



UNIVERSITI
MALAYSIA
KELANTAN

UNDERSTANDING DETERMINANT FACTORS IN PROMOTING SUSTAINABILITY OF ECOSYSTEM: THE CASE OF SABAH, MALAYSIA

By

SIGANG UNG SHIO YIEN (H18A0562)

NURUL AIDA BINTI NOR AZHAR (H18A0464)

NUR SYAZWANA BINTI ZABIDI (H18A0426)

NURUL SYAFIQAH RAMLEE (H18A0510)

A report submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Entrepreneurship (Tourism) with Honors

Faculty of Hospitality, Tourism and Wellness
UNIVERSITY MALAYSIA KELANTAN

2021

DECLARATION

I hereby certify that the work embodied in this report is the result of the original research and has not been submitted for a higher degree to any other University or Institution

OPEN ACCESS

I agree that my report is to be made immediately available as hardcopy or on- line open access (full text)

CONFIDENTIAL

(Contains confidential information under the Official Secret Act 1972)*

RESTRICTED

(Contains restricted information as specified by the organization where research was done)*

I acknowledge that Universiti Malaysia Kelantan reserves the right as follow.

The report is the property of Universiti Malaysia Kelantan

The library of Universiti Malaysia Kelantan has the right to make copies for the purpose of research only

The library has the right to make copies of the report for academic exchange

Certified by:

umg

Signature

Group Representative : Sigang Ung Shio Yien

Date: 20 June 2021



Signature of Supervisor

Name: Puan Raja Norliana Binti Raja Omar

Date: 20 June 2021

Note: *If the report is CONFIDENTIAL OR RESTRICTED, please attach the letter from the organization stating the period and reasons for confidentiality and restriction

ACKNOWLEDGEMENT

Thankful, we would like to express our gratitude towards our supervisor, Madam Raja Norliana Binti Raja Omar, for briefing and guiding us very well until the end of this research. Without her constant supervision and guidance, our research would be impossible to finish. In addition, do not forget to thank our family and friends for supporting us in mentally and spiritually despite facing various challenges during this preparation.

Besides that, thanks and congrats to every member of our group for the cooperation attitude and dedicated efforts. All of us attended every meeting and everyone shared their constructive opinions, creative ideas and information in this research. However, we also would like to thank our respondents, who are local people and visitors in Sabah, Malaysia. Lastly, we would thank those who got involved in this research directly or indirectly, deeply appreciated.

UNIVERSITI
MALAYSIA
KELANTAN

TABLE OF CONTENT

	Pages
TITLE PAGE	i
DECLARATION	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENT	iv
LIST OF TABLES	viii
LIST OF FIGURES	x
LIST OF SYMBOLS & ABBREVIATION	xi
ABSTRACT	xii
ABSTRAK	xiii
CHAPTER 1: INTRODUCTION	
1.1 Introduction	1
1.2 Background of the Study	2
1.3 Problem Statement	4
1.4 Research Objective	6
1.5 Research Question	7
1.6 Scope of Study	7
1.7 Significance of the Study	8
1.8 Definition of Terms	9
1.8.1 Protection of Natural Resources	9
1.8.2 Full Public Participation Actively	9
1.8.3 Balance of Urban Growth With Natural Surroundings	10
1.9 Summary	10

CHAPTER 2: LITERATURE REVIEW

2.1	Introduction	12
2.2	Factors that Influenced Sustainability Ecosystem	13
2.2.1	Protection of Natural Resources	13
2.2.2	Public Participation	14
2.2.3	Balance of Urban Growth With Natural Surroundings	16
2.2.4	Promoting Sustainability of Ecosystem in Sabah	17
2.3	Previous Related Research	18
2.4	Theoretical Framework	20
2.5	Conceptual Framework	21
2.6	Hypothesis	22
2.7	Summary	23

CHAPTER 3: METHODOLOGY

3.1	Introduction	25
3.2	Research Design	26
3.3	Population	27
3.4	Sample Size	29
3.5	Sampling Method	32
3.6	Data Collection Procedure and Method	33
3.7	Research Instrument	35
3.8	Data Analysis Approach	36
3.8.1	Descriptive Analysis	37
3.8.2	Reliability Analysis	38
3.8.3	Pearson Correlation Analysis	39
3.9	Pilot Test	40
3.10	Summary	41

