



***ECONOMIC VIABILITY AND COST-BENEFIT ANALYSIS OF COMMUNITY-
BASED ECOTOURISM SERVICE PROVIDER IN KUBANG KERIAN,
KELANTAN, MALAYSIA***

SITI MARIAM MELLISA BINTI ABDULLAH

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By

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**Thesis submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

April 2019

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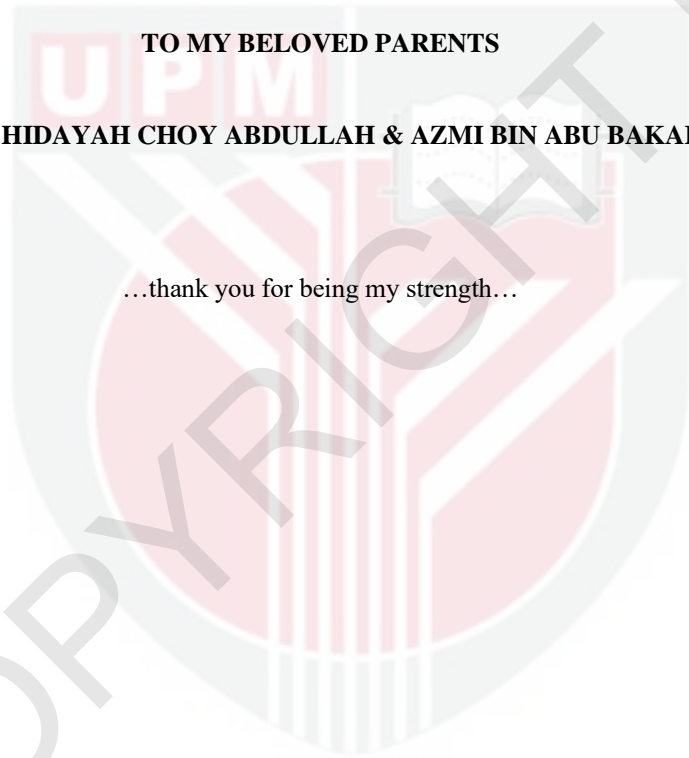


DEDICATION

TO MY BELOVED PARENTS

NUR HIDAYAH CHOY ABDULLAH & AZMI BIN ABU BAKAR

...thank you for being my strength...



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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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April 2019

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Faculty : Economic and Management

Like other natural resource-endowed developing economies, Malaysia has been aggressively boosting ecotourism as a subset of the tourism industry. It has become apparent in recent years that ecotourism in this country is gaining acknowledgement, mainly due to growing global awareness of sustainability and environmentalism. One of the new forms of ecotourism product is community-based ecotourism which is involved and managed locally by the communities in its development and management; and substantial benefits remain within the community. This study has been conducted in the village of Min House Camp (MHC), Kelantan to assess the economic viability and cost-benefit analysis of community-based ecotourism service provider. For the first objective, a survey from 200 responses from different stakeholders in MHC using partial least square structural equation modelling were used to identify the attitudes of relevant stakeholders and their perceptions in support of CBE development. For the second objective, a survey of 360 local and international visitors were collected using choice experiment to assess the economic value for each improvement attribute for conservation and management. For the third objective, the aim was to formulate and assess the feasibility of alternative options of community-based ecotourism project at MHC, Kelantan using the cost-benefit analysis. Two scenarios are evaluated: first 'without project', which reflects the status quo whereby community participation and ecotourism activities are excluded, and this serves as the base case for assessing the difference in project options, and, second 'with ecotourism project' in MHC.

By using the partial least squares-structural equation modelling method, findings revealed that stakeholders' support for community-based ecotourism development is a function of perceived benefits and perceived cost of tourism impacts and three exogenous variables of stakeholders' involvement, knowledge of ecotourism, and environmental attitudes. For the indirect relationship, it shows the three exogenous variables has an indirect relationship with stakeholders' support for community-based ecotourism development through mediating variables of perceived benefits and costs. However, the

knowledge of ecotourism is the most influential factor to support community-based ecotourism development in MHC. This shows key stakeholders that involved in the management must possess sufficient knowledge in ecotourism to provide the directions needed to carry out proper planning for community-based ecotourism. The business operator should understand the importance of perceived benefits and costs of CBE as this construct has a strong influence to support CBE development in MHC.

For the choice experiment method, the study measures the economic value of ecosystem services offered by community-based ecotourism by assessing the willingness to pay for various intangible ecotourism services offered by the community-based ecotourism provider at MHC, Kelantan. The results show the conditional logit interaction model were best fitted model as visitors are mostly willing to pay a significantly higher price for improved conservation and management attributes. In terms of conservation issues, visitors are willing to contribute the most on 'fair' ecological management as the important attribute, followed by 'stop' declining the number of unfamiliar local and exotic animal species observation' and 'fair' ecological management. The marginal values for each improvement attribute were RM18.05, RM19.36 and RM20.10 respectively. In terms of management issue, visitors are willing to contribute the most on the 'super' package activity attribute, followed by 'increase 10%' the involvement and employment of local people, 'medium' information provided, and lastly 'very good' accommodation facilities. The marginal values for each improvement attribute were RM4.62, RM3.54, RM2.88 and RM2.02 respectively. Hence, the results of the study would enable MHC to incorporate the economic value information of ecosystem services offered in revising its pricing strategy, where eco-friendly attraction can be offered sustainably.

For the cost-benefit analysis method, the study formulates and assesses the feasibility of alternative options of community-based ecotourism project at MHC, Kelantan. The responses for economic value of conservation and management attributes which were analyzed using choice experiment are then incorporated into the cost-benefit analysis of establishing a community-based ecotourism at MHC. Both net present values 'without project' and 'with project' were computed and use to estimate the incremental net present value of the community-based ecotourism at MHC. The positive incremental net present value obtained implies that the community-based ecotourism development at MHC shows a bright prospect for ecotourism with community participation. In this case, the government needs to view and consider ecotourism and conservation not as an expense, but rather generating benefits for the welfare of society so that the rural local community could gain benefits of the CBE to be shared among the communities.

Finally, the above findings and their implications have some policy relevance in that the promotion of community-based ecotourism in the national tourism policy has been found to be pragmatic and workable. These findings are useful information for the policy maker, government, and tourism operators to enhance greater stakeholder participation in developing and sustaining community-based ecotourism. The results of economic valuation and cost-benefit analysis could aid the government to gain insight about real value of community-based ecotourism in support of profitable venture that incorporates ecosystem conservation. MHC at Kubang Kerian, Kelantan is such a successful model case study.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**ANALISIS KEUPAYAAN EKONOMI DAN FAEDAH-KOS BERKAITAN
PERKHIDMATAN EKOPELANCONGAN BERASASKAN-KOMUNITI DI
KUBANG KERIAN, KELANTAN, MALAYSIA**

