The data collection involved a review of literature of the common approaches or framework of the visitor impact management model and principles of marketing sustainable heritage sites. Nine models of visitor impact management were evaluated. Interviews were carried to explore the key components and marketing practices relevant in making Kinabalu National Park a world sustainable heritage site. A total of sixteen respondents which consisted five local tour operators, four local guides and four mountain guides and three park officers were interviewed with regards to the subject. Data analysis was data and conceptually driven and included thematic analysis.

## FINDINGS

The reviews of nine visitor management models. These include Recreational Carrying Capacity Model (RCC), Recreation Opportunity Spectrum (ROS), Limits of Acceptable Change (LAC), Visitor Activity Management Process (VAMP), Visitor Impact Management Model (VIM), Visitor Experience and Resource Protection Model (VERP), Tourism Opportunity Spectrum (TOS), Ecotourism Opportunity Spectrum (ECOS), and Tourism Optimisation Management Model (TOMM). These models are formulated to address issues such as carrying capacity limit; environmental impacts; methods to determine appropriate types, levels, and conditions of uses; and methods to inventory and manage an appropriate mix of visitor opportunities (Nilsen & Tayler, 1998).

Each model presents the key components in visitor management and has its own strengths and weaknesses. This implies that there is no comprehensive single system of evaluation on visitor impact management and framework. The review of visitor management models highlighted shared common features that are related to the resources/ecological (environmental/physical), social and cultural (experiences) and economics (cost, benefits and incomes). Environmental management system is widely used by protected area managers to monitor environment performance in ensuring the sustainability of the place. Nevertheless, it is found that the study by Moore et al. (2003) on the environmental performance for natural area tourism and its framework and indicators is deemed useful and the most relevant to the context of Kinabalu National Park. Simply, these indicators

(resources and social) are deemed crucial for the Park and are significant indicators for sustainable heritage destinations.

The findings seem to indicate that within the Kinabalu National Park context, the resource and social indicators are key components in the visitor management model, as emerged from the interview responses: *“the natural resource and tourist experiences are vital for marketing Kinabalu National Park as a world heritage site (Respondents 2,4,8); “need to put emphasis on the natural environment, social and economic aspects in the visitor management model as these are vital for sustainable growth (Respondents 3,5,8,10,12,14).* Simply, the resource indicator is vital to determine the condition of the natural resources in and around Kinabalu Park, whilst the social indicator determines the level of quality of tourist experiences and changes in local community status. More importantly, it is suggested that the visitor management framework in Kinabalu National Park needs to consider the three key components that are closely associated with the park context, namely the pressure or measure of the causes, the state and condition of the park environment and the responses of the resource and social indicators. Kinabalu National Park is regarded as a world heritage site and needs to practise and incorporate sustainability principles in its management, operation and marketing activities. This is to ensure that Kinabalu National Park provides authentic and quality experiences to the visitors and maintain sustainable growth. These are evidenced from the following interview responses :

*“need to focus on authentic and quality experiences as marketing practices... not just the highest mountain...: (Respondent 5)*

*“the park needs to preserve and protect the valuable natural resources...” (Respondent 15)*

*“marketing Kinabalu National Park means to incorporate the principle of sustainability ...like putting emphasis on the heritage site and need to partner with others such as tour operators, tourism organisations ... (Respondent 7)*

*“we must build and maintain relationships with the local community and engage them actively...” (Respondent 9)*

*“deliver quality tour packages that have social and environmental value..” (Respondent 2)*

*“marketing Kinabalu National Park sustainably means to develop sustainable and superior tour products to specific target markets... not the mass markets ...” (Respondent 11)*

*“ marketing activities need to include the social, environmental or resources aspects..” (Respondent 4)*

Thus, the findings reveal that using the 4Ps marketing mix to market Kinabalu National Park as a world heritage site is inadequate. Principles of sustainability need to be seriously considered and marketing strategies need to be re-examined, especially to ensure a quality product and experiences, and engaging the local community and tourists are vital. This is consistent with the 5 basic principles put forward by the National Trust for Historic Preservation which are deemed useful to the management and marketing of sustainable heritage sites. These are presented as follows):

- 1) Building partnership with others to gain support. The success depends on the active participation of tourism business leaders, tour operators, tourists and political leaders
- 2) Determine the balance between needs of residents and visitors to ensure mutual benefits.
- 3) Find ways to engage as many of the visitor’s five senses
- 4) Focus on quality and authenticity as these are essential ingredients for all cultural heritage tourism, and authenticity is critical whenever heritage or history is involved.
- 5) Preserve and protect - a community’s cultural, historic, and natural resources are valuable and often irreplaceable.(Source:

<http://www.preservationnation.org/information-center/economics-of-revitalization/heritage-tourism/basics/the-five-principles.html>)

Likewise, as a world heritage site, it is vital to ensure sustainable growth. Thus, understanding and practising sustainable marketing principles are significant for the tour operators, Kinabalu National Park officers, and the heritage management team who are committed to ensure authentic and quality experiences. The Australian Heritage Commission have developed eight principles to market heritage and these are taken from the international and national contexts of sustainable practice in both tourism and heritage. The principles have been widely adopted as international and national guidelines and best-practice documents in both the tourism and heritage fields. The eight principles of marketing sustainable heritage site give emphasis on the importance of the heritage site or place, heritage conservation by taking all reasonable steps to reduce and avoid the impact on the natural and cultural attractions and to retain the natural and cultural significance of the places; mutual beneficial partnership, incorporate heritage issues into business planning, invest in people and place, market and promote products responsibly, provide high quality visitor experiences and respect indigenous rights and obligations. It is strongly suggest that these principles form relevant guidelines in the visitor attraction management plan of Kinabalu National Park; and should be practised by the marketing and promotional stakeholders concerned. Hence, it is proposed that park management need perform careful analysis and take steps in formulating marketing activities, promotions and strategic planning to ensure the sustainability of the heritage site. It is strongly suggested that above the principles should be incorporated in formulating the management and marketing plan of Kinabalu National Park. In order to develop a sound and holistic visitor management framework to ensure the sustainability of Kinabalu National Park, the resource and social indicators and principles of sustainability cannot be ignored.

## **DISCUSSION AND CONCLUSION**

The paper presents the common approaches or frameworks to visitor impact management and principles of marketing sustainable heritage destination. Clearly, the delivery of a sustainable Kinabalu National Park as a world heritage destination suggests the need to consider three key components, namely physical carrying capacity and its capacity of facilities, the sustainability of destination management and the quality experience, as noted by Cooper (2012). For making Kinabalu National Park a sustainable world heritage destination, the protection of resources, delivery of quality experiences and sustainable marketing practices of a heritage site are vital. Sustainable marketing means the generation of a positive experience for both visitors and the local people, with an emphasis on low impact on the environment, natural and local culture while still generating employment for the local people. This implies building and maintaining sustainable relationships with customers, the social environment and the natural environment. By creating social and environmental value, sustainable marketing delivers quality value through creating customer value, social value and environmental value, meeting the “triple bottom line” (Elkington, 1999). It develops sustainable products that provide superior value, which are then priced, distributed and effectively promoted to selected target groups. The process of sustainability marketing integrates social and ecological aspects (Frank-Martin Belz, 2005). Hence, the paper presents the visitor management model and key principles in marketing a sustainable heritage site that could be useful and applicable to the Kinabalu National Park management. It points out the relevant practices and potential model that can be considered for park management by facilitating the promotion of natural and cultural heritage at Kinabalu National Park. The principles of marketing heritage site are deemed useful guidelines for the



heritage site manager and planner to market and promote heritage site sustainably. More importantly, it makes sustainability a part of business operations for the private sector and a means for community benefits. The principles and proposed model benefit the park management, particularly in formulating an effective park management plan to protect and conserve the heritage site and its attractions in a sustainable manner.

### **IMPLICATIONS AND LIMITATIONS**

The nature of the study is exploratory which has limits of generalisability. Another limitation lies in the sample respondents whereby the key stakeholders such as local people, park management and local tourism association were excluded in the study. Thus, it is suggested that a new avenue of research should include such respondents, using a quantitative method of data collection.

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# EMOTIONAL INTELLIGENCE AND LEADERSHIP PRACTICES AMONG MIDDLE LEVEL ADMINISTRATORS IN SABAH PUBLIC UNIVERSITIES.

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## Abstract

The main challenges for the higher education institutions are to ensure academic and training programs provided to the people are market driven and able to respond to the changing need of various economic sectors. Moreover, the Malaysian Ministry of Higher Education (MOHE) has announced the decision to make the country as a center of higher education excellence. Therefore the main purpose of this study was to examine the relationship between emotional intelligence and leadership practices in Sabah Public Universities namely UMS and UiTM. The respondents were consisting of middle level administrators. By using a structured questionnaire, a total of 350 surveys were distributed to the selected respondents. Mean scores were also used to analyze the level of EI and LP. In addition, correlation analyses were used to measure the strength and direction of relationship between EI and LP among middle level administrators in UMS and UiTM. The findings of this study have contributions both to the practical and theoretical implications. Understanding these factors can provide more in-depth and information which can lead to better planning and implementation of leadership development in UMS and UiTM. Finally, several practical recommendations were made for future research.