CHAPTER 4 : RESULTS AND DISCUSSION

4.1	Introduction	42
4.2	Results of Descriptive Analysis	42
4.2.1	Demographic Profile	43
4.2.1.1	Gender	43
4.2.1.2	Age	44
4.2.1.3	Race	46
4.2.1.4	Working Status	47
4.2.1.5	Education Level	49
4.2.1.6	Citizenship	50
4.2.1.7	Number of Trips to Sabah	52
4.2.1.8	Reason to Sabah	53
4.2.2	Independent Variable (IV) and Dependent Variable (DV)	55
4.2.2.1	Protection of Natural Resources (IV)	55
4.2.2.2	Public Participation (IV)	56
4.2.2.3	Balance of Urban Growth with Natural Surroundings (IV)	58
4.2.2.4	Promoting Sustainability of Ecosystem in Sabah (DV)	59
4.3	Reliability Analysis	60
4.4	Pearson Correlation Coefficient	63
4.5	Discussion Based on Research Objective	69
4.6	Summary	72

CHAPTER 5: CONCLUSION

5.1	Introduction	73
5.2	Recapitulation of the Findings	73
5.2.1	Protection of Natural Resources	74
5.2.2	Public Participation	75
5.2.3	Balance of Urban Growth With Natural Surroundings	77
5.3	Limitation of Study	78

5.4 Recommendation	79
5.5 Summary	81
REFERENCES	82
APPENDICES	85



UNIVERSITI
MALAYSIA
KELANTAN

LIST OF TABLES

Tables	Titles	Pages
Table 3.1	Reliability Statistic of Pilot Test	40
Table 4.1	Gender of Respondents	43
Table 4.2	Age of Respondents	44
Table 4.3	Race of Respondents	46
Table 4.4	Working Status of Respondents	47
Table 4.5	Education Level of Respondents	49
Table 4.6	Citizenship of Respondents	50
Table 4.7	Number of Trips to Sabah of Respondents	52
Table 4.8	Reason to Sabah of Respondents	53
Table 4.9	Protection of Natural Resources	55
Table 4.10	Full Public Participation	56
Table 4.11	Balance of Urban Growth with Natural Surroundings	58
Table 4.12	Promoting Sustainability of Ecosystem in Sabah	59
Table 4.13	Result of Reliability Coefficient Alpha for the Dependent Variables and Independent Variable	61
Table 4.14	Correlation Between Protection of Natural Resources and the Promoting Sustainability of Ecosystem in Sabah	64
Table 4.15	Correlation Between Full Public Participation and the Promoting Sustainability of Ecosystem in Sabah	65
Table 4.16	Correlation Between Balance of Urban Growth with Natural Surroundings and the Promoting	66

Sustainability of Ecosystem in Sabah

Table 4.17	Summary Result of Pearson Correlation Coefficient	67
Table 4.18	Rules of Thumb of Correlation Coefficient	68



UNIVERSITI
MALAYSIA
KELANTAN

LIST OF FIGURES

Figures	Tittles	Pages
Figure 2.1	Conceptual Framework	21
Figure 3.1	Population of Sabah from 2011-2020	28
Figure 3.2	Determining Sample Size of Known Population	31
Figure 3.3	Simple Random Sample	33
Figure 3.4	Cronbach's Alpha Coefficient	38
Figure 3.5	Meaning of Pearson Correlation Coefficient Value (r)	39
Figure 4.1	The Percentage of Gender	44
Figure 4.2	The Percentage of Age	45
Figure 4.3	The Percentage of Race	46
Figure 4.4	The Percentage of Working Status	48
Figure 4.5	The Percentage of Education Level	49
Figure 4.6	The Percentage of Citizenship	51
Figure 4.7	The Percentage of Number of Trips to Sabah	52
Figure 4.8	The Percentage of Reason to Sabah	54

LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviations

WTO	World Trade Organization
UNSTAT	United Nations Statistics Division
WTTC	World Travel and Tourism Council
IUCN	International Union for Conservation of Nature and Natural Resources
UNEP	The United Nations Environment Programme
DV	Dependent Variable
IV	Independent Variable
UNWTO	United Nations World Tourism Organization
Sig	Significant
NGO	Non-Governmental Organization
SPSS	Statistical Package Social Science