Oleh

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Seperti lain-lain ekonomi membangun yang kaya dengan sumber semula jadi, Malaysia telah bersungguh-sungguh meningkatkan ekopelancongan sebagai sebahagian daripada industri pelancongan. Tampak jelas sejak beberapa tahun kebelakangan ini, ekopelancongan di negara ini mula mendapat pengiktirafan, sebahagian besarnya disebabkan oleh peningkatan kesedaran mengenai kemampuan dan keprihatinan terhadap alam sekitar. Salah satu bentuk produk ekopelancongan baru adalah ekopelancongan berasaskan komuniti yang melibatkan dan di uruskan oleh komuniti setempat di dalam pembangunan dan pengurusannya, dengan itu faedah-faedah penting terus kekal dalam komuniti tersebut. Kajian ini telah dijalankan di kampung Min House Camp (MHC), Kelantan yang bertujuan untuk menilai daya maju ekonomi dan faedah-kos pembekal perkhidmatan ekopelancongan-berasaskan komuniti. Untuk objektif pertama, 200 soal selidik daripada mereka yang berkepentingan dalam MHC menggunakan *Partial Least Square Structural Equation Modeling* (PLS-SEM) untuk mengenal pasti sikap dan persepsi pihak berkepentingan dalam menyokong pembangunan ekopelancongan-berasaskan komuniti. Bagi objektif kedua, soal selidik daripada 360 pelawat tempatan dan antarabangsa telah dikumpulkan menggunakan *Choice Experiment* (CE) untuk mengukur nilai ekonomi bagi setiap aspek peningkatan dalam pemuliharaan dan pengurusan. Bagi objektif ketiga yang bertujuan untuk merumus dan menilai keboleh-upayaan pilihan-pilihan alternative ekopelancongan yang berasaskan komuniti di MHC, Kelantan menggunakan kaedah *Cost-Benefit Analysis* (CBA). Dua senario dinilai: pertama 'tanpa projek', yang mencerminkan status quo di mana peserta komuniti dan aktiviti ekopelancongan diasingkan, dan ini berfungsi sebagai kes asas untuk menilai perbezaan dalam pilihan projek, dan kedua 'dengan adanya projek ekopelancongan' di MHC.

Dengan menggunakan kaedah *PLS-SEM*, hasil kajian menunjukkan bahawa sokongan pihak berkepentingan untuk pembangunan ekopelancongan-berasaskan komuniti berfungsi sebagai persepsi faedah dan kos kepada impak perlancongan dan 3 pemboleh

ubah eksogen pihak berkepentingan iaitu penglibatan, pengetahuan tentang ekopelancongan, dan sikap terhadap alam sekitar. Bagi hubungan tidak langsung, ia menunjukkan tiga pemboleh ubah eksogen mempunyai hubungan tidak langsung dengan sokongan pihak berkepentingan untuk pembangunan ekopelancongan-berasaskan komuniti melalui pembolehubah pengantara persepsi faedah dan kos. Walau bagaimanapun, pengetahuan mengenai ekopelancongan adalah faktor yang paling berpengaruh dalam menyokong pembangunan ekopelancongan-berasaskan komuniti di MHC. Ini menunjukkan pihak berkepentingan utama yang terlibat dalam pengurusan mesti mempunyai pengetahuan yang mencukupi dalam ekopelancongan untuk menyediakan hala tuju yang diperlukan dalam menerapkan perancangan untuk ekopelancongan-berasaskan komuniti. Pengendali perniagaan perlu memahami kepentingan persepsi kos dan manfaat ekopelancongan berasaskan komuniti dimana ini membina pengaruh yang kuat untuk menyokong pembangunan ekopelancongan berasaskan komuniti di MHC.

Untuk kaedah *CE*, kajian ini mengukur nilai ekonomi perkhidmatan ekosistem yang ditawarkan oleh ekopelancongan-berasaskan komuniti dengan menilai kesediaan pelawat untuk membayar pelbagai perkhidmatan ekopelancongan tidak ketara yang ditawarkan oleh penyedia ekopelancongan-berasaskan komuniti di MHC, Kelantan. Hasilnya menunjukkan '*conditional logit*' model adalah yang paling sesuai kerana kebanyakannya pelawat bersedia untuk membayar harga yang lebih sedikit untuk meningkatkan kriteria pemuliharaan dan pengurusan. Dari segi isu-isu pemuliharaan, pelawat bersedia untuk membuat sumbangan terbesar kepada pengurusan ekologi yang 'adil' sebagai kriteria penting dimana ia diikuti dengan 'menghentikan' kemerosotan bilangan haiwan tempatan yang jarang dan eksotik yang dipelihara dan pengurusan ekologi yang 'adil'. Nilai marginal bagi setiap kriteria penambahbaikan masing-masing adalah RM18.05, RM19.36 dan RM20.10. Dari segi isu pengurusan, pelawat bersedia menyumbang paling banyak pada kriteria pakej aktiviti 'super', diikuti oleh 'peningkatan 10%' penglibatan dan pekerjaan orang tempatan, maklumat 'pengantara' yang disediakan, dan yang terakhir adalah kemudahan penginapan yang 'sangat baik'. Nilai marginal bagi setiap sifat penambahbaikan masing-masing adalah RM4.62, RM3.54, RM2.88 dan RM2.02. Oleh itu, hasil kajian itu akan membolehkan MHC untuk memasukkan maklumat nilai ekonomi perkhidmatan ekosistem yang ditawarkan dalam menyemak semula strategi penetapan harganya, di mana tarikan mesra alam dapat ditawarkan secara lestari.

Bagi kaedah '*cost-benefit analysis*', kajian ini merumuskan dan menilai kebolehlaksanaan pilihan alternatif projek CBE di MHC, Kelantan. Maklumbalas terhadap nilai-nilai ekonomi kriteria pemuliharaan dan pengurusan yang telah dianalisis menggunakan '*choice experiment*' yang kemudiannya dimasukkan ke dalam '*cost-benefit analysis*' untuk mengadakan ekopelancongan-berasaskan komuniti di MHC. Hasil kedua-duanya memberikan nilai 'tanpa projek' dan 'dengan projek' telah diproses dan digunakan untuk menganggarkan peningkatan jumlah semasa ekopelancongan-berasaskan komuniti di MHC. Penambahan positif nilai semasa bersih yang diperolehi memberi gambaran yang ekopelancongan-berasaskan komuniti di MHC menunjukkan prospek yang cerah bagi ekopelancongan dengan penyertaan komuniti masyarakat. Dalam hal ini, kerajaan perlu melihat dan mempertimbangkan ekopelancongan dan pemuliharaan bukan sebagai perbelanjaan, tetapi sebaliknya memberi manfaat untuk kesejahteraan masyarakat supaya masyarakat setempat luar bandar dapat memperoleh

keuntungan daripada ekopelancongan-berasaskan komuniti supaya ia dapat dikongsi oleh di kalangan komuniti masyarakat.

Akhir sekali, penemuan di atas dan implikasinya mempunyai beberapa kaitan dengan dasar, yang mana memperkenalkan ekopelancongan-berasaskan komuniti dalam dasar pelancongan negara telah didapati pragmatik dan boleh dilaksanakan. Penemuan ini adalah maklumat yang berguna kepada pembuat polisi, kerajaan, dan pengusaha pelancongan untuk meningkatkan penyertaan pemegang berkepentingan dalam membangun dan mengekalkan ekopelancongan-berasaskan komuniti. Di samping itu, keputusan penilaian ekonomi dan *'cost-benefit analysis'* dapat membantu kerajaan mendapatkan maklumat mengenai nilai sebenar ekopelancongan-berasaskan komuniti dalam memberi sokongan terhadap perkongsian yang menguntungkan dimana pemuliharaan ekosistem diterapkan. MHC di Kubang Kerian, Kelantan adalah satu kajian kes model yang berjaya.