Keywords: *Emotional Intelligence, leadership, Public Universities.*

## INTRODUCTION

The Government is planning to turn the country as an educational hub in this region (Morshidi, 2008) since the move has a significant impact on economic growth (Simrit Kaur, 2005). Consequently, the Malaysia needs to remain competitive in providing excellent quality of higher education services that are recognized locally and internationally (Ministry of Higher Education, 2006). It was reported, more than 69,000 international students from more than 150 countries arrived and no doubt Malaysia has become a centre of educational excellence in the region (Lim, 2009). By the year 2015, Malaysia is targeting 150,000 international students to pursue their education in this country (Malaysia, 2010). For that reason, the Ministry has been formulating and implementing an aggressive promotional campaign overseas on higher education opportunities in order to meet this target (Ministry of Higher Education, 2007a).

Traditionally, academic institutions played the role of institutions to promote moral and intellectual development and function as a centre to promote civilization. Meanwhile, the main contemporary challenges for the higher education institutions are to ensure academic and training programs provided to the people are market driven and sensitively able to respond to the changing need of various economic sectors (Malaysia, 2010). Most of the past studies show a consistent relationship between emotional intelligence and effective leadership as well (Anand & UdayaSuriyan, 2010; Caruso & Salovey, 2004; Gardner & Stough, 2002; Goleman, 1998a; Langhorn, 2004; Vrba, 2007).

Previous studies also indicated emotional intelligence scores were a strong predictor of leadership effectiveness (Anand & UdayaSuriyan, 2010; Gardner & Stough, 2002; Kerr, Garvin, Heaton & Boyle, 2006). Although the administrative group has proven to have important roles for the development of higher education institutions, however there appears a complete ignorance for administrators' job, and in most cases administrative staff contributions are less recognized (Szekeres, 2004). According to Johnsrud, Heck and Rosser (1998), the primary sources of middle level administrators' frustrations are the nature of their daily role, lack of recognition for their contribution, and very little opportunity for career advancement.

Eventually, the findings of the study will attempt to answer several research questions as follows:-

1. What is the level of leadership practices among middle level administrators in Malaysian public universities?
2. What is the relationship between emotional intelligence and leadership practices among middle level administrators in Malaysian public universities?

## **LITERATURE REVIEW**

### **The Relationship between Emotional Intelligence and Leadership Styles**

Previous research indicated that leadership competencies are determined by several factors such as emotional skills, integrity, knowledge, leader's demographic attributes, culture, and organizational business model influenced effective leadership (Anand & UdayaSuriyan, 2010; Barbuto & Burbach, 2006; Hur, 2008; Judeh, 2010; Kennedy & Norma, 2002; Mung et al., 2009; Schafer, 2009; Wright & Pandey, 2010). However, the real surprise was to observe that there is a surging interest on emotional aspects in examining the nature of leadership in the organization (Anand & UdayaSuriyan, 2010; Barbuto & Burbach, 2006; Goleman, 1995; Fernández-Berrocal & Extremera, 2006a; Groves & McEnrue, 2008; Mayer & Salovey, 1993). Hopkins et al. (2007) suggested emotional intelligence is important element for school boards leadership effectiveness.

Meanwhile, some scholars attempted to explore the predictive association of emotional intelligence and transformational leadership (Gardner & Stough, 2002; Longhorn, 2004). Subsequently, Sivanathan and Fekken (2002) examined the relationship between emotional intelligence and moral reasoning to leadership style and effectiveness. Recognizing this development, the influence of emotional intelligence as a predictor to effective leadership has been explored remarkably (Anand & UdayaSuriyan, 2010; Antonakis, Ashkanasy & Dasborough, 2009; Fowlie & Wood, 2008; Gardner & Stough, 2002; Kerr et al., 2006; Longhorn, 2004). Both approaches (ability-based model and mixed model of emotional intelligence) were widely used in this field. Consequently, leaders that demonstrate higher emotional intelligence level than their peers outperform and advance faster in their careers (Higgs & Rowland, 2002). Vrab (2007) assumed that a person with outstanding emotional intelligence skills emphasize higher degree of transformational leadership proficiency and consequently leading to higher performance. In a study conducted on 194 academic staff in several Taiwan universities, Chen and Chen (2008) examined the correlation between personality traits (such as emotions, thought, and behaviors) and leadership style to innovative operations. Factor analysis and correlation analysis revealed that leadership style has strong correlation to innovative operations.

Besides that, the study also indicated personal traits have a considerable positive relationship to innovative operations. Kerr et al. (2006) in their investigation on the

relationship between managerial emotional intelligence and effective leadership suggested that overall results indicated effective leadership was mainly determined by an individual's emotional intelligence. The findings also exhibited employee perceptions of their supervisor achievement was strongly related to the supervisor emotional intelligence level. Parallel to the findings, in several cases, leaders lead through a combination of logical decision-making and feeling (Alston, Dastoor & Sosa-Fey, 2010). Therefore, depending upon the situation, leaders may require more emotional intelligence skill and less logical decision-making skill or vice versa (Mayer et al., 2002).

Meanwhile, Barbuto and Burbach (2006) when investigating the relationship between emotional intelligence and transformational leadership, found strong evidence consistent with previous studies that showed positive considerable relationships between the two variables (Barling et al., 2000; Leban & Zulauf, 2004; Vrab, 2007). Consequently, Sosik and Megerian (1999) discovered between the four factors of emotional intelligence and transformational leadership, and imply these important elements both to produce and maintain strong emotional relationships with followers. Fowlie and Wood (2009) affirmed a relationship between managers' behaviors (one of emotional intelligence major elements) and the employees' ability to respond positively to the various organizational challenges that take place in this century. Subsequently, the authors described, when formulating competency frameworks, human resource professionals should taking into consideration the clusters of self-management and relationship management competencies components as well.

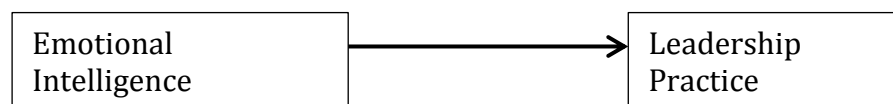
This study attempt to achieve three objectives which are to measure the level of emotional intelligence among middle level administrators in Sabah Public Universities, to measure the level of leadership practices among middle level administrators in Sabah Public Universities and To measure the strength and direction of the relationship between emotional intelligence and to measure the strength and direction of the relationship between emotional intelligence and leadership practices among middle level administrators in Sabah Public Universities.

## **METHODOLOGY**

### **Conceptual Framework**

This study was developed to examine the relationship between independent variable of emotional intelligence and dependent variable of leadership practices among middle level administrators in Malaysian public universities.

**Figure 1:** Conceptual Framework



All the variables, emotional intelligence and leadership practices, are explored as individual-level variables, because this study are more concern on how all the variables interact to influence their origination and not their emergence to the organizational level.

## **Research Design**

This study employed a quantitative cross sectional survey method and the unit of analysis is individual middle level administrator grade 41 to 54 working in public university in Sabah. Basically, the theme for this study can be divided into three main parts, respectively emotional intelligence and leadership practices among middle level administrators in Malaysian public universities.

Primarily, the content of the developed questionnaire is based on theoretical research framework together with the respondents' personal information. The five-point multi-item Likert scale was used to measure the independent variables, moderating variable and dependent variable. All the variables, emotional intelligence and leadership practices, are explored as individual-level variables, because this study are more concern on how all the variables interact to influence their origination and not their emergence to the organizational level. The study emphasizes on all middle level administrators serving in 2 public universities in Sabah. Therefore, the population for this study is middle level administrators of various service schemes in grade 41 to 54, classified as management and professional grade (Jabatan Perkhidmatan Awam, 1991 & 2002), working in public universities in Sabah. Initially, middle level administrators are responsible to manage and coordinate the daily administration activities in universities (Rosser, 2004). The population of this study included all service schemes such as administrators, accountants, engineers, counselors, hostel managers, information technology officers, and librarians in various departments across the 2 public universities in Sabah. Generally, this group is accountable to the head of department for their office's function. Specifically, middle level administrators devote much of their working hour to directional and organizational functions.

Factor analysis was performed to find out dimensions or components of a set of variables. Kim & Mueller (1978) explained that the observed variables can be assumed were linear combinations of certain unobservable factors. Additionally, some factors were supposed to be ordinary to other factors, while others were assumed to be unique. Consequently, the unique factors do not influence the covariance. Factor analysis can be used for several reasons, hence in this study factor analysis employed to examine the fundamental dimensions of emotional intelligence, Islamic work ethic, and leadership practices scales used for data collection. In the meantime, other consideration concerning the leadership practices scale is the probability that the scale might be used as a single factor or more powerful correlated factors (Alston, 2009).