Symbols

H	Hypothesis
N	Frequency
%	Percentage
r	Pearson Correlation
\leq	Less than or Equal to
=	Equal
p	p-value

ABSTRACT

This study aims to understand the determinant factors that influence promoting sustainability of ecosystem in Sabah, Malaysia. The nature of the natural ecosystem is self-sustaining and preserving for hundreds to thousands of years the characteristic mosaic of plant forms. However, particular development in Sabah have destroyed the natural ecosystem and had caused an inability to self-sustain the environment. Therefore, protecting natural resources and balance of urban growth within natural surroundings has become the factors to promote sustainability of ecosystem in Sabah, Malaysia. Hence, public participation and collaboration among several parties are significantly essential to sustain the ecosystem of natural environment. Sabah is well-known for its tourism-based resources that encompass the mix of natural environment, people, heritage and culture, tourism facilities, events and nature-based tourism destinations highly exposed to sustainability destruction. However, doing research during the pandemic of COVID-19 limits the data collection to only distributed using Google Form with respondents are those who used to travel to Sabah, including Sabah's residents between 15 to 64 years old with (n = 384). By using quantitative approaches, this research benefit students and society of Sabah.

Keywords : Promoting sustainability of ecosystem, protecting natural resources, balance of urban growth within natural surrounding, public participation, local people and tourist.

UNIVERSITI
MALAYSIA
KELANTAN

ABSTRAK

Kajian ini bertujuan untuk memahami faktor-faktor penentu yang mempengaruhi peningkatan kelestarian ekosistem di Sabah, Malaysia. Sifat ekosistem semula jadi dapat bertahan dan mengekalkan selama beratus-ratus hingga ribuan tahun ciri khas bentuk tumbuhan mozek. Walau bagaimanapun, pembangunan tertentu di Sabah telah memusnahkan ekosistem semula jadi dan menyebabkan ketidakupayaan untuk menjaga alam sekitar. Oleh itu, melindungi sumber semula jadi dan keseimbangan pertumbuhan bandar di sekitar semula jadi telah menjadi faktor untuk mendorong kelestarian ekosistem di Sabah, Malaysia. Oleh itu, penyertaan dan kerjasama orang ramai antara beberapa pihak sangat penting untuk mengekalkan ekosistem persekitaran semula jadi. Sabah terkenal dengan sumber daya pelancongannya yang merangkumi gabungan persekitaran semula jadi, manusia, warisan dan budaya, kemudahan pelancongan, acara dan destinasi pelancongan berasaskan alam yang sangat terdedah kepada kemusnahan kelestarian. Walau bagaimanapun, melakukan penyelidikan semasa pandemik COVID-19 menghadkan pengumpulan data hanya diedarkan menggunakan Google Form dengan responden adalah mereka yang biasa melakukan perjalanan ke Sabah termasuk penduduk Sabah berusia antara 15 hingga 64 tahun dengan ($n = 384$). Dengan menggunakan pendekatan kuantitatif, penyelidikan ini memberi manfaat kepada pelajar dan masyarakat Sabah.

Kata kunci : Mempromosikan kelestarian ekosistem, melindungi sumber semula jadi, keseimbangan pertumbuhan bandar di sekitar kawasan semula jadi, penyertaan orang ramai, penduduk tempatan dan pelancong.

UNIVERSITI
MALAYSIA
KELANTAN

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

This chapter consists of the background of the study, problem statement, research objectives, research questions, significance of the study, definition of terms, and summary. Problem statement is identified as a clear and descriptive statement that describes the symptoms of specific issues to be examined by a researcher (Mukesh, Salim, & Ramayah, 2013). Research objectives apply to statements of intent or act intended to be defined in the form of acts to address the questions posed. Research questions are generalized questions that could be answered by exploratory questions (Abao, 2018). Furthermore, the significance of the study can be defined as the note-worthy study conducted by the researcher who is hoped to be of interest in the research topic by many people and other researchers alike (Lee, 2020). The definitions of terms are short descriptions of independent variables and dependent variables.