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This thesis was submitted to the Senate of University Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

AMOS	Analysis of a Moment Structures
ASEAN	Association of Southeast Asian Nations
AVE	Average Variance Extracted
BAU	Business-as-Usual
BT	Benefit Transfer
CAT	Community Attachment Theory
CBA	Cost-Benefit Analysis
CBE	Community-based Ecotourism
CBT	Community-based Tourism
CBR	Community-Based Rehabilitation
CBRH	Community-based Rural Homestay
CB-SEM	Covariance-based Structural Equation Modelling
CE	Choice Experiment
CFM	Community Forest Management
CFS	Central Forest Spine
CL	Conditional Logit
CM	Choice Modelling
CR	Composite Reliability
CVM	Contingent Valuation Method
DAO	District Agriculture Office
DMO	Destination Management Organization
ETP	Economic Transformation Plan
FAMA	Federal Agricultural Marketing Authority
GDP	Gross Domestic Product
HPM	Hedonic Pricing Method
HTCM	Hedonic Travel Cost Method
IUCN	International Union of Conservation and Nature
INPV	Incremental Net Present Value
KBC	Kelantan Biotech Corporation
KHH	Kho Hong Hill
KNP	Kubah National Park
LISREL	Linear Structural Relations

LV	Latent Variable
MARDI	Malaysian Agricultural Research and Development Institute
MDG	Millennium Development Goals
MV	Manifest Variable
MHC	Min House Camp
ML	Mixed Logit
MOA	Ministry of Agriculture
MOTAC	Ministry of Tourism & Culture Malaysia, Kelantan
MU	Marginal Utility
MYR	Malaysian Ringgit
NEP	National Ecotourism Plan
NGO	Non-Governmental Organization
NPA	National Protected Area
NPV	Net Present Value
NTFP	Non-Timber Forest Product
PES	Payment for Ecosystem Service
PIM	Pitons Management Area
PLS-SEM	Partial Least Square-Structural Equation Modelling
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RP	Revealed Preference
RUM	Random Utility Model
SA	Sensitivity Analysis
SEM	Structural Equation Modelling
SET	Social Exchange Theory
SP	Stated Preference
SRT	Social Representation Theory
SDG	Sustainable Development Goal
TEV	Total Economic Value
TIC	Tourist Information Centre
TRC	Travel Cost Method
UNWTO	United Nations World Travel Organization
USD	United States Dollar

UMK	University Malaysia Kelantan
UPM	University Putra Malaysia
USM	University Science Malaysia
VIF	Variance Inflation Factor
WCED	World Commission on Environment and Development
WCPA	World Commission on Protected Areas
WHS	World Heritage Site
WTTC	World Travel & Tourism Council
WTO	World Tourism Organization
WTA	Willingness-to-Accept
WTP	Willingness-to-Pay
WWF	World Wide Fund for Nature

CHAPTER 1

INTRODUCTION

1.1 An Overview of Tourism in Malaysia

Like many other countries, Malaysia is well known for its appealing and authentic attractions. The tourism industry is one of the essential contributors to the national economy and continues to grow in both scope and size. More importantly, the tourism industry leads to several economic gains and creates significant revenue for the country. Importantly, tourism plays a vital role by developing new and exciting opportunities for people to enjoy and improve their quality of life, improve infrastructure, increase foreign exchange and tax revenues. In 2014, tourism revenue in Malaysia according to the former Prime Minister contributed RM 161 billion to the economy or 14.9% of Gross Domestic Product (GDP) (The Sunday, Oct 17, 2015).

The United Nations World Travel Organisation (UNWTO) as a leading international organisation in the field of tourism, promotes tourism as a critical driver of economic growth, development and environmental sustainability providing a useful contribution with a country's overall well-being (UNWTO, 2015). However, Moscardo (2008) asserts that it is not always transparent on whose well-being benefits from tourism or how these benefits arise. The tourism industry in Malaysia has always projected positive growth, especially concerning tourist arrivals and receipts. Although unfortunately, tourism revenues have declined in 2014 from RM 71,998.80 million to RM 69,119.60 million in 2015 resulting from several airline tragedies occurring in 2014. However, despite these adversities, Malaysia still managed to attract 27.44 million tourists, generating RM 72 billion in that year (Najib, 2015). Between 1998 and 2015, tourism revenues in Malaysia averaged RM 41,019.85 million thereby achieving an all-time high of RM 71,998.80 million in 2014 coming from a record low of RM 8,580.50 million in 1998. This trend is not surprising. For instance, Galdini (2007) mentioned that tourism creates an opportunity for rejuvenation after experiencing a slight downfall following a crisis.

Notwithstanding, three reasons lead communities to participate in the tourism industry, namely: economic benefits, socio-cultural and environmental conservation aspects (Inskeep, 1991). Also, stakeholder communities are willing to be involved in tourism given the global expansion of tourism (Hausler & Strasdas, 2003). Although, poorly planned projects in this area would not be able to take advantage of this situation, and consequently, tourism communities would be adversely impacted. Therefore, appropriate planning of development projects for tourism should be undertaken to avoid any adverse effects (Chhabra & Phillips, 2009).

A promising segment within the tourism industry that has quickly emerged is ecotourism (Bhuiyan et al., 2011). Vasanth (2005) pointed out that ecotourism is fast becoming a growing form of tourism in Malaysia, contributing approximately 10% of the country's

revenue. Ecotourism has also evolved to comply with sustainable tourism which forms one of the probable solutions to protect the environment and cultural resources of travel sites, providing local economic opportunities and creating a higher level of awareness on the environment amongst travellers. The International Union of Conservation and Nature (IUCN) defines ecotourism as “environmentally responsible travel to natural areas, in order to enjoy and appreciate nature (and accompanying cultural features, both past and present) that promote conservation, have low visitor impact and provide beneficially active socio-economic involvement of local people.” On the other hand, the World Tourism Organisation (WTO) describes sustainable tourism as an industry that meets the needs of current tourists and host populations while enhancing opportunities for the future (WTO, 2010).

Ecotourism consists of conservation benefits, a nature-based experience and establishing economic and social benefits (Orams, 1995). Accordingly, ecotourism should benefit conservation through the improved management of natural areas (Bhuiyan et al., 2011). The principle of ecotourism is emphasised on nature and culture heritage conservation, empowerment and the provision of financial benefits to the local community, minimum environmental impact, and environmental and cultural education for tourists (Ah-Choy, 2010). Ecotourism is not only seen to help generate income for the community as indicated in the business model, but it also facilitates in fulfilling the Government’s agenda to eradicate poverty and create job opportunities for communities.

Accordingly, Agenda 21 for sustainable tourism development is summarised into three components (Tourism and Local Agenda 21, UNEP, 2003):

- a) To develop effective structures for multi-stakeholder participation, both in setting the direction for tourism in the community and in working together to create and manage it;
- b) To identify an effective strategy of sustainable tourism for sustainable development that emphasises stakeholder views and other related managerial functions in the tourism destination; and
- c) To implement meaningful actions that ensure the economic, social and environmental sustainability of the tourism destination.

Various studies have investigated local stakeholder participation in tourism activities. For instance, Liu (2006) looked into the socio-economic effects of local participation in the tourism industry. Whereas, Scheyvens (2002) highlighted the decision-making processes involved in a local community’s participation in this area, while Lacher and Nepal (2010), studied minority group participation in the tourism industry. In another study, Harrison and Schipani (2007) investigated the distribution of the economic benefits of tourism among the local community. Although, most of the studies conducted in Malaysia have focused on the physical and social effects of tourism. For instance, the effect on the diversity of small mammals on Mount Kinabalu (Shukor, 2001), community forestry and forestry management systems (Horowitz, 1998) or ecology (Maryati et al., 1996). Only a few studies have analysed the economics of tourism in the context of Malaysia (Hasegawa et al., 2006; Liu, 2006). However, the major international and

domestic tourism attraction to Malaysia is its biodiversity and multiculturalism. At the centre of community-based ecotourism (CBE) offerings, is the community itself given their active participation that enhances the quality of eco-tourism attractions. Though, stakeholder involvement and inclusivity are not well-researched for the tourism sector to capitalise upon.

Accordingly, both support and participation of the community are essential to the success of tourism development (Inskeep, 1991; Jamal and Getz, 1995; Laws, 1995; McIntyre, 1993; Murphy, 1985; Sofield, 2003). Although, researchers' debate that community members should be involved as partners in tourism development projects or as an important attraction for tourists (Al-Oun and Al-Homoud, 2008). Therefore, to ensure that the community can benefit from respecting traditional lifestyles and values, community members should be actively involved in the decision-making process associated with tourism development plans (Li, 2006; Timothy, 1999). Communities are often included in tourism planning and development processes that have been labelled differently as community-based, community involved, community participated, or community collaborated approaches (Jamal and Getz, 1995; Joppe, 1996). Indeed, the notion of community participation in the tourism sector has gained increasing interest from researchers and many practitioners in-turn, have focused on sustainable tourism development. However, community-based tourism (CBT) has become a slogan used in the context of development and tourism planning.