## **EXPECTED RESULTS AND DISCUSSION**

This chapter will focuses on the data analysis output based on research objectives presented in Chapter 1. Initially, this part represents the result of the study from the statistical analysis carried out on the collected data and hypotheses testing. SPSS version 14.0 for windows will be used to analyze the data obtained. 350 questionnaires will be distributed to middle level administrators in both UMS and UiTM Sabah. The survey is conducted through face-to face interview and written structured questionnaire. In the first part of this chapter, the presentation would be on the characteristics of respondent profiles. Using descriptive analysis, this section presents the demographic profiles of the respondents that taking part in the survey. The demographic profile characteristics that will be investigated are institution, tenure, job classification, level of education, monthly pay, age, gender, marital status, and race. Later, the goodness of measured will be determined by analyzing factor analysis, reliability analysis of the measurement and descriptive analysis. Finally, this study which is based on quantitative data will be conducted to investigate the relationship between

emotional intelligence and leadership practices among middle level administrators in Malaysian public universities.

This research intends to examine the hypotheses where Hypotheses H1 to H4 is stated in an alternate form as follows:

- H1: The appraisal of emotion in self or others has a significant relationship with leadership practices among middle level administrators in Malaysian public universities
- H2: The expression of emotion has a significant relationship with leadership practices among middle level administrators in Malaysian public universities
- H3: The regulation of emotion in self and others has a significant relationship with leadership practices among middle level administrators in public universities
- H4: The utilization of emotion in problem solving has a significant relationship with leadership practices among middle level administrators in Malaysian public universities

The hypotheses (H1, H2, H3, and H4) will be examined with multiple regression analysis by regressing emotional intelligence dimensions (managing of emotion in self or others, expression of emotion, appraisal of emotion, and utilization of emotion) and the dependent variable, leadership practices.

## **CONCLUSION**

This study will be conducted to develop and validate a theoretical framework to further explain the structural relationship between emotional intelligence and leadership practices. Consequently, this study has some encouraging implications for leadership developmental programs particularly among middle level administrators within public university institutions and some directions for future research. Finally, several suggestions will be proposed for future studies such as the utilization of longitudinal procedures, multi method approach, review the effectiveness of developmental programs, adapt the qualitative approach, adding new variables and highlighted on the emerging generation Y workforce in the workplace.

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# MODERATING EFFECT OF GENDER ON THE RELATIONSHIP OF PERSONAL MORAL PHILOSOPHY WITH ETHICAL DECISION MAKING: CASE STUDY ON HR PRACTITIONERS IN MALAYSIA HOTEL INDUSTRY

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## Abstract

The study attempted to examine whether personal moral philosophy is significantly correlated with ethical decision making. Besides that this study intended to investigate the moderating effects of gender and their linked between personal moral philosophy and ethical decision making among human resource practitioners in Malaysia hotel industry. The concern for ethical actions continuously challenges the hotel industry. Interest and complex ethical issues impact this broad business which ranges from restaurant management to senior living to tourism – based operations and beyond. Business ethics remain at the forefront of popular and academic journals as incidents that threaten the ethics fiber of hotel industry. The challenges of human resources practitioners are to exemplify ethical action and to be willing to be held accountable to their management board and to the public for their decision choices (Ardagh & Macklin, 1998). The study attempted to examine whether personal moral philosophy is significantly correlated with ethical decision making. Besides that this study intended to investigate the moderating effects of gender and their linked between personal moral philosophy and ethical decision making among human resource practitioners in Malaysia hotel industry. Results showed that personal moral philosophy and gender differences played significant in ethical judgment. Furthermore, the findings consistently showed that gender influences able to change the ethical belief of HR practitioners in their ethical judgment.

*Keywords: Personal moral philosophy, idealism, relativism, ethical decision making, human resources, hotel*

## INTRODUCTION

Normally, those who make use of hospitality services demand achievement of a professional level of quality consistent with the universal standards, although perhaps regulated for local conditions. Most of the customers hope that hotels are clean, comfortable, safe and secure. They have high expectation on the hygiene and sanitary conditions, food and beverage at a reasonable price. Furthermore, they also look to host for courtesy, friendliness, respect and identification. Perhaps more important than anything else, they want honesty, truth and equity during their staying from the operator to the employees.

Nowadays, HR practitioners must be able to address ethical dilemmas that result from an imbalance between economic and social performance as argued by Davis, Johnson & Ohmer (1998). On top of it, they also need to develop a thorough understanding of how to conduct a philosophical, ethical analysis in business setting.

Considering that human relations are intense in the hotel industry and the concept of ethics generally evolved as a result of human behavior, it was expected in this sector that moral

and ethical values were addressed in many aspects. Nevertheless, the lack of comprehensive study findings about the subject at present motivated me to work in this study. Primarily the study attempted to specify which ethical approach the HR practitioners in hotel enterprises employ in decision – making especially when they faced ethical dilemmas. The result of study will be the evidence about the HR practitioners’ basic point of views on ethical decision – making in enterprise like hotels that provide service to different interest groups. It is also expected that these acquired results will be helpful in guiding the managers.

The human resources practitioners not regarding the failure (breach) to fulfill a commitment given to the customers (written or mentioned verbally) as an ethical problem will gradually obstruct the perception of other ethical problems by the managers. This will cause some problems in the enterprise; hence, it will also result in the loss of customers and customer discontent. It was found that a breach of a commitment, written or mentioned verbally, usually emerges in the issues regarding financial loss, ecology, quality and security. In the ethical dilemmas about socio-cultural and institutional image, on the other hand, it was seen that the managers behave within the content of the relativity theory and they consider these issues with lower frequency of choice. This situation can be considered as an indicator reflecting that the managers highly consider the commitments and agreements; however, they ignore other ecological and socio-cultural values.

From the previous study (Gupta, 2010; Zabid, 1999), most of the findings assumed that most profession utilizes a utilitarian perspective or framework in their analysis of ethical problem. Given the format of business training, the identification and qualification of factors that positively and negatively, it seems that the utilitarianism is a logical and methodical approach to assist the decision – making process, especially involve ethics issues (McDonald & Pak, 1996). However, a question raised – do HR practitioners exclusively rely on a utilitarian framework of analysis for investigating and resolving ethical dilemma or, are other framework more salient in the ethical decision making?

The research objective of this study is to empirically examine personal moral philosophy as it relates to HR practitioners’ ethical decision making. In addition, this study purposed to investigate the effect of moderating variable (gender) on the relationship between the independent variables (idealism and relativism) and dependent variables (ethical behaviour, and ethical sensitivity). Hence, ethical decision making model will be define, followed by the literature review on the personal moral philosophy and the past studies of these two variables for the hypothesis development.

## **LITERATURE REVIEW**

### *Ethical Judgment*

Ethics often known as the system or principles by which we choose right from wrong (Rest, 1986). Conflicts in ethics arise when one person or a group of people impede the beliefs of another person or group of people. It would not be possible to decide who is right or wrong when a conflict arises, but it is our moral responsibility to resolve the dilemmas to the best of our ability (Rest, 1986).

Rest (1986) suggested that this four component model has been useful in helping researchers place their study on moral judgment in the larger historical perspectives of the psychology of morality and in providing a perspective for designing future research. This model is useful to approach the complexity of morality as this model postulate that four major kinds of psychological processes must have occurred in order for moral behaviour to

occur. But in this study, we only examined one components of ethical decision making – ethical judgment.

Ethical judgment is the component where individual evaluates various courses of action to determine which are morally right and which are morally wrong (Rest, 1986). This helps individual to identify on what the correct response to a moral issue should be. Furthermore, Rest (1986) defined ethical judgment as what action from the possible alternatives ought to be chosen in the situation where the situation is already interpreted and the needs and goods of different participants should be considered.

Ethical judgment involves reasoning about the possible actions in the situation and judging which action is most ethical. A person making an ethical judgment uses reason to decide what the best solution or decision is to a problem, as by using reasoning to determine what the best decision is, reflecting on the situation to make sure that the best decision has been made, and planning how to implement the decision (Rest, 1986).

Caswell & Gould (2008) suggested that ethical judgment as a psychological construct that provides conceptual guidance for individual's decision regarding which action is ethically right and which action is ethically wrong when confronted with a dilemma. Lin & Ho (2008) supported this as they believe that based on ethical judgment, individual tends to make judgment and comparison on which action would be most justifiable in an ethical sense.

#### *Personal Moral Philosophy*

In this study, Forsyth's Taxonomy will be used for the explanation of personal moral philosophy. Forsyth (1980) has shown that moral philosophy – the beliefs about the basis on which ethical decisions should be made is an important determinant of attitudes toward a variety of social and moral issues.

Forsyth (1980, p.175) stated that relativism is the degree to which an individual rejects universal moral rules as appropriate guidelines for ethical decisions. Relativism contends that moral absolutes should be reject, and that moral rules exists in a situational context as a function of time, place and culture, as argued by Forsyth (1992). A person who is highly relativistic will believe that universal ethical codes or moral principles are not important when making ethical judgments, because he / she must consider the contextual factors. While, those low in relativistic will more stress on the importance of rigid adherence to ethical codes and moral absolutes when making moral judgments, as stated by Forsyth (1992).