1.2 BACKGROUND OF THE STUDY

Tourism is the activities of people traveling to and staying in places outside their usual environment for leisure, business, or other purposes for not more than one consecutive year. The primary purpose for a person to travel is business, visiting friends and relatives, business, and other personal pleasures (Cooper et al., 1999). This tourism activity involves tourists from various human backgrounds, including international tourism, internal tourism, domestic tourism, and national tourism. Tourism also may be defined as the processes, activities, and outcomes arising from the relationships and the interactions among tourists, tourism suppliers, host governments, host communities, and surrounding environments that are involved in the attracting and hosting of visitors (WTO, 2005). Tourism is a wide-ranging classification of the field in the industrial sector, which includes transportation, travel services, recreation and entertainment, accommodation, and food and beverage services.

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs. According to Elkington (1987), the concept of sustainability is composed of three pillars which are economic, environmental, and social. It is also known informally as profits, planet, and people. Following from "Sustainability Assessment and Management" stated to underline links between these three dimensions leading to formalize indicators needed to measure and assessing sustainability and effort to enhance it. In that way, sustainability has become an important issue in all the spheres of life by focusing on safeguarding natural resources against exploitation, in the name of productivity and

competitiveness, by manufacturing and service organizations. Nonetheless, nowadays, because of the environmental and social problems societies around the world are facing, sustainability has been increasingly used in a specific way. Therefore, people must practice the love of the environment within themselves so that our earth continues to be preserved for future generations.

The purpose of this study is to understand the determinant factors in promoting sustainability ecosystem in Sabah, Malaysia. In this context, Malaysian tourism products are a combination of the natural environment, people, heritage and culture, tourism facilities, and events. Nature-based tourism destinations are more important than other tourism products in promoting tourist destinations (Hamzah, 1997). For example, the declaration of Kinabalu National Park in Sabah as World Heritage site has added to the image of this state as the wild, unexplored frontiers of Malaysia and become a major attraction for nature tourism. The World Travel and Tourism Council (WTTC) also recognizes the significance of nature-based tourism products in Malaysia. From that, it can indirectly maintain and improve the quality of oxygen from the green life found in our country. Malaysia is one of the countries with a large number of reserved forests, but unlimited human activities will affect the well-being of the environment.

1.3 PROBLEM STATEMENT

In recent years, the tourism industry is on the rise, contributing significantly to Malaysia's economy. While Sabah is one of Malaysia's main tourist attractions, Sabah ecosystem sustainability research will make the tourism industry more competitive and, at the same time, wholly promoted. With this in mind, this study proposes a conceptual structure discussing internal and external influences fostering ecosystem sustainability in Sabah, Malaysia.

Study to support Sabah's ecosystem's sustainable growth covers internal and external challenges Sabah tourism operators face. These are the main factors that decide Sabah's sustainable ecotourism industry's good production and growth. The suggested internal considerations include open community growth, sustainable development between urban community development and natural environment, and complete public engagement in decision-making on development.

The local community is currently involved in various activities, from guides, homestay services, handicraft production to local retail and other activities. These activities provide essential feedback to cultural tourism growth. Although government policies supported local community participation, local people did not participate fully in cultural tourism in Sabah due to local beliefs, religions, and economic and traditional factors (Siow et al., 2014). Moreover, the government, local communities and researchers' lack of in-depth knowledge and attention to certain cultural products further hinders sustainability in Sabah's cultural tourism (Omar, 2013).

External considerations are the essential determinants of natural resource security, which are his, her, their, maintaining and extending open green spaces, shorelines, and natural watercourses, ensuring the optimum use of land in an ecosystem approach to maintain environmental integrity and diversity. Include, but not limited to, encouraging environmentally protected land and using rich soil for urban agricultural development. Demand for sustainable biodiversity tourism has become increasingly important and, under diverse conditions, numerous sustainable calculation approaches and methods have been developed to ensure their applicability and precision in measuring sustainability. Abbasi and Mohamed (2013) suggested that environmental indicators affect the sustainability of ecosystem tourism because they include natural ecosystem protection, waste management, infrastructure visual impact management along with facilities, and many others. These two powers (internal and external) jointly strengthened tourism industry efficiency in Sabah to support sustainable ecosystem growth and eventually led to tourism industry progress.