Community involvement first emerged as a concept and practice in developed countries. For instance, Keogh (1990) studied community participation in the tourism industry in Canada, followed by Simmons (1994) and Prentice (1993) in the United Kingdom (UK). However, the concept has become widely known in developing countries, given the literature on CBT which has emerged in recent years. For example, Timothy (1999) studied participatory planning in Indonesian tourism, Li (2006) investigated community participation in tourism in China, Hipwell (2007) studied CBE in Taiwan, and Al-Oun and Al-Homoud's (2008) explored CBT in Jordan. A study by Sebele (2010) of CBT in Botswana, illustrated the growing interest in this concept, where CBT has been used as a tool to mitigate problems associated with community participation, development, empowerment and poverty reduction. Also, CBT investments are cheaper and more plausible compared to other sectors; local tourist sites are readily available to local resources, such as local brands (e.g. local culture, beautiful beaches and wildlife), and local people as service providers.

1.2 Background of Community-Based Ecotourism (CBE)

Many of the most beautiful and picturesque places globally exist in endangered habitats and vulnerable, exposed communities. CBE is a form of eco-tourism that emphasises the development of local communities and allows residents to have significant control over their development and management, with an important part of the benefits remaining within the community (WWF, 2001). In recent years, it has shown that the outcomes of these trials do not occur naturally but rather, need to be well planned, resourced, and led

by a range of partners (Weaver, 2011). Also, CBE should encourage the use of sustainability and responsibility, as well as individual initiatives inside the community. In ecotourism, local communities share the environment and their way of life with visitors who travel there, while at the same time, the community's local income and economic benefits are enhanced. By sharing in their activities such as celebrations, festivals, guest houses or homestays and production (i.e. trade of goods), CBE allows communities to participate in the modern global economy, in cultivating a sustained source of income while maintaining their cultural lifestyle. The CBE models that tend to succeed consist of several community initiatives including involving community leaders, creating more local employment opportunities, to ensure the generation of ecotourism income remains within the community and that local economic benefits are maximised. CBE projects can be managed by one or more defined communities, or as joint venture partnerships with the private sector. The aim is to ensure equal community participation, sustained use of natural resources and to improve community living standards (Rozemeijer, 2001).

Even though ecotourism has often emphasised the improved livelihood of the local community and also as a potential source of employment, irresponsible tourism practices can instead, deplete natural resources and exploit local communities. Some researchers have discussed the development value and its impact on the people and places affected by the delivery of CBE (Almeyda et al., 2010; Kruger, 2005). Therefore, it is essential that CBE projects are part of a much broader and carefully planned development strategy with community members. This will help to ensure that communities achieve the desired results that are consistent with both the culture and heritage of the community. In many ways, participants in CBE projects are not employees, but rather, managers. CBE initiatives also help to reduce poverty by providing not only income but by providing the residents of rural communities with the tools and knowledge to aid in long-term thinking and decision-making. Tourism is not a panacea, and therefore, CBE and responsible tourism must be part of much broader strategies for sustainable development. Sustainable development cannot entirely depend on achieving economic efficiency without raising economic equity and distribution. Therefore, there is a need to measure the level of economic inclusivity where not only the owner of the ecotourism business benefits but also the other stakeholders involved in the ecotourism offerings along the value chain also gain a substantial share of the returns and benefits.

The differentiation between the community-based tourism (CBT) and community-based ecotourism (CBE) is where CBT is approach to tourism in which (either urban or rural), often poor and marginalized "local communities are active participants as land-managers/users, entrepreneurs, employees, decision-makers and conservators". The goal is for communities to make decisions on tourism development in their area and to work with other stakeholders to develop job opportunities, enterprises, skills development, and other improvements in local livelihoods "(Ashley, 1999). For CBE is refer to community has substantial control and involvement in the ecotourism project and that the majority of the benefits remain in the community" (Wood, 2002). CBE is specific type of ecotourism where the concept is based on community approach and also known as specific subtype of CBT (Mearns and Edward, 2009). Figure 1.1 illustrates the context of community-based ecotourism. CBE enable the empowering of the poor community to control their own land and resources, leveraging their land and acquire the necessary skills for their self-development.

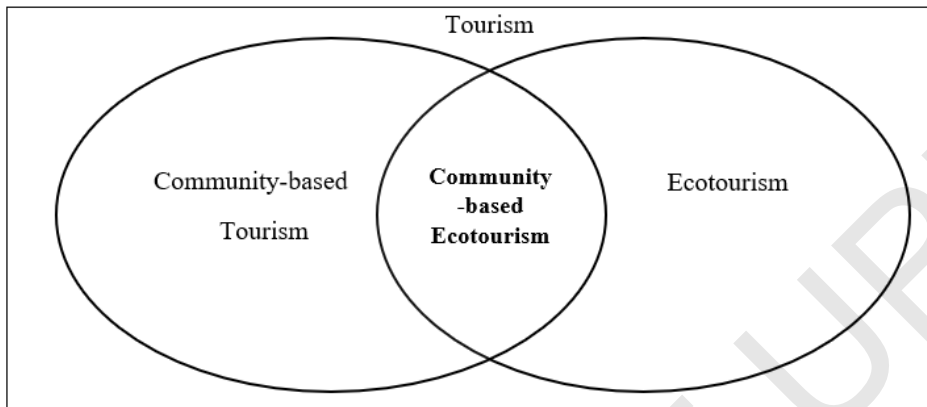


Figure 1.1: Community-based Ecotourism Context
 (Adapted from Mearns and Edward, 2009)

In Malaysia, CBE is one of the most dynamic and fastest growing sectors in the tourism industry (Yaman and Mohd, 2004) and many of the destinations involved include protected areas, national parks, and game reserves that serve as background settings in providing ecotourism activities to visitors. Local communities are willing to be involved in ecotourism activities given they believe CBE can provide additional income, diversification, preserve local culture, conserve the natural environment and fauna, and provide educational opportunities (MacDonald and Jolliffe, 2003; Briedenhann and Wickens, 2004; Harrison and Schipani, 2007). However, there are several challenges in order to gain real benefits from ecotourism development.

To investigate the virtues and challenges of CBE as practised in Malaysia, a site was selected in Kubang Kerian, Kelantan. Kelantan is enriched in biodiversity and culture with local communities maintaining their traditional local practices. The Kelantanese are also entrepreneurial in the tourism industry participating in providing many homestays and lodges. Furthermore, the Kelantan government has urged the local and aboriginal community to promote ecotourism (The Star, February 24, 2018).