Idealism (Forsyth, Nye, & Kelley, 1988) involves the extend of an individual's concern with the welfare of others. This is the degree to which an individual believes that desirable consequences can, with the right action, always be obtained (Forsyth, 1980; Forsyth, 1980B). An idealist believes that morally correct actions will often produce negative consequences as well as positive ones (Forsyth, 1980). Idealism describes the individuals' concern for the welfare of others. Highly idealistic individuals believe that harming others is always avoidable, and they would rather not choose between the lesser of two evils that will lead to the negative consequences for other people (Karande, Rao, & Singhapakdi, 2002). Those who are less idealistic feel that harm is sometimes necessary to produce good (Forsyth, 1980a, 1992). Idealism is not based on an embrace of moral absolutes; but yet it involves values related to altruism and a sense of optimism in considering responses to moral issues (Singhapakdi, Vitell, & Franke, 1990).

*Moderation effect of gender:*

The role of gender in ethical decision making has received significant examination from the past researchers (Akaah, 1989; Chonko & Hunt, 1985; Jones, 1991; Loe, et al, 2000; Loo, 2003; Mason & Mudrack, 1996; McNichols & Zimmerer, 1985; Park, 1996; Ruegger & King, 1992; Schminke & Ambrose, 1997; Smith & Oakley, 1997; Stedham, Yamamura & Beekun, 2004; Wagner, Buck & Winterbotham, 1993). Even though gender is one of the most researched or tangentially researched areas, the findings are mixed and inconclusive. From the studies, those gender related studies were used the student as the sample of the research. Perhaps the use of the students' samples to measure organizational ethics related issues is not relevant as the students samples are younger than organizational samples and have some imbedded characteristic associated with the sample's inexperience both in life and the workplace (Beltramini, Peterson & Kozmetsky, 1984; Betz, O'Connell & Shepard, 1989; Jones & Frederick, 1988; McNichols & Zimmerer, 1985).

Based on past work, it appears likely that men value consequence-based moral reasoning philosophies when making ethical decisions, while women readily utilize rule-based moral philosophies (Caswell & Gould, 2008; Maria & Jane, 2004). The gender socialization approach assumes that "males and females bring different sets of values to the workplace (Gilligan, 1982), causing males and females to respond differently to the same set of circumstances. Males view achievement as competition, and are more likely to break rules to achieve competitive success" (Coate and Frey, 2000, p. 383), which demonstrates a consequence-based (teleological) approach to ethical decision making. Conversely, women are more "concerned with their own performance and with maintaining harmony in the workplace. Therefore, females are less likely to break rules and are less tolerant of those who do break rules" (Coate and Frey, 2000, p. 383), suggesting that they are more universalistic (and less contextual) in their approach to ethical decision making. Previous research appears to support these claims. For instance, Betz et al. (1989) found that men value achievement and monetary gain and are willing to break rules to be successful, while women want to help others, develop positive relationships, and follow the rules. Smith and Oakley (1997) concluded that the sexes prioritize relationships differently, leading women and men to make different types of ethical evaluations. Atakan et al. (2008) determined that men emphasize a rationale based on the economics of the situation, which likely represents a more consequence-based type of reasoning. Coate and Frey (2000) also concluded that the manner in which different scenario items were classified by gender suggested that men utilize a more structured (or situational) approach of ethical reasoning that relies on such experiences as social learning, rewards, and punishments; this finding supports the notion that women and men are socialized in distinct ways.

Most of the researchers have indicated that females are more ethical than males (Akaah, 1989; Barnett, et al, 1998; Beltramini, et al, 1984; Betz, et al, 1989; Gilligan, 1977; Miesing & Preble, 1985; Ruegger & King, 1992). Moreover, Gilligan (1977) has found out that male and female differ in the moral reasoning, and identified characteristics of men and women that influence their ethical attitudes and behavior (Gupta, 2010). According to Gupta, 2010, Gilligan mentioned that "men are more likely to adhere to the 'ethics of justice' by emphasizing rules and individuals rights, whereas women are more likely to adhere to the 'ethics of care' by emphasizing relationship and compassion."

Gupta (2010) pointed out that from the previous study of Singhapakdi *et al.* (1999), women tend to be more idealistic and less relativistic than men, but with the results on non significant on the gender effect. Hence, it argued to study this issue more detail. Based on

the studies of the past 20 years on the ethics, female who possess the characteristic of caring, leading them to believe that taking actions that are detrimental to others is avoidance. Therefore, women exhibited greater idealism (Forsyth, et al, 1988; Gupta, 2010; Hall & Enghanen, 1991). On the other hand, males tend to be more masterful and assertive, and therefore could attribute certain actions to circumstances in order to demonstrate their competence, therefore men would be expected to be more relativistic than women.

Gender, overall ethicality, and ethical intentions while women and men reference distinct moral philosophies when making ethical decisions, women likely score higher in overall ethicality by using a combination of rule-based and consequence-based moral philosophies. Further, the strength of such ethical reasoning should encourage women to establish future intentions to behave ethically. For instance, rather than treating consequence- and rule-based moral philosophies as unique constructs, the Janus-Headed Model suggests that an iterative back-and-forth process occurs before behavioural intentions are established. Based on the socialization processes already discussed, women should be more inclined to consider different moral philosophies, thus increasing their ethical intentions. Thus, the following hypothesis is presented:

Therefore, the literature has been used as a foundation to develop a conceptual framework for this study as shown in figure 1. Based on the framework, this study was primarily conducted to examine two major objectives: first, relationship between personal moral philosophy with ethical awareness and ethical judgment; and second, effect of gender as moderating variables on the relationship between personal moral philosophy with ethical awareness and ethical judgment.

## **METHODOLOGY**

This study employed quantitative method to describe the application of theory gender socialization with the moderating variable of gender among HR practitioners. Self-administered questionnaires were distributed to 140 HR practitioners in Malaysia. Respondents were approached by using snowball technique. As the subject is used to locate the hidden population, the researcher doesn't have to invest money and time for the sampling process. Snowball sampling method does not require a complex planning and the staff used is considerably smaller in comparison to other sampling methods.

In the study, questionnaire was developed based on the review of past studies. It consists of four different sections, which included respondents' demographic profile and research variables respectively. The differences in respondents' responses were measured using seven-point Likert scale (i.e. 1 = strongly disagree and 7 = strongly agree).

Hierarchical multiple regression analysis is used in this study. In this study, predictors (gender) are selected based on the review of past studies and the decision of researcher in which order to enter the predictors into the model. Based on the review of past studies, first predictor (personal moral philosophy) entered in the model first in order of their importance in predicting the outcome of cheating behavior. After the first predictor entered, the second predictor (gender) entered in second model. Hierarchical Multiple Regression was performed in this study as researchers attempted to predict the value of ethical judgment based on the value of these different variables. These variables also known as predictor, explanatory variable.

In the study, variable of gender is a moderator variable that specified conditions under which personal moral philosophy is related to ethical judgment. Based on the review of past studies, a gender difference is able to explain in details “when” personal moral philosophy and ethical judgment are related. This moderation implied an interaction effect, where introducing a moderating variable changes the direction or magnitude of the relationship between these two variables. It is proposed that differences in gender can result differences of personal moral philosophy in ethical judgment

## FINDINGS AND DISCUSSION

Prior to conducting a hierarchical multiple regressions, the relevant assumptions of this statistical analysis were tested. Firstly, a sample size of 140 was deemed adequate given three independent variables to be included in the analysis (Tabachnick & Fidell, 2007). The assumptions of singularity were also met as the independent variables (Idealism, Relativism and Gender) were not a combination of other independent variables. An examination of correlations (see Table 1) revealed that no independent variables were highly correlated. However, as the collinearity statistics (i.e., Tolerance and VIF) were all within accepted limits, the assumptions of multicollinearity was deemed to have been met (Hair et al, 2008).

Extreme univariate outliers identified in initial data screening were modified as above. An examination of the Mahalanobis distance scores indicated no multivariate outliers. Residual and scatter plots indicated the assumptions of normality, linearity and homoscedasticity were all satisfied (Hair et al., 2008). A two stage hierarchical multiple regression was conducted with ethical judgment as the dependent variable. Idealism and relativism were entered at stage one of the regression to control. The gender was entered at stage two. The relationship variables were entered in this order as it seemed chronologically plausible given attachment is relevant from infancy. Description and inter - correlations between the multiple regression variables were reported in Table 1.

Additionally, the correlations amongst the predictor variables (Idealism, Relativism and Gender) included in the study were examined and these are presented in Table 1. From the Table 1, the variables of idealism ( $r = -.61$ ;  $p < .001$ ) and gender ( $r = .450$ ;  $p < .001$ ) was positively correlated with ethical judgment while relativism ( $r = -.490$ ;  $p < .001$ ) were negatively correlated with ethical judgment, with the strength of moderate and weak respectively. From the analysis, it indicates that multicollinearity was unlikely to be problems (see Tabachnick and Fidell, 2007). All predictor variables were statistically correlated with cheating behaviour except intention, which indicates that the data was suitably correlated with the dependent variable for examination through multiple linear regression to be reliable undertaken.