In Sabah, Malaysia, people pay growing attention to study to encourage sustainability of ecosystem. Including the local community's position, this appreciation makes the local community part of all planning decisions. The proposed development's economic, environmental, and social impact should be considered. The future research plan is to find a balance between urban growth and natural environment around Sabah, Malaysia. Which highlights having a strategic plan and an economic agenda aimed at developing effective and acceptable ways of marketing that demonstrate a sense of community and reflect a new type of urban growth that involves encouraging energy efficiency through effective land use planning and building design.

If internal and external factors development are essential for sustainable ecosystem development, the results of this study indicate protection of natural resources, full public

participation, and balance of urban growth with natural surroundings that will influence communities, government, also developers. Therefore, the purpose of this study was to focus on understanding determinant factors in promoting sustainability of ecosystem in Sabah, Malaysia. The overlooked problems in Sabah ecosystem development are limitations that triggered the sustainable development. In this case, the problem statement subsequently helps define the focus with which this work has been carried out. The approach describes the activities that were carried out to find a solution to a defined problem.

1.4 RESEARCH OBJECTIVE

The objective of this study are as follows

1. To identify the relationship between protection of natural resources towards promoting sustainability of ecosystem in Sabah;
2. To determine the relationship between public participation towards promoting sustainability of ecosystem in Sabah; and
3. To study the relationship between balance of urban growth with natural surroundings towards promoting sustainability of ecosystem in Sabah.

1.5 RESEARCH QUESTION

The research aimed to provide a better understanding of the sustainability ecosystem tourism in Sabah. Hence, the research question for this research were as follows:

1. What is the relationship between protection of natural resources towards promoting sustainability of ecosystem in Sabah?
2. What is the relationship between public participation towards promoting sustainability of ecosystem in Sabah?
3. What is the relationship between balance of urban growth with natural surroundings towards promoting sustainability of ecosystem in Sabah?

1.6 SCOPE OF STUDY

The scope of the study explains the extent to which the field of research will be explored sustainable tourism in Sabah, Malaysia by conducting surveys, providing questionnaires to the public at random. Then, the researcher will quantitatively analyze the questionnaire.

In this research, the scope of the study is to know more about sustainable tourism of ecosystem in Sabah, Malaysia. This study will show more on promoting sustainability of ecosystem in Sabah, Malaysia. Therefore, the tourist industry will know how to improve their

sector by implementing the promoting strategies that may influence sustainability ecosystem tourism in Sabah, Malaysia. The scope of the study will examine the protection of natural resources, public participation, and the balance of urban growth with natural surroundings to promote sustainability of ecosystem in Sabah, Malaysia.

1.7 SIGNIFICANCE OF THE STUDY

The study will contribute to improving education in the tourism industry in Malaysia and global universities. At the end of the research, this study is expected to contribute to the body of knowledge about the promoting sustainability of ecosystem in Sabah, Malaysia. Furthermore, the promoting sustainability of ecosystem in Sabah could get benefits to expand their market in Malaysia as well as around the world. Moreover, this study could help the tourism industry determine the relationship between public participation and promoting sustainability of the ecosystem in Sabah. Lastly, the Malaysians can get the opportunity to protect natural resources, public participation actively in promotes sustainability of ecosystem and also to balance between urban development and natural surroundings.

1.8 DEFINITIONS OF TERMS

1.8.1 PROTECTION OF NATURAL RESOURCES

Protection is an action that is taken to prevent external forces from harming something. Tangible objects, including organisms, systems, and intangible things, such as civil and political rights, may be secured. Although means of a defense vary considerably, the fundamental definition of the term remains the same. In addition, resources that occur without any human intervention are natural resources. This includes all-important characteristics, such as commercial and industrial use, aesthetic value, interest in science, and cultural value. Sunlight, atmosphere, water, land, all plants and animals are included on the earth. In nature reserves, natural resources which be part of our natural heritage or preserved.

1.8.2 PUBLIC PARTICIPATION

According to European (2020), participation can be interpreted as a process of government-public engagement, ranging from advising and listening on the one side to pursuing jointly negotiated proposals on the other; and there is dialogue, debate, and analysis on both sides. Public participation can be defined as a deliberative procedure by a concerned or impacted citizen, before a political decision is made, civil society groups and government actors are

engaged in policy-making (European, 2020). Usually, civic engagement seeks and promotes the involvement of others who are personally impacted by or interested in a decision. This may be in relation to individuals, states, agencies, corporations, or any other institutions that influence the interests of the public.