1.2.1 Background of Kelantan Tourism

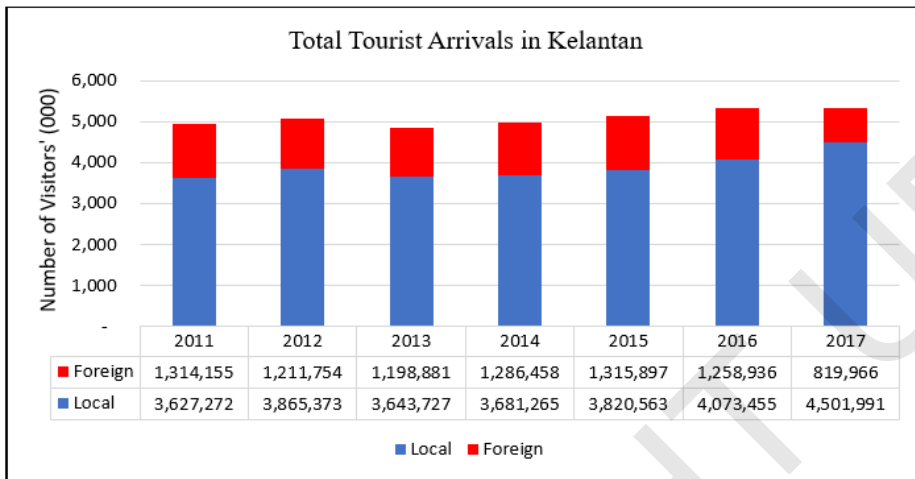


Figure 1.2: Kelantan Visitor Arrivals
 (Source: Ministry of Tourism and Culture Malaysia, 2017)

As shown in Figure 1.2, the number of Kelantan tourist arrivals recorded, increased each year with the exception between 2013 and 2017. The decrease in tourist arrivals in 2013 was due to economic and political issues in Malaysia, while in 2017, the arrival of tourists was affected due to the transmission of the bird flu epidemic (H5N1) (Muhamad, 2017 Mac 22). Notwithstanding, a few other factors also contributed to the decline in tourism, such as the 6% Goods and Services Tax (GST), the global economic crisis, health pandemic and political instability (WTTC,2017) in the country. This issue led to the number of international tourists visiting Kelantan declining.

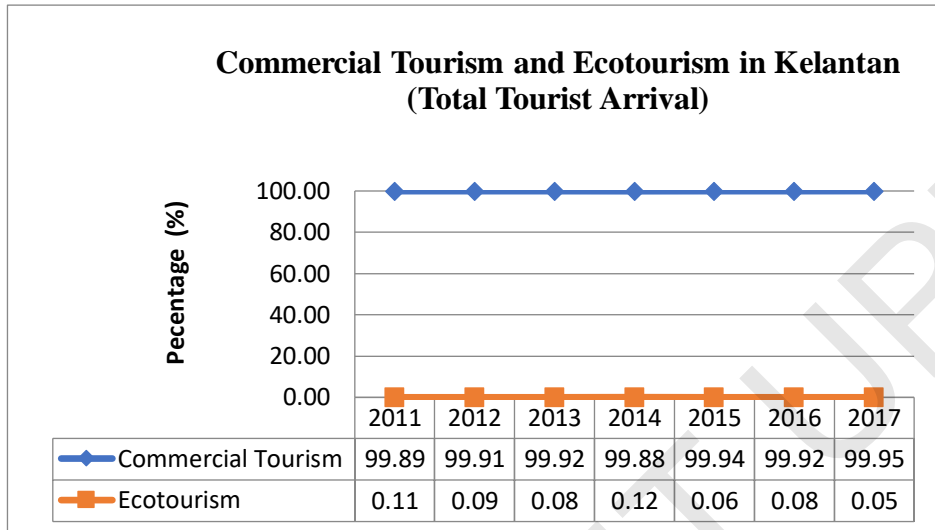


Figure 1.3: Commercial Tourism and Ecotourism in Kelantan
(Source: Annual report from Ministry of Tourism and Culture Malaysia (MOTAC), Kelantan and Department of Wildlife and National Parks (DWNP), Peninsular Malaysia)

As shown in Figure 1.3, the percentages of Kelantan tourist arrival were recorded for commercial tourism and ecotourism in year 2011 to 2017. It shows that the commercial tourism has the highest percentage of tourist arrival as compared to ecotourism. Due to data constraints, ecotourism in Kelantan presented here only recorded tourist arrival from Taman Negara Kelantan, Kuala Koh destination. This is one reason for the low percentage of total ecotourist arrival in Kelantan as there is a lack of tourist arrival data recorded for other ecotourism destinations in the state. Between 2014 and 2015, the percentages of tourist arrival decreased drastically because of the major floods that have affected both periods of the year.

Malaysia is famous for its abundance of natural resources such as waterfalls, beautiful islands, amenity forests, caves and highland resorts. As such, one of the states that can be developed as a promising tourist destination and attraction is Kelantan (Jabil Mapjabil et al., 2011). Generally, tourism in Kelantan is continuing to grow given the region has many attractions to offer tourists who are immersed in eco- and agro-tourism (Hamzah and Nizam Ismail, 2008). For instance, ecotourism-related activities include river boating, wildlife viewing, jungle trekking, firefly watching, tree planting and homestay programmes. Furthermore, among its many waterfalls, mountains, caves, streams and tropical jungles, some have remained untouched by humans while others have been explored by nature enthusiasts repeatedly.

From the abundance of natural resources mentioned above, locals not only have opportunities to participate in CBE but also in the development of the local communities. Even though, ecotourism contributes towards the development of natural heritage and conservation, limited attention directed towards tourism development, including

experience on ecotourism planning and financing are among the significant constraints for the development of ecotourism in Kelantan (Adriansyah et al., 2013). Indeed, there are many ecotourism activities in Kelantan, but limited regarding CBE.

1.2.2 Background of CBE in Min house Camp, Kubang Kerian

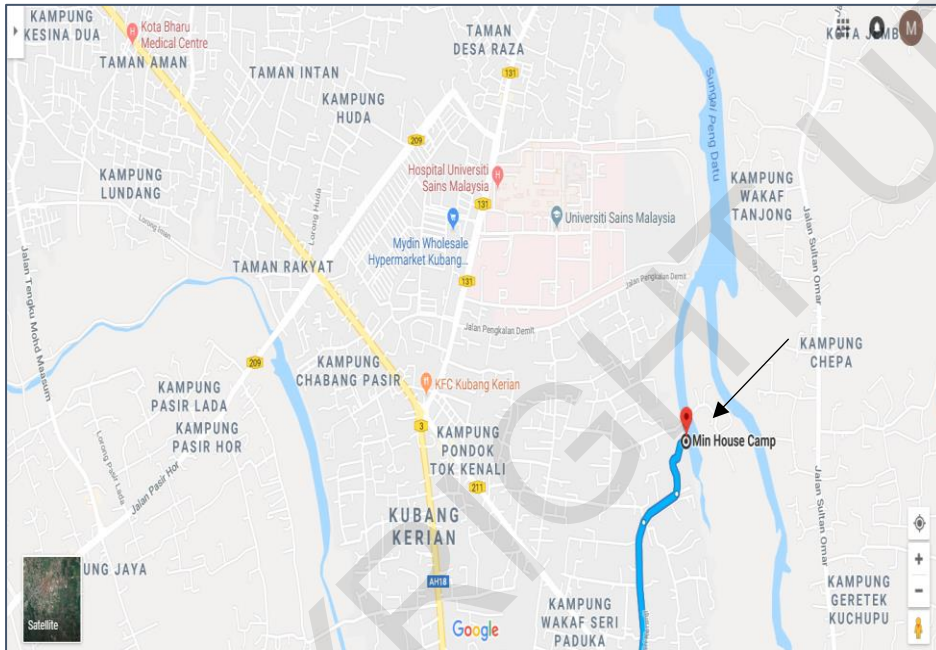


Figure 1.4: Map of Research Sites (MHC)
(Source: Google Maps)

Min House Camp (MHC) is based in Kampung Pulau, Kubang Kerian, Kelantan (on the edge of Kota Bharu) which focuses on ecotourism and agro-tourism. MHC is one of the CBE locations that is rich in natural flora and fauna, surrounded by lush green forests situated next to the Peng Datu River (Figure 1.4). MHC is one of the officially registered villages of Kelantan that offer more than 15 chalets, multipurpose halls, Trigona bee farm, a firefly garden, an organic farm, petting zoo and even water sports facilities such as kayaking, river bathing, fishing and clam digging.