Table 1: Description Statistics and Correlations for all continuous variables (N = 620)

Variables	EJ	I	R	G
Ethical Judgment (EJ)	1.000	.61**	-.490***	.450***
Idealism (I)	.61**	1.000	.362	.56
Relativism (R)	-.49***	.362	1.000	-.51***
Gender (G)	.450***	.56***	-.51***	1.000
<i>Means</i>	4.2	3.69	2.93	1.65
<i>Standard Deviation</i>	.3652	.7845	.6832	.4780

Note: Statistical significance: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

In the first step of hierarchical multiple regression, two predictors were entered: idealism and relativism. This model was statistically  $F(5, 614) = 43.70; p < .001$  and explained 24% of the variance in ethical judgment (Table 2). After entry of gender at Step 2 the total variance explained by the model as a whole was 37.5% ( $F(5, 614) = 47.46; p < .001$ ). The introduction of gender differences explained additional 13.9% variance in ethical judgment, after controlling for idealism and relativism ( $R^2 \text{ Change} = .139; F(5, 614) = 47.46; p < .001$ ). In the final model, three variables were statistically significant, with gender technique recording a higher Beta value ( $\beta = .30, p < .001$ ) than idealism ( $\beta = -.14; p < .001$ ) and relativism ( $\beta = .202; p < .01$ )

Table 2: Hierarchical Regression Model of Ethical Judgment

	<i>R</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> <i>Change</i>	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>
Step 1	.486	.236***					
Idealism				.001	.027	.002***	.054
Relativism				-.117	.024	-.188***	-4.777
Step 2	.612	.375***	.139***				
Idealism				.001	.027	.014***	.011
Relativism				-.117	.025	-.202***	-.140
Gender				.109	.023	.30***	4.705

Note: Statistical significance: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

## CONCLUSION

Through the findings, it can be concluded that there were significant differences in personal moral philosophy in ethical judgment between male and female HR practitioners. Besides that female respondents' ethical decision making score were significantly higher than male score.

Furthermore, this finding suggested that male and female bring different ethical standards to the work environment. However, females appear to demonstrate a greater sensitivity ethical decision making suggests that females are more sensitive and caring than are male counterparts, especially they are less likely to use double standards when consider the ethical action towards different employees in a similar situation.

The findings suggested that women are right – oriented principles based compare with male counterparts. They have higher concerns for duties and ethical obligation compare with male, which this may assist female HR practitioners to achieve more mutual benefits for the company and the employees compare with male HR practitioners who solely focus on the profit maximization and results oriented.

Through the findings of the study, it helps to provide additional data that widen the limited existing knowledge of ethical decision making. Understanding the nature of ethical decision making is important to the well – being of the organizations being led. Exploring ethical decision making in hotel industry, HR practitioners able to gain insights and understanding how the ethical decision been made, especially when the variables of gender differences and personal moral philosophy are present.



Due to human resources practitioners are the leader of human capital in hotel industry, it is important for them to have awareness of how they run and managed their human capital in hotel organizations. Tolerance for differing opinions is important in a hotel setting as it is becoming more diverse. From the findings, it suggested that mostly HR practitioners have self awareness which assist them to make connections between HR code of ethics and the establishment of human resources as a profession. By being ethically aware, HR practitioners begin to aware and understand what is expected of the HR practitioners and what they can expect from the hotel organization.

Through the findings of the study, it suggested that in order to increase the level of ethical awareness, HR practitioners should practice how to engage in active listening. This help to learn about the potential ethical consequences of choices, as well as the likely response of others through listening closely to what others have to say. By engaging in active listening, HR practitioners are able to gather more comprehensive information and visualize the situation clearly. Hence, HR practitioners will be more effective in interpret the ethical dilemma and seek for the positive outcomes for everyone in the organization, including their employees.

Besides that, HR practitioners must always be alert to the presence of the “dark side” of the personality. Unless acknowledged and confronted, internal forces can seriously disrupt ethical reasoning. HR practitioners are advised to take time to consult with others, gather the necessary information, probe for underlying causes and set a clear direction.

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# EXPLORING EMPLOYER BRANDING IN MALAYSIA BANKING AND HOTEL INDUSTRIES

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## Abstract

The employer brand studies that have been conducted to employees are sprouted in the academic and industrial literature. Nonetheless, little qualitative investigation has been made to explore the employer brand from the perspectives of employers in hotel and banking industry. This study explored the components of employer brand that have been implemented in organizations as perceived by the human resource managers. In-depth interviews were conducted to four managers from reputable hotels and banks in Malaysia. Seven themes of employer brand were extracted from the findings: learning and growth, organization culture and management, work environment, credibility and reputation, reward and recognition, job security, and social-oriented. These themes are believed to be the employer brand dimensions that are able to attract and retain employees, from the perspectives of employers. On the other hand, from the perspectives of employees, only three employer brand dimensions were identified based on a quantitative study. The three dimensions are organization, individual, and growth. Implications of identifying the employer brand dimensions are discussed in this paper.

Keywords: *Employer brand, hotel, bank, employer, employee.*

## INTRODUCTION

The employer brand term was first introduced by Ambler and Barrow (1996). It has been identified as a strategic tool to be employed by organizations to reduce turnover and enhance organizational attraction (Backhaus & Tikoo, 2004; Barrow & Mosley, 2005; Berthon, Ewing, & Hah, 2005). In the previous studies, different researchers proposed different set of employer brand dimensions from the perspectives of employers and/or employees (Ambler & Barrow, 1996; Barrow & Mosley, 2005; Berthon, et al., 2005; Cho, Woods, & Sciarini, 2006; Fulmer, Gerhart, & Scott, 2003; Kimpakorn & Dimmitt, 2007; Minchington, 2012; Sokro, 2012).

From employers' perspectives, there were three dimensions of employer brand; psychological, functional, and economic (Ambler & Barrow, 1996). Employer brand is conceptualized as the employment benefits comprise functional, economic and psychological benefits. These benefits have to be identified by the organization's stakeholders. Functional benefit refers to the development and useful job activities, while economic benefit is material or monetary reward. On the other hand, psychological benefit refers to sense of belonging, direction, purpose and recognition (Ambler & Barrow, 1996).

Kimpakorn and Dimmitt (2007) identified human resource management, internal branding, internal communication, management style, service culture, internal service quality

management, and internal marketing as the dimensions of employer brand. The scope of these dimensions is broad compared to the dimensions proposed by other researchers, which derived from employee's perspective (Berthon, et al., 2005; Cho, et al., 2006; Lievens & Highhouse, 2003; Sokro, 2012). Bondarouk, Ruel and Weekhout (2012) proposed the employer brand protocol consists of five dimensions: organizational characteristics, people and culture, remuneration and advancement, job characteristics, and employer reputation. Based on the protocol, they also assessed the strength of employer branding in the organization; ranged from a strong employer branding to a weak employer branding (Bondarouk, Ruel, & Weekhout, 2012).

Most of the employer brand studies were conducted to employees, either potential or current employees. The implementation of employer brand study to employer in identifying the employer brand dimension is still in the infancy stage (Ambler & Barrow, 1996; Bondarouk, et al., 2012; Kimpakorn & Dimmitt, 2007). Hence, this study aimed to explore the employer brand dimensions that were perceived important and implemented in organizations from employer's perspectives. In addition, this study was implemented in a qualitative study due to several factors. First, by investigating the employer brand through an in-depth interview, results of this study conveys the richness and intensity of detail about the employer brand dimensions as perceived by employers. Besides the in-depth understanding, this study focuses to the specific context of Malaysian banking and hotel industry. Third, the interview was conducted in a natural setting, attempting to understand the reality occurs in the organizations.

## **METHODOLOGY**

This study was conducted through a qualitative study, specifically an in-depth interview. A semi-structured interview with open-ended questions allowed participants to provide a wide explanation. Probing questions were included to gain further description of participant's responses. The interviews were conducted in a natural and informal setting in order to give comfort to participants. It is anticipated that the comfort may stimulate the participants to be more open in answering the questions and willing to express their feelings.

An additional quantitative study was also conducted to hotel employees to compare the results of the qualitative study. Paper surveys were distributed to the employees through their managers. The population for this study was full-time employees in Malaysia four- and five-star hotels. The sampling frame for this study was derived from full-time employees who worked in four- and five-star hotels in Kuala Lumpur and Putrajaya, Selangor, and Pahang. These three areas were selected as they represented 50% (26,639) of all four- and five star hotel employees in Malaysia (52,733). Kuala Lumpur and Putrajaya had 28.35% of the total four- and five star hotel employees in Malaysia, followed by Selangor, 11.68%, and Pahang, 10.48% (Department of Statistics Malaysia, 2011).

Consistent with the objectives of the study, human resource managers from reputable hotels and banks in Malaysia were identified as key informants. Nonetheless, as different organizations may have different department that is in charge for the employer branding, this study considered manager from other department to participate in the interview. Seven hotels and five banks were contacted for the research interview. Due to organization's policy and inability to commit with the interview, eight organizations could not participate in the research study. Only four managers from two banks and two hotels agreed to participate. These managers represented the organization targeted in this study. They were provided with an introduction letter and a list of tentative interview questions for their initial

view. The introduction letter explains about objectives of the study, procedures of the interview, and a statement that ensure the confidentiality of responses. The manager's position from each organization is as follow:

- i. Bank A: Director of communications and employer branding
- ii. Bank B: Head of human resource management
- iii. Hotel A: Group human resource manager
- iv. Hotel B: Assistant manager of human resource

For the quantitative study, the participant was individual employee who worked full-time in Malaysia four- and five-star hotels. The employee might hold either supervisory or non-supervisory position, worked in any department of the hotels, and had served the hotel for more than six months. According to the Department of Statistics Malaysia (2011), the number of full-time employees in Malaysia four- and five-star hotels was 52,733. According to Krejcie and Morgan (1970), the sample size for a population of 50,000 is 381, with 95% confidence level and 0.05 standard error.