1.8.3 BALANCE OF URBAN GROWTH WITH NATURAL SURROUNDINGS

According to Planning (2020), urban growth is characterized as the pace at which an urban area's population increases. This results from the migration of people from rural areas to urban areas by urbanization. The extension of a metropolitan area into the surrounding environment is also referred to as urban growth. While balance can be defined as a state in which objects have equal power (Cambridge, 2020).

1.9 SUMMARY

In Chapter 1, the first section regarded the background of the study, and it explained about factors in promoting sustainability of ecosystem the case of Sabah, Malaysia. At the same time, problem statement is illustrated in the second section. From this section, the problem statement has stated the problems that often occur during this research. Next, there were four research questions and four research objectives in the study, as illustrated in sections three and

section four. Therefore, throughout the research conducted, these four elements are the main purpose of achieving the objectives set in this topic. In section five of this chapter, it was explained the scope of the study. In section six, it was defined the significance of the study, while section seven illustrated the definition of the terms used in the conceptual model of this section.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

There are seven sections in chapter 2, including the introduction. The first section is the study variable, which brief about independent variables and dependent variables of our study. Previous related research will be discussed in the following part. Next, is theoretical framework which is the theory that can link to our study. The content will continue with conceptual framework that explained the relationship between independent variables and dependent variables. Along with hypothesis statement, and will closed with a conclusion which is a short summary of chapter 2. The background of the variables as evidence is given in this chapter.

2.2 FACTORS THAT INFLUENCED SUSTAINABILITY ECOSYSTEM

2.2.1 PROTECTION OF NATURAL RESOURCES

According to Sustainable (2021), protecting of natural resources is important to maintaining the sustainability of a community. Water, energy, air and climate, biodiversity, land, and forest play an important role in protecting natural resources. Together, these natural resources offer ecosystem services that can offer better quality to human life (Lyyanki & Muralikirshna, 2017). Thus, there has a close relationship between protection of natural resources and ecosystem. Declining air quality and climate change will adversely affect the ecosystem (Sustainable, 2021). By limiting or preventing the release of dangerous chemicals into the air and minimizing air pollution, air quality can be maintained.

Biodiversity is vital to ecosystem's functions and services on which people rely and is closely connected to economic, social, and environmental components of sustainability (Niesenbaum, 2019). Nevertheless, biodiversity still faces several threats such as habitat destruction or fragmentation and pollution. According to Sustainable (2021), communities may promote healthy wildlife through supporting integrative approaches for management, protection, and enhancement of wildlife population and habitats appropriate to the wildlife area. Furthermore, protected areas can be established to protect natural resources. In the cases of legally protected areas under national laws and regulations, it is necessary to comply with the requirements specified in the prescribed protection zone management plan (Lyyanki &

Muralikirshna, 2017).

Integrated environmental education should be used as an awareness-building instrument that would illustrate and clearly stress the sustainable use of the natural resource base to protect the natural resources of future generations. (Thomas, 2006). Indirectly, it not only allows people to have knowledge in protecting natural resources but also provides human beings with better quality of life. According to Thomas (2006), there were some natural resources in the past, but this may not be the case in the future, as it will depend on how humans are utilization. Therefore, if it is to be done in a balanced manner, environmental education on the features of natural resources must be carried out in such a way that it does not become a limiting factor for sustainable development.

The focus of the protection of natural resources is environmental sustainability to ensure that it is used in the present and maintain its potential to ensure the lives of future generations (W.WRI, IUCN & UNEP, 1992). To have a healthy ecosystem, policies and plans must balance economic and conservation needs.