Most importantly, MHC is widely known for the breeding and production of stingless bee honey, for commercial use or as an ecotourism attraction for visitors. One of the interesting activities favoured by many tourists is night firefly watching involving a boat ride with stops at areas enabling visitors to witness beautiful fireflies that lights up the place naturally. The boat ride for the firefly-watching starts operating from 8pm to 11pm. Other than that, visitors can also engage in the many cultural activities offered including

handicraft-making, cooking lessons, traditional games, night walk and cultural performances such as the shadow play and a Kelantanese traditional dance known as “Wayang Kulit and Dikir Barat”.

MHC has received much recognition and awards from Malaysian ministries and agencies. The ASEAN Tourism Award is a recognition of ASEAN’s best sustainable rural and urban tourism products proposed and implemented by public and private stakeholders who have joined forces for the benefit of their destination. In 2018, MHC was one of the organisations that won the ASEAN Green Hotel Standard and Community-Based-Tourism Standard in Kelantan.

Moreover, MHC has attracted many local and foreign tourists who favour an atypical experience in the remote countryside for their vacation break. The Kelantan Tourism Office (KTO) has recognised MHC as one of the main attractions in Kelantan for their offerings. Indeed, the environment is peaceful, with comfortable accommodation provided and with free internet access. Likewise, it also offers various outdoor recreational ventures and experiential services with an array of activities for corporate team building.

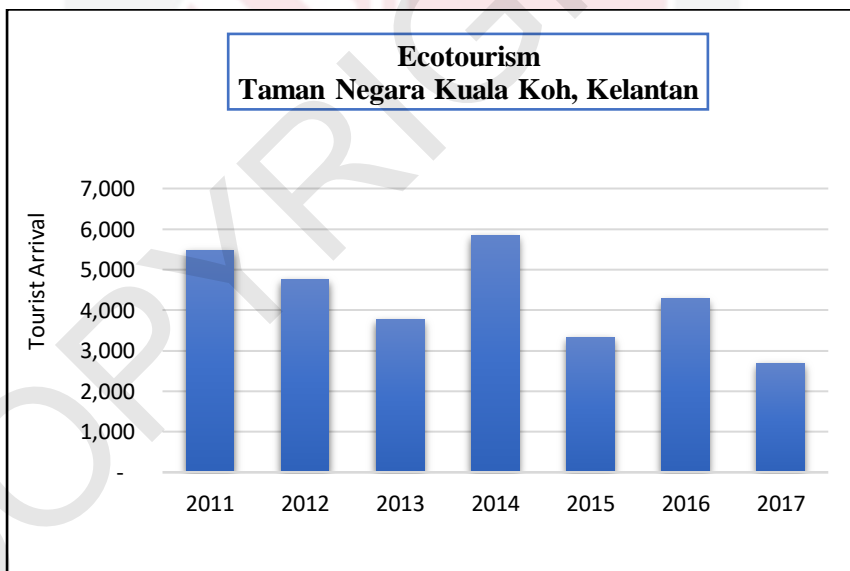


Figure 1.5 Total Tourist Arrival in Taman Negara, Kelantan

(Sources: Department of Wildlife and National Parks (DWNP), Peninsular Malaysia)

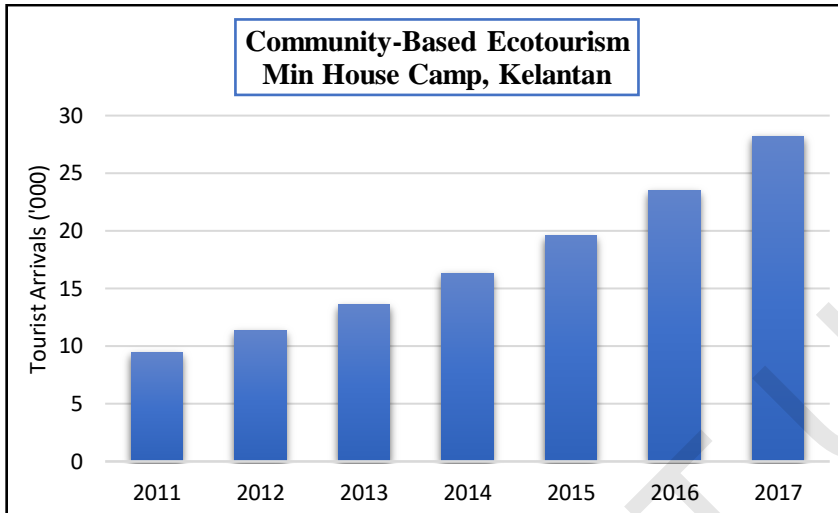


Figure 1.6 Total Tourist Arrival in Min House Camp, Kelantan
(Sources: MHC operator)

Unlike other ecotourism in Kelantan, MHC proves to be extraordinary and is a growing set up business. Based on the ecotourism statistics in Figure 1.5 and Figure 1.6, the tourist arrival in Kelantan is not growing as compared to the tourist arrival in Min House Camp, Kubang Kerian, Kelantan, which increased gradually. This is a growing issue for ecotourism in Kelantan as MHC has offered various ecotourism activities that require participation of the local community whereas other places do not offer that. MHC has been attracted to many foreign tourists from all over the world due to its unique culture and different environments compared to other ecotourism in Kelantan. Hence, MHC can be set as a benchmark for other rural communities to operate similar businesses. Using MHC as a model, interested local communities could be given an opportunity to hone their local entrepreneurship skills and set up their own small businesses as long as they can get the local communities living within or adjacent to the ecotourism sites to participate and involve in the tourism planning and management, offer natural and cultural activities, and receive support from various key stakeholders such as government, private enterprise, non-governmental organizations, educational institutions, local communities and volunteers.

1.2.3 Reasons MHC was Selected as the Case Study

Kelantan is also full of culture, natural attractions and delicious local cuisine. Kelantan promotes a quiet cultural and ecotourism destination that offers beautiful landscape with activities close to nature such as hiking, boating, trekking and fishing. One of the tourism products is CBE where local entrepreneurs foresee this as a business opportunity to gain income by operating a tourism enterprise through the participation of local communities. Therefore, this study chose MHC, based in Kg Pulau, Kubang Kerian Kelantan as a CBE enterprise model and case study which is managed by a local entrepreneur. MHC has attracted many travellers each year especially foreign tourists who are seeking a unique, hospitable and affordable tourism experience. Table 1.1 displays several features of the

MHC site in providing the type of accommodation, ecotourism activities, nature attraction, community involvement, eco- practices, status of site protection and the support from key stakeholders.

Table 1.1: MHC characteristics

SITE/ CHARACTERISTICS	MIN HOUSE CAMP (MHC)
Form of accommodation	Chalet rooms, traditional huts, dorms and camps
Type of activities	Stingless bee farm, kayaking and traditional archery, exotic reptile petting, fireflies watching
Type of attractions	Nature, local culture and opportunities for guests to offer volunteer services
Community involvement	Local villagers offering various services surrounding the Kampung Pulau, Kubang Kerian, Kelantan
Eco-practices	Stingless bee farm and laboratory
Status of site protection	Business Lot
Support of stakeholders	Governments (Ministry of Tourism & Culture Malaysia, Tourism Information Centre , Ministry of Agriculture, Malaysian Agricultural Research and Development Institute, Federal Agricultural Marketing Authority, Town Council in Kota Bharu), private enterprise (Kelantan Biotech Corporation), Institutions (University Science Malaysia, University Malaysia Kelantan, Community-based Rehabilitation Centre), non-governmental organization (Stingless Bee Organization, Association of Organic Entrepreneurs of Kelantan, Malaysia Agroecology Society for Sustainable Resource Intensification, Kelantan Kayak Association) , local communities and volunteer visitors.