From the 1035 survey forms distributed to the hotels, the researcher managed to collect 614 forms (59% from the distributed forms). However, only 597 forms were usable to be filtered for the data analysis (97%). The 3% of the remaining forms could not be used as there were many incomplete responses and few pages had missing data. The final usable responses after the removal of unrelated missing data were 436.

A list of semi-structured interview questions served as a guideline to the interviewers. It is also to ensure that the participants would have an idea about the interview and be prepared. The questions were flexible and adjusted according to the participants' responses. Although this study focuses on the employer brand dimensions, the participants were also asked about their awareness about the employer brand, its significance, and implementation in the organizations. It is forecasted that the interview take about one to two hours. Responses from the participant were tape recorded. Part of the interview questions is based on the previous studies (Ambler & Barrow, 1996; Eshoj, 2012; Kimpakorn & Dimmitt, 2007). Some of the questions that were asked to the participants comprise:

- What are the key factors that make employees want to join an organization?
- What are the key factors that make employees here wanted to remain working in this organization?
- How would you describe elements that create an organization as a best place to work?
- What do you think the most accurate motto for your organization?
- Your organization is most concerned about .....

The instrument for the quantitative study was adopted from a questionnaire proposed by Berthon et al. (2005). The questionnaire comprised two sections with 25 items for each section. It measured the employer brand offering and the employer brand delivery. In the first section, respondents were asked to rate the extent to which the employer brand elements were offered to them before they join the organization or during their early employment stage. The items were labelled with EBO (employer brand offering). The second section required respondents to evaluate to what extent that their employer fulfilled the employer brand offerings. The items were labelled with EBD (employer brand delivery). The questionnaire was measured using a 7-point Likert-scale. The 7-point Likert-scale response was based on the likelihood continuum, comprised; "1 - Not at all", "2 - To a very small extent", "3 - To a small extent", "4 - To a moderate extent", "5 - To a fairly

great extent”, “6 – To a great extent” and “7 – To a very great extent” (King, Shaw, Orchard, & Miller, 2010).

## **DATA ANALYSIS**

This study managed to obtain data of four organizations, from four different in-depth interviews. The analysis involved an evolving process and several iterations. It was relied on the constant comparative method. The data were first transcribed and explored to get a general sense of the information (Creswell, 2009). From the transcripts, the data were coded based on keywords, ideas, and terms. The open codes were then examined and clustered. Research questions of this study were used to guide the clustering. The relationship between clusters was examined and justified based on the previous studies and an expert view. Finally, the themes were identified based on the list of the clusters. The findings were checked to ensure that they are consistent with the data. They were also validated through peer review, where interpretation and conclusion was discussed with an expert in the area.

For the quantitative study, IBM SPSS Statistics 20 software was used to analyze the data. Exploratory factor analysis was conducted to identify the employer brand dimensions. This analysis would provide the results for the employer brand dimensions from employees' perspectives, which later will be compared to the employer brand dimension from employers' perspectives.

## **FINDINGS**

The findings for this study are presented in two sections; qualitative findings and quantitative findings. The qualitative findings derived from employers' perspective while the quantitative findings derived from employees' perspectives.

Clusters derived from the hotel industry include; training / learning / experience, development / career progress / advancement opportunity, caring / family-oriented / people-oriented, flexibility, job security, inculcate organization value and culture, top management, career website / career talk, salary, benefits, location, work environment, activities for employees, roles and responsibilities, reward and recognition, corporate social responsibility, and finally innovative.

On the other hand, the number of clusters derived from the bank industry is more compared to the hotel industry. The clusters are training / learning / experience, development / career progress / advancement opportunity, caring / family-oriented / people-oriented / people with chemistry, flexibility, job security, inculcate organization value and culture, top management, career website / career talk, salary, benefits, location, work environment (comfort, relax, fun), activities for employees, roles and responsibilities, reward and recognition, corporate social responsibility, performance driven / challenging, focus on specific niche, assessment / potential measurement, employee characteristics, organization reputation, dynamic, effective communication, team work, innovative, diversity, and finally organization facilities. Some of these clusters are similar with the clusters from the hotel industry.

From both industries, seven themes were identified from the clusters; learning and growth, organizational culture and management, work environment, credibility and reputation, reward and recognition, social-oriented; and job security. Most of the themes derived from this study are consistent with the employer brand dimensions proposed in previous studies

(Ambler & Barrow, 1996; Barrow & Mosley, 2005; Berthon, et al., 2005; Kimpakorn & Dimmitt, 2007).

### ***Learning and growth***

This dimension comprises training, learning experience provided by employer to employee, development and advancement opportunities. It is informed by the manager that her employer is a learning organization and has innovative program for learning. For instance, the organization offers English language program as part of personal effectiveness module:

*We are a good place to work at. You know, we are learning organization, we obsess with talent...To move up, you will need English. So we decided to do English language program for them. The English language program is part of the personnel effective type of module.*

*(Source: Bank A)*

The English language program is not an in-house training. The organization is partnering with a private university to conduct the program. The manager emphasized that giving opportunity to study and by obtaining a certificate, employees would be proud of their learning achievement. The organization also conducted in-house training for the enhancement program:

*We wanted to give these people this opportunity to study in university also. You know, for them if they get a certificate...You know how proud they would be if they get certificate in English language even though it is staggered... So we give them opportunity to also study in a university for a while. Then the rest of the enhancement program will be in house of the academy.*

*(Source: Bank A)*

The organizations participated in this study concern about learning and interested to have people who want to learn. The managers believed employee's growth can be achieved by learning, which will lead to organization's growth. Learning and growth is identified as one of the dimension in their employer branding.

### ***Organization culture and management***

Flexibility, influence of top management and organization values, challenging culture, team work and diversity are some of the aspects that create organization culture and management. One of the managers stated that the organization would expect a challenging culture, where its people need to be tough:

*We need to bring them down a little bit, do not be too eager to please, so we have to toughen them up and challenge them. So I guess I gave them a little bit of hard time to toughen him up a bit... I do not care whether it is called employer branding or not... but I care for you as a person.. I want you to be able to survive.*

*(Source: Bank A)*

Another manager shared that employees are interested to join the organization as they want to challenge themselves to build up the organization. The organization is known as not the top-tier organization in the banking industry. Hence, there are more rooms for improvement. The manager commented:

*They would like to join us for the sake of the challenge to move Bank B into the top-tier bank... There is still more to be done, there is still work to be done...*

*(Source: Bank B)*

Innovativeness and creative are the aspects that the manager looked in an employee. The manager from the hotel industry mentioned that working in a service industry requires employees to have these traits, as they are dealing with guests. The organization will give a certificate and money to employees who invent a prototype:

*Let say a guest suddenly requested to have a birthday party at our premise, our employees must be creative with anything that they have in a very short period... We would propose the prototype created by employees to our parent company... There was an employee who came out with an eco-pen. This eco-pen is created with recycle newspaper... We sell this eco-pen to the parent company and it will be placed in the guest room.*

*(Source: Hotel B)*

### **Work environment**

Work environment refers to the condition in which employee works, including physical environment, location, amenities. The manager in Hotel B mentioned that some of their employees are comfortable with the relaxed work environment. Even though the hotel industry is associated with busy work environment, it is seasonal (Ahmad, Atlas, & Kibat, 2009; Cho, et al., 2006; Liu & Liu, 2008). During low season, Hotel B is quite quiet:

*Working in Putrajaya is quite relaxed, not like in Kuala Lumpur, where we have to rush here and there... but here, we are a bit relaxed... Let say during the first week of the fasting month, we are not busy... It will up and down... But we are not like in Kuala Lumpur.*

*(Source:Hotel B)*

According to the statement made by the manager from Hotel B, the relaxed work environment is due to the location of the hotel. Most of the employees stay near to the hotel. Hence, they can save their time and fuel cost:

*Our employees stay in Dengkil, Sepang, Nilai, Bangi and Kajang. Even though their salary may not be higher, the employees said they can save on fuel. They might get a higher salary if they work in Kuala Lumpur, but the fuel cost is higher.*

*(Source:Hotel B)*

The organization's facility is also identified as one of the aspect under work environment, where the facility is part of a branding strategy. The manager of Bank A mentioned that the bank has a gym facility and a club.