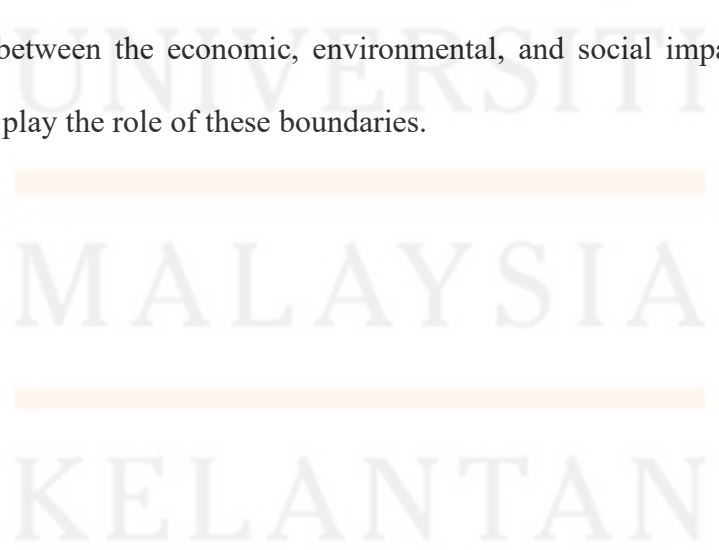
2.2.2 PUBLIC PARTICIPATION

Public participation conceptualizes the relationships between government and other sectors in one of two ways, collaboration. We use this to draw attention to the role of public and government relations in shaping an active Sabah community. The second method is the role of public participation in promoting the sustainable development of Sabah's ecosystem. In this

content, promotion strategies allow the public to participate in ecosystem sustainability decisions fully. The government may be more or less receptive, and the public may be more or less active in its insistence to play a role.

According to Beard (2003), the public must seek a role in decision-making. According to some, in government, the public must describe individuals who work on behalf of the public's interests. This includes activism (Davidoff 1965), justice (Krumholz and Forester 1990), and radical (Clavel, 2010) planners who use their political offices, technical judgment, and ethical responsibilities to discuss what they know about socio-economic disadvantaged groups' problems.

The public has the potential to collaborate. Activism, justice, and radical planners fundamentally agree with the second method and hope to promote it further. Researchers propose that some forms of full public participation can improve sustainability ecosystem planning and policy outcomes in Sabah. This approach made researchers realize the importance of full public participation in the efforts to solve the problem. This including the role of a local community, this place acknowledges allowing the local community to be part of all planning decisions. The inclusive approach between the economic, environmental, and social impacts of the proposed development should play the role of these boundaries.



2.2.3 BALANCE OF URBAN GROWTH WITH NATURAL SURROUNDING

The future research agenda is to find a balance between urban growth and natural environment around Sabah, Malaysia. This highlights delivering a strategic plan and economic policy aimed at developing effective and acceptable ways of marketing that demonstrate a sense of community, as well as reflecting a new type of urban growth that involves encouraging energy efficiency through productive land use planning and building design.

Provide insights on the importance of building a balanced community over a period of time. Bring practical theory into the community and draw attention to the importance of urban development in the natural environment and society (Hajer and Wagenaar 2003). Defined in this way, the community must practice, learn and act through practice. As long as people engage in practical activities, the community will understand the importance of urban development in the natural environment.

This method determines the importance of balancing urban growth with the goal of creating a natural environment. Communities' involvement is part of balanced urban growth by establishes commitments, responsibilities, and full support. Striking a balance between urban development and the natural environment can encourage community action, development, and personal responsibility. The goal of urban growth in the economy and society is to lead to stable and balanced development decisions.

2.2.4 PROMOTING SUSTAINABILITY OF ECOSYSTEM IN SABAH

Another attempt to promote ecosystem sustainability in Sabah's tourism industry is the practical approach. This is a system of sustainable monitoring methods that describes practical methods as a way to reduce errors and analyses the business environment. In addition, a practical approach is also not only responsible for the planning of promoting Sabah's sustainability evaluations but also helps with discussions and generating ideas on key issues, along with comparing the current sustainable evaluations and determining whether the goals set have been met. When measuring the sustainability of Sabah's ecosystem, practical methods are used.

This approach stresses the importance of a comprehensive understanding of numerous dimensions. Practical methods allow for more strategic planning through the protection of natural resources, active public participation, and the balance between urban growth and the natural environment to improve the sustainability of the ecosystem, thereby improving the quality of tourism products. The demand for sustainable ecosystems has become more and more important, and various sustainable measurement methods and methods have been developed in different contexts to ensure their applicability and accuracy in measuring sustainability levels (Abbasi and Mohamed, 2013).