However, despite the urgings of the Kelantan government, the ecotourism business is experiencing many issues and challenges. Generally, the main problems associated with the current practice of ensuring the sustainable development of the ecotourism industry in Malaysia include:

- a) The lack of effective and proper approaches for efficient and sustainable management practices of ecotourism sites;
- b) The lack of monitoring and enforcement to ensure the ecosystem is sustained and that operators comply with ecotourism principles;
- c) The insufficient environmental/ecological expertise among the operators to incorporate ecotourism fundamentals into practice;
- d) The lack of a consistent approach in implementing preventative measures and meeting the needs of environmental authorities in the country; and
- e) A large number of small organisations operating in ecotourism making the data collection effort costly and time-consuming, resulting in unreliable, incomplete and out-of-date ecotourism data.

In the case of MHC, most of the stakeholders that supported the CBE development were involved and participating in the tourism management and conservation program. The definition of community in the context of this study refer to a group of individuals living or working within the same geographic area with some shared cultures or common interest. The positive attitudes come from the operator that is willing to share the benefit

with the local communities. However, the local communities are willing to participate and offer the trade, involve in boat guide, food stall, stingless beehive supplier, and others. Most of the local communities in MHC generally perceive tourism activities positively, especially because of the economic benefits, including job opportunities and generated additional income. Socio-cultural aspects are generally perceived positively too, mainly because of enhanced local cultural and crafts activities. However, there are also some negative attitude as they see foreign visitor as intruding the village and this local people do not have entrepreneurship attitude as compared to other local communities that participate in ecotourism activities. The environmental component is often perceived by the local community in negative terms, due to some the costs brought on by tourism development like pollution, crowding, destruction of natural habitats, crime and others. Hence, some of the local communities does not actively participate in tourism activities as they do not see the value and benefit offered by CBE in MHC.

1.3 Research Problem Statement

While ecotourism development can provide many benefits, it also challenges local communities, resource managers, planners, and the developers. One form of tourism development that is said to be in line with the principle of sustainable ecotourism is CBE, which primarily emphasises the involvement of the local community with substantial benefits accruing back. CBE programs are providing opportunities to rural communities, regarding social and economic development, while minimising leakages, establishing backward linkages, educating tourists and conserving the environment. However, in reality, it is quite the opposite where the local community does not gain benefit from the tourism (Kayat and Zainuddin, 2016).

Kelantan has remained as one of the nation's higher poverty and larger rural populations, and its agricultural-driven economy has remained mostly slow moving (Nair and Sagar, 2017). Even the Director of the Kelantan Tourism Information Centre (KTIC) mentioned in the media on one occasion that Kelantan has an abundance of resources which have the potential to be developed into a tourist destination, but these resources have not been fully exploited (Utusan, May 27, 2001). This is the main reason why Kelantan is lacking as a tourist destination. Having CBE can be seen as one of the potential opportunities to be developed. There are isolated sites where CBE is successful in Kelantan. Personal communication with the Director of the Office of the Ministry of Tourism, Art and Cultures for the State of Kelantan (MOTAC) mentioned that MHC is one of the best practicing setup operating CBE that is officially registered in one of the villages in Kubang Kerian, Kelantan. Therefore, this study chose MHC as a case study of best practiced CBE. Why is MHC the best practiced and successful? Firstly, MHC is a practising CBE entrepreneur in Kelantan that is managed by local entrepreneurs who involves the local community that lives in it. Furthermore, this CBE enterprise has received support from various stakeholders such as local communities, government, private enterprise, a local institution, non-governmental organisations and volunteer tourists. Having CBE business in MHC has created benefits for the locals in terms of job opportunities and income earning. Second, MHC has fully utilised the unique endowment available in Kelantan and offers various ecotourism attractions which have attracted many visitors including foreigners from all around the world. Third, it also

incorporates conservation in its business where the education of nature and cultures is provided to the tourists. Apart from that, MHC has received awards from the Ministry of Tourism, Art and Culture (MOTAC) as a “Green Budget Hotel” and “Community-based Tourism” in Malaysia. It appears that CBE ala MHC has been successful because of the support from the stakeholder towards CBE development. This study is motivated by the need to understand what makes MHC a successful CBE operation rather than in trying to solve problems that it is facing. Therefore, it is important to understand the views and attitudes of the main stakeholders involved in ecotourism that contributes to the development and growth of CBE in MHC (Hanafiah et al., 2013). This study will help identify the attitudes of relevant stakeholders in support of CBE development in MHC, Kelantan.

As MHC seemed to have sustained, it is interesting to identify the roles being played by the ecotourism services being offered. Ecotourism services and activities offered by MHC such as firefly watching, boating along the river, sightseeing attractions, experiential activities, traditional edible snail collections, clam digging and night walks into traditional villages has often no market price. Importantly, these experiences, which are satisfying, have an economic value which has never been properly estimated. The second issue here is to know how much economic value is being created by the formation of MHC? As such, this study aims to measure the economic value of the ecosystem services and conservation offered by MHC as a CBE provider.

CBE is one of the most environmentally compatible alternatives for the economic use of land resources in MHC, Kubang Kerian Kelantan with the hope of minimizing negative ecological and sociocultural impacts of visitors at recreational locations. Nonetheless, CBE looks upon the potential to alleviate poverty in Kelantan, but sadly, not many entrepreneurs are keen to invest or become involved, as they are not aware of the feasibility of such a venture as financially and economically viable or not. However, while not providing sufficient returns to the entrepreneurs financially, the venture(s) can still be supported if proven to be economically viable when the benefits to the local communities and visitors are considered and also when non-financial benefits to the entrepreneurs are taken into account. The third issue is how does cost-benefit analysis (CBA) that includes the intangible value can make MHC feasible? Accordingly, this study will attempt to formulate and assess the feasibility of alternative options of the CBE project in MHC.