*We have various things here... I am not a sporty person... so I do not know what they do... In Chow Kit centre, we have a gym there... and we are going to build one here... These are part of the branding.*

*(Source: Bank A)*

### **Credibility and reputation**

Credibility according to Fulmer et al. (2003) consists of communication, competence in coordinating human and material resources, integrity in carrying out vision with



consistency, information from management, and responsibility given to people. One of the bank managers informed that she wanted her employees to have multiple roles:

*As a mentor, is also to bring him up as a person, beyond that particular role... I said Yosen, who are you? He said I am your assistant...this is it and then after that I said who are you, I kept on who are you and then he said he is a son to his parents and I kept on who are you and I said, Yosen, you are beyond this two roles...*

(Source: Bank A)

She also added that her organization has a high workload:

*So, the money is good but work very very hard. If you go back at midnight, it is also considered quite good. In certain section, of course I don't, so we push ourselves really really very hard...*

(Source: Bank A)

Organization reputation is also one of the factors lead to this dimension. The bank manager indicated that reputation is important and people are interested to join an organization with a strong corporate brand:

*So, strong banking institution is really important... I think people would want to work for company that is corporately strong... we all like 20,000 in Malaysia... and 40,000 across the region... one of our mission is to champion Asian as well.*

(Source: Bank A)

The hotel manager also commented that their workload is high, not like a typical office hour from nine to five. They have to work six days in a week, where it is a long working hour. Hence, the responsibilities are much higher compared to workers who work five days a week from nine to five:

*We exactly in this hotel... we are the one who are still work six days and have one day off. The working hour is long... It is impossible to have a work life balance*

(Source: Hotel B)

### **Reward and recognition**

Reward and recognition is another dimension identified in this study. This dimension covers salary, benefit, and recognition. The organization offers high salary to attract potential employees and keep their people through money. The bank manager believed that they can make money by having good employees, and they have to keep these employees by giving them high salary:

*If you do not take care of your asset, you do not brand yourself as the preferred employer. If you do not have the right people, you are not going to make money. It is simple as that. If you are able to attract the people and keep the people through money, you can keep the people through culture. I think maybe more through money.*

(Source: Bank B)

The bank manager also added:

*If you got one year bonus is considered very little, imagine... So the money is good but the work very very hard.*

(Source: Bank A)

Another bank manager informed that the bonuses and benefits make their people stay. Bank B really put effort to ensure that its employees are getting more benefits compared other banks, and also other industries. The managers believed that his employees are paid well for the job that they do well. That makes them stay in the organization:

*There is a lot more focus on rewarding people for the job they done and they stay. I would say this is one of the major factors. The rewards are quite good as compared to the other banks in term of the bonuses, in term of the benefits, so why people stay? I would say is you have been paid well for the job that you do well.*

*The rewards program, we are doing it only year to year basis. We engaged consultants to find out how the benefits compared to other industries not just with other bank, we are always above. Above means so we're paying above that what other people are paying in terms of benefits as well. We are getting a bit more from what the other people are getting.*

(Source: Bank B)

The organizations in this study recognize their employees for what they have done. The manager in Hotel A mentioned that the hotel brought its employees to Japan for a ski activity as these employees have well performed. On the other hand, the manager in Bank A said that they recognize what their employees can contribute rather than merely looking at employee's qualification:

*We have different types of qualification... To me, the person I am hiring has a diploma. She is coming in, she is 32... has a diploma and I do not see anything wrong with that. To me, it is what you can do, what you have rather than qualification.*

(Source: Bank A)

### **Social-oriented**

The dimension of social-oriented identifies in this study comprises a caring and family-oriented organization members, organization that is people-oriented, and organization members who have chemistry among them. For instance, Bank A really concern about its employees and this is shown through its employment policy. Besides, there is a relationship manager who looks at interesting cases from employees:

*There is one woman who wrote about her experience. Her mother was dying, she is from Kuching. She has just given birth and after that her mother was dying and she really wanted to be with her you know, you cannot fly back because she is just given birth to the baby. So, she took that staff rejuvenation program because it is in the policy, the boss also then cannot say why I must give you then you rather stay here and work and all that. So, she took the leave and spend about a couple of month with the mother and then the mother pass away and she is so grateful. When I read the story I also want to cry. Because when it matters, you would be surprised that such policy really really important.*

(Source: Bank A)

The manager also added that her organization includes work personal harmony its competencies and cares about its employees like a family:

*We continuing engaged our people, for instance, this year not much la, you know, when mother's day is coming up, we send our messages to our staff, we run safety talk for women... Then even things like pre-retirement. So, why do we care whether they retire already, lantak la, isn't it? No, but we do. We care about them.*

(Source: Bank A)

The manager of Hotel A mentioned that their Chief Executive Officer (CEO) always greet them and pray that the employee's life will be bless. Hotel A aimed to be people market instead of employment market. It shows that this hotel treats its employees as human being, rather that functional employees:

*My CEO always said "God bless you"... that is the thing that he always said when he meets employees here... This hotel is looking to be people market and not employment market.*

(Source: Hotel A)

Besides, the manager of Hotel B stated that the hotel is a family oriented; most of its employees are type of fun people and have chemistry among them. When the manager was asked about the motto that accurately portrays Hotel B as a workplace, the manager answered that she viewed this hotel not as a work place, but more as a family.

*We are family oriented and I always encouraged my employees to know each other, even though from different departments... Hotel B as a workplace? I see that we are like a family... a family that is cheerful and fun... We have chemistry among us... some people may left as they do not have chemistry, but some get back to us as they miss to be part of the family.*

(Source: Hotel B)

### **Job security**

This dimension is the least mentioned in the interview. It is stated by only one manager, from Hotel A. While other organizations have to cut down the number of employees during economic crisis, this hotel retains its employees. The manager mentioned:

*In 2007, there is no retrenchment although the economic is down... we remained the price of our rooms and we kept our employees. We can be sure that there is a job security in here.*

(Source: Hotel A)

### Quantitative Findings

The exploratory factor analysis was conducted to employer brand offering and employer brand delivery perceived by employees. Table 1 shows the factor analysis for employer brand offering while Table 2 shows the factor analysis of employer brand delivery. Then, the factors extracted from employer brand offering were compared to the factors extracted from employer brand delivery. The comparison is shown in Table 3.

**Table 11:** Factor analysis for employer brand offering

Item	Loading			Communality
	Factor 1	Factor 2	Factor 3	
EBO22	<b>.754</b>	.269	.175	.672
EBO25	<b>.727</b>	.168	.272	.631
EBO24	<b>.699</b>	.148	.318	.611
EBO14	<b>.689</b>	.447	.225	.725
EBO16	<b>.673</b>	.304	.239	.602
EBO11	<b>.660</b>	.461	.195	.686
EBO13	<b>.659</b>	.448	.241	.694
EBO17	<b>.657</b>	.346	.260	.619
EBO19	<b>.612</b>	.391	.396	.685
EBO12	<b>.612</b>	.418	.375	.690
EBO23	<b>.606</b>	.378	.372	.648
EBO20	<b>.597</b>	.402	.264	.588
EBO18	<b>.577</b>	.344	.485	.686
EBO2	.443	<b>.730</b>	.112	.742
EBO8	.206	<b>.725</b>	.333	.679
EBO5	.279	<b>.717</b>	.333	.702
EBO7	.279	<b>.708</b>	.339	.694
EBO6	.390	<b>.685</b>	.224	.671
EBO3	.430	<b>.683</b>	.127	.667
EBO4	.270	<b>.682</b>	.425	.719
EBO10	.538	<b>.540</b>	.263	.650
EBO9	.278	.266	<b>.779</b>	.756
EBO15	.349	.253	<b>.747</b>	.743
EBO21	.431	.197	<b>.732</b>	.761
EBO1	.201	.416	<b>.725</b>	.740
Eigenvalue	14.564	1.277	1.220	
% of total variance*	28.559	23.243	16.441	
Total variance*		68.243		

\* % of total variance and total variance are from rotation sums of squared loadings

**Table 2:** Factor analysis for employer brand delivery

Item	Loading			Communality
	Factor 1	Factor 2	Factor 3	
EBD25	<b>.747</b>	.241	.233	.669
EBD24	<b>.734</b>	.178	.287	.653
EBD17	<b>.715</b>	.362	.207	.685
EBD22	<b>.695</b>	.319	.298	.674
EBD16	<b>.635</b>	.348	.283	.605
EBD23	<b>.629</b>	.454	.289	.685
EBD14	<b>.602</b>	.544	.242	.716
EBD12	<b>.563</b>	.518	.354	.711
EBD19	<b>.535</b>	.396	.479	.672
EBD20	<b>.479</b>	.445	.425	.608
EBD2	.368	<b>.735</b>	.238	.732
EBD3	.412	<b>.731</b>	.065	.708
EBD5	.351	<b>.712</b>	.331	.739
EBD7	.251	<b>.707</b>	.391	.717
EBD8	.145	<b>.707</b>	.361	.651
EBD4	.319	<b>.693</b>	.386	.731
EBD6	.334	<b>.691</b>	.348	.710
EBD10	.468	<b>.602</b>	.331	.692
EBD11	.537	<b>.593</b>	.261	.708
EBD13	.528	<b>.559</b>	.317	.692
EBD9	.364	.183	<b>.793</b>	.794
EBD21	.214	.398	<b>.769</b>	.796
EBD15	.259	.470	<b>.702</b>	.780
EBD1	.449	.236	<b>.652</b>	.682
EBD18	.335	.484	<b>.587</b>	.690
Eigenvalue	15.246	1.161	1.094	
% of total variance*	26.765	25.199	18.042	
Total variance*		70.006		

\* % of total variance and total variance are from rotation sums of squared loadings