2.3 PREVIOUS RELATED RESEARCH

Sustainability is one form of resilience that is able to last for a long time. Therefore, it is undeniable that maintaining ecosystem sustainability is not an easy task as we are faced with various pollution. Moreover, in other words, ecosystem sustainability explains how biological systems remain diverse and productive over time. For humans, it is the potential to maintain well-being in the long run, which in turn depends on the conservation of nature and natural resources. For example, a more sustainable way of life can take many forms from the restructuring of living conditions such as eco-rural cities, eco-cities and sustainable cities. Here, the government should re-evaluate the economic sector, especially in permaculture, green building, sustainable agriculture, or sustainable architecture, to develop new technologies as well as adapting the lifestyles of individuals conserving natural resources.

Nowadays, environmental and social problems faced by communities around the world have created continuity which has been widely used in certain ways. According to Smith (2009), sustainable use can also be prevented indirectly as a result of the negative impact on ecosystem services arising from resource management, extraction, or widespread use. Dealing with domestic, industrial, and agricultural waste is a growing environmental problem with implications for ecosystems and human health. This is because waste and by-products of production often pollute the environment (air, water, and soil) with hazardous materials, which can limit or disrupt the ability of ecosystems to provide essential resources and services in human life.

In short, fostering ecosystem preservation is an important element in sustaining nature and life through competent and wise actions. Next, there are other examples of previous studies relevant to emerging problems for sustainable growth and forest management in Sarawak, Borneo. First, as we know, Borneo's forests are the world's third-largest islands that maintain some of the world's highest biodiversity and carbon storage. The forest also provides essential ecological services to millions of people in the country, including many indigenous peoples. The Pan-Borneo Highway is expected or under development in Sarawak, a Malaysian state that covers most of Borneo.

These developments seek to improve the economic prosperity and regional partnerships, support community access to resources, and encourage industrial development. The effects of road and dam construction on forest integrity, biodiversity, and ecological resources remain unreported. That's because Borneo's people don't want the building of roads and dams to harm the life and environment they've defended so far. The project will impact 32 protected areas, including several main habitats of endangered species such as *Nasalis larvatus*, Sarawak surili (*Presbytis chrysomelas*), Bornean orangutans (*Pongo pygmaeus*), and tufted squirrels (*Rheithrosciurus macrotis*).

Local and cross-country forest links between Borneo Malaysia and Borneo Indonesia will also be significantly decreased under the proposed growth trajectory. Here, approximately 161 km of Sarawak's Pan-Borneo Highway will cross the forest landscape, and 55 km will cross the carbon-rich peat, while 13 hydroelectric dam projects will collectively impact 1,7 million ha of Sarawak forest. The consequences of constructing proposed highway and hydroelectric projects would increase the region's carbon footprint. In addition, several new road parts and hydroelectric dams will be constructed on steep slopes in high rainfall zones and woodland areas,

rising building costs, and ongoing maintenance. Projects often indirectly change downstream communities' subsistence practices, threatening their long-term survival.

Several approaches have been made to resolve this issue by highlighting and evaluating roads and hydroelectric dams, landscape access, and even protected area, peat-land, and slopes. While this action includes certain authorities as well as high risk, this ecosystem's sustainability can also be retained at all parties' discretion. The construction aim is to further improve the infrastructure and popular interest in the Borneo community's use of highways and dams. In reality, this action would minimize nature sustainability throughout the forest there. Each nation has a role in preserving nature's sustainability as it will conserve the wildlife species and the population's oxygen content in a country itself.

2.4 THEORETICAL FRAMEWORK

The theory that can be connecting to this study is sustainability theory. According to Willis (n,d), sustainability theory aims to prioritize and combine social responses to environmental and cultural issues. An economic model aims to preserve environmental and financial capital; an ecological model looks at biological diversity and ecological integrity; a democratic model looks at individual dignity-realizing social structures. Sustainability implies a capacity over time to sustain any object, result, or operation. Agriculture, forestry, or financial expenditure may be called renewable, which ensures that the practice does not deplete the material capital on which it relies (Wilis, n,d). A related usage of the word 'sustainability' applies to contingent social

conditions; for example, whether it does not exceed the support of a national society, a peace treaty, an economic strategy, or a cultural tradition may be considered sustainable. The definition of sustainability, in its increasingly popular usage, frames the ways in which environmental issues place the conditions of sustainable economic, ecological, and social environments at risk.

2.5 CONCEPTUAL FRAMEWORK