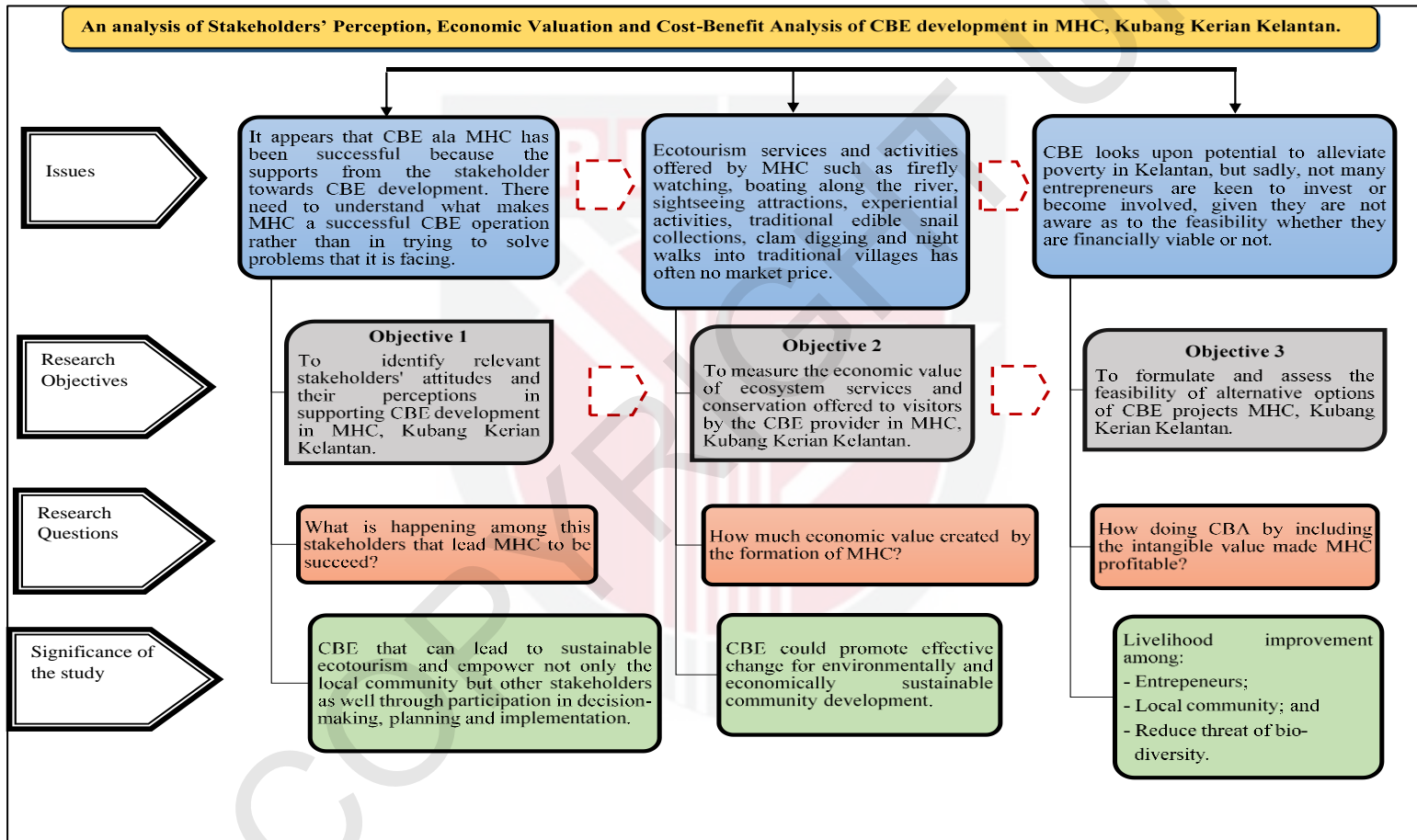


Figure 1.7: Process of the Study

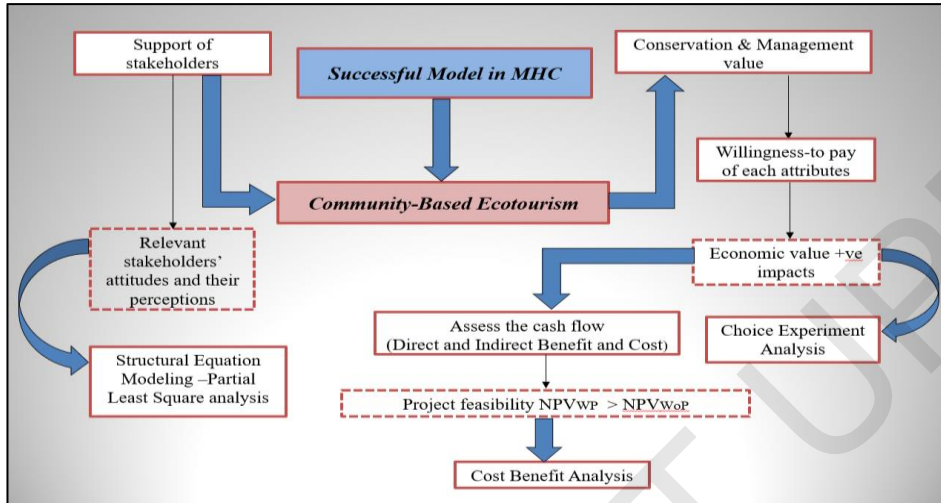


Figure 1.8: Conceptual Framework of Economic Viability of CBE Service Provider in Kubang Kerian, Kelantan

1.4 Research Objectives

The general objective of this study is to examine the economic viability and cost-benefit analysis of community-based ecotourism service provider in Min House Camp, Kubang Kerian, Kelantan, while the specific objectives are as follows:

More specifically, the objectives of this study are:

- To identify the relevant stakeholders' attitudes and their perceptions in support of CBE development at Kubang Kerian, Kelantan.
- To measure the economic value of ecosystem services offered by CBE by assessing the willingness-to-pay for various intangible ecotourism services offered by the CBE provider at Kubang Kerian, Kelantan.
- To formulate and assess the feasibility of alternative options of the CBE project at Kubang Kerian, Kelantan.

1.5 Research Questions

Given the knowledge gap as highlighted earlier, this study endeavours to answer the following research questions:

- To what extent are the roles of the relevant stakeholders' either in the planning, implementation or decision making affecting the development of the CBE at MHC?

2. What is the economic value of the various attributes contained in the tourism experience offered by the CBE at MHC?
3. What is the economic return on investment of the alternative options of CBE at MHC?

To answer these research questions, an extensive review of the literature concerning ecotourism and stakeholders' participation in the tourism sector will be undertaken.

Many researchers highlight that tourism stakeholders play a critical role in sustainable ecotourism (Daud, 2002; Peric, Durkin & Lamot, 2014) and that the effective and sustainable development of established tourism businesses requires that various stakeholders should ultimately benefit. However, the contribution of the local community and conservation activities have remained relatively weak in the ecotourism industry (Chan & Bhatta, 2013). Despite the policies that support and encourage local community participation in ecotourism, these ventures have not benefited local communities as intended (Sebele, 2010). Local communities can participate in ecotourism by providing recreational activities and services to visitors, such as accommodation, transportation, food supply, tour guides, and so forth to visitors. Hence, local tourism entrepreneurs should investigate and search for more innovative approaches to address the involvement and participation of the local community (Er et al., 2013). This issue is the main reason why many ecotourism projects are unsuccessful. However, despite the lack of community inclusivity, some successful case studies are demonstrating how local communities (Mohd Shahwahid, 2012) are empowered through ecotourism. While these case studies were able to raise economic inclusivity, it still requires further investigation to capitalise on the lessons learnt which can be disseminated to other entrepreneurs and local small and medium-sized investors. For example, this can be undertaken firstly, by undertaking significant research in selected CBE areas to understand the relationship between relevant stakeholders' attitudes and their attitudes in supporting CBE development. Second, to measure the economic value of ecosystem services offered by CBE through assessing the willingness to pay for various intangible ecotourism goods and services. Lastly, to examine to what extent practising CBE over the status quo tourism package is financially and economically feasible.

1.6 Significance of the Study

In this research, a comprehensive investigation into the virtues of practising 'inclusivity' in CBE is undertaken because the government had previously stated inclusivity as being vital towards an equitable society as outlined in the 10th Malaysia Plan. Although, the issue is how to know the state of inclusivity in ecotourism? In this study, possible recommendations are posited to maximise the potential benefits of CBE in MHC through biodiversity, ecosystems, and socio-economic development.

The investigations and research in this study as stated below will aim to:

- i. Provide insight of important stakeholders that supported CBE that can lead to sustainable ecotourism and empower not only the local community but other stakeholders through participation in decision-making, planning and implementation.
- ii. Show the merit of fair and equitable sharing of the benefits of ecotourism activities, with emphasis on the specific needs of the local communities concerned.
- iii. Reduce poverty through the generation of sufficient revenues and employment to effectively reduce threats to biodiversity in local communities.
- iv. Show the importance of supporting the effective participation and involvement of local communities in the development, operation and monitoring of ecotourism activities regarding the use and conservation of natural resources.
- v. Confirm that CBE can promote effective change for environmental and economic sustainable community development.

In this study, the measurement of the economic value of ecotourism development in MHC through user preferences can be used to provide information for ecotourism planning and decision-making. Also, it will help managers, administrators and planners to take correction action based on the necessary information needed to carry out these tasks. Further, this research will provide a positive contribution to the economic perspective of ecotourism in Malaysia as a whole, directly or indirectly.

1.7 Organisation of the Study

This study is organised into five chapters. The first chapter provides the introduction to the study, which includes the problem statement, research questions, objectives, and significance of the study. The second chapter reviews the relevant literature with a focus on CBE. This is followed by the third chapter which outlines and presents a detailed description of the research methodology and explains the data collection process and analysis. Chapter four discusses the results of the analysis and findings respectively. Chapter five summarises the key findings of the study, briefly discussing the implications for research and practice, limitations and recommendations for further study.

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