**Table 3:** Items loading according to factor for employer brand offering and employer brand delivery

<b>Employer Brand Offering</b>	<b>Employer Brand Delivery</b>
<b>Factor 1</b>	<b>Factor 1</b>
EBO22: Hands-on inter-departmental experience	EBD25: An attractive overall compensation package
EBO25: An attractive overall compensation package	EBD24: An above average basic salary
EBO24: An above average basic salary	EBD17: Opportunity to apply what was learned at a tertiary institution
EBO14: The organization produces innovative products and services	EBD22: Hands-on inter-departmental experience
EBO16: Humanitarian organization	EBD16: Humanitarian organization
EBO11: Innovative employer	EBD23: Happy work environment
EBO13: The organization produces high-quality products and services	EBD14: The organization produces innovative products and services
EBO17: Opportunity to apply what was learned at a tertiary institution	EBD12: The organization values and makes use of employee's creativity
EBO19: Feeling of acceptance and belonging	EBD19: Feeling of acceptance and belonging
EBO12: The organization values and makes use of employee's creativity	EBD20: The organization is customer-oriented
EBO23: Happy work environment	
EBO20: The organization is customer-oriented	
EBO18: Opportunity to teach others what you have learned	

<b>Employer Brand Offering</b>	<b>Employer Brand Delivery</b>
<b>Factor 2</b>	<b>Factor 2</b>
EBO2: A fun working environment	EBD2: A fun working environment
EBO8: Having a good relationship with your colleagues	EBD3: A springboard for future employment
EBO5: Feeling more self-confident as a result of working for a particular organization	EBD5: Feeling more self-confident as a result of working for a particular organization
EBO7: Having a good relationship with your superiors	EBD7: Having a good relationship with your superiors
EBO6: Gaining career-enhancing experience	EBD8: Having a good relationship with your colleagues
EBO3: A springboard for future employment	EBD4: Feeling good about yourself as a result of working for a particular organization
EBO4: Feeling good about yourself as a result of working for a particular organization	EBD6: Gaining career-enhancing experience
EBO10: Working in an excitement environment	EBD10: Working in an excitement environment
	EBD11: Innovative employer
	EBD13: The organization produces high-quality products and services
<b>Factor 3</b>	<b>Factor 3</b>
EBO9: Supportive and encouraging colleagues	EBD9: Supportive and encouraging colleagues
EBO15: Good promotion opportunities within the organization	EBD21: Job security within the organization
EBO21: Job security within the organization	EBD15: Good promotion opportunities within the organization
EBO1: Recognition and appreciation from management	EBD1: Recognition and appreciation from management
	EBD18: Opportunity to teach others what you have learned

Based on Table 3, items for Factor 1, Factor 2, and Factor 3 are almost the same between employer brand offering and employer brand delivery. Only three items in employer brand offering are not loaded under the same factor as in employer brand delivery, namely EBO11, EBO13 and EBO18. Hence, these three items were removed as they do not show synchronization in the factor loading between employer brand offering and employer brand delivery.

There are 10 items that represent Factor 1, 8 items for Factor 2, and 4 items for Factor 3. The three factors extracted explaining 68.224% of the variance in employer brand offering and 70.006% variance in employer brand delivery. Hair et al. (1998) indicated that variables with higher factor loadings are considered more important and have greater influence on the name selected to represent a factor. The highest factor loading of employer brand offering and employer brand delivery may be different. Thus, the average of the loadings for both constructs is calculated to rank the items from highest to lowest. The dimension's name created for this study is based on the academic literature from marketing and psychology. Factor 1 is named as organization, Factor 2 as individual, and Factor 3 as growth.

Items with higher loadings in Factor 1 are viewed as elements provided by an organization, for examples salary, inter-departmental experience, and compensation. Salary and compensation are part of employer brand elements, grouped under economic dimension, while experience is allocated under functional dimension (1996). Economic and functional dimensions are delivered by organization, and not derived from employees (1996). Competitive salary and training have been identified as the explicit needs required by employees from an organization (Barrow & Mosley, 2005; Lievens & Highhouse, 2003; Minchington, 2011; Wickham & O'Donohue, 2009). Factor 1 is named as organization dimension as the three items with highest factor loadings and most of the remaining items in Factor 1 (e.g.: organization produce innovative products and services, opportunity to apply what was learned at the tertiary institution, humanitarian organization) are the elements provided by organization. The percentage of variance accounted for the organization dimension in employer brand offering is 28.559% and 26.765% in employer brand delivery.

Factor 2 is named as individual dimension, which accounted for 23.243% of variance in employer brand offering and 25.199% of variance in employer brand delivery. The items with highest factor loadings are: a fun working environment, feeling more self-confident as a result of working for a particular organization, and having a good relationship with your colleagues. These items are related to feelings and social condition of an organization, as proposed by Maslow (1943). Other remaining items under this factor are also connected to the aspect of individual feelings, such as having a good relationship with your superiors and feeling good about yourself as a result of working for a particular organization. Hence, this factor is named as individual dimension because the items under this factor are initiated and derived from the individuals of the organization. This dimension has a close resemblance with the psychological dimension proposed by Ambler and Barrow (1996a).

Finally, Factor 3 is related to the aspect of moving further with the organization (e.g. promotion opportunities, job security, encouraging colleagues). This factor is named as growth dimension. Supportive and encouraging colleagues is the item with the highest factor loading. The remaining three items have the same weightage of factor loading; good promotion opportunities within the organization, job security within the organization, recognition and appreciation from management. Although supportive and



encouraging colleagues can be associated with the individual dimension as in Factor 1, it is viewed from different perspective in this study. This item is viewed as a means to promote employees growth in an organization Support from colleagues provides knowledge, experience, and emotion to enhance employee's development (Barrow & Mosley, 2005; Benson & Dundis, 2003; Lievens & Highhouse, 2003; Minchington, 2011; Ramlall, 2003; Wickham & O'Donohue, 2009). Meanwhile, promotion, job security, recognition and appreciation are the elements to encourage employees to stay and grow in their organization. The percentage of variance accounted for this dimension in employer brand offering is 16.441% and 18.042% in employer brand delivery.

## **DISCUSSION**

The seven aforementioned dimensions show that employer branding implemented in the organizations from employers' perspectives comprises of a broad dimensions. Most of the dimensions were practiced in all four organizations; Hotel A, Hotel B, Bank A, and Bank B. However, the prominence of each dimension is different from one to one organization. For instance, Bank A concerns about the dimension of credibility and reputation, while Bank B emphasizes on learning and growth. Hotel A is the only organization that has job security. On the other hand, Hotel B focuses on the social oriented as its uniqueness to be a desired workplace.

On the other hand, from the quantitative findings, the employer brand was assessed within the context of its offering and delivery. This study discovered that the employer brand values perceived by hotel employees in Malaysia could be grouped into three dimensions: organization, individual, and growth. These dimensions are narrower compared to the dimensions perceived by employers. The result is supported by previous studies, where different groups of people in different industries would perceive different dimensions of employer brand (Ambler & Barrow, 1996; Barrow & Mosley, 2005; Berthon, et al., 2005; Cho, et al., 2006; Fulmer, et al., 2003; Kimpakorn & Dimmitt, 2007; Minchington, 2012; Sokro, 2012).

Most of the aspects in the employer dimensions in this study have been proposed in the academic literature (Ambler & Barrow, 1996; Barrow & Mosley, 2005; Berthon, et al., 2005; Cho, et al., 2006; Fulmer, et al., 2003; Kimpakorn & Dimmitt, 2007; Minchington, 2012; Sokro, 2012). There is a consistency between the aspects reported in this study with the established aspects from the previous studies. Looking at the trend of employer brand dimension, most of the dimensions proposed in the earlier study can be found from the current study. However, weightage of the dimensions has changed from time to time. In 1996, Ambler and Barrow reported that psychological, functional, and economic as the employer brand dimensions, and there is no aspect of challenging and flexibility in the dimensions (Ambler & Barrow, 1996). Moving towards the new era, Sokro (2012) proposed that working environment, challenging work responsibilities, competence development and work flexibility were most important variables that attract prospective employees.

This study provides theoretical and practical implications. Theoretically, the findings of this study extend the employer brand literature by discovering employer brand

dimensions in the Malaysian hotel and banking industry. Although most of the dimensions have been proposed in the previous studies, this study gives an in-depth insight on the aspects that were grouped in each dimension. It is also anticipated that the findings from this employer brand research will add value to the field of person-organization fit (P-O fit) by identifying the match between employer's offerings and employee's preferences. P-O fit has been widely discussed in human resource, psychology and organizational behaviour fields. (Cable & Judge, 1994; Cable & Judge, 1996; Tuzuner & Yuksel, 2009).

From the practical perspectives, this study helps employees, particularly potential employees to have a clear understanding on how to fit their values with values implemented by the hotel and banking industry. The compatibility between a person and an organization is important to ensure that the person can remain longer in the organization and later to perform (Backhaus & Tikoo, 2004; Supornpraditchai, Miller, Lings, & Jonmundsson, 2007). The findings may also serve as a guideline to employers from other industries. Applying dimensions that are not exist in their organization may enhance employee attraction and retention (Barrow & Mosley, 2005; Minchington, 2011).

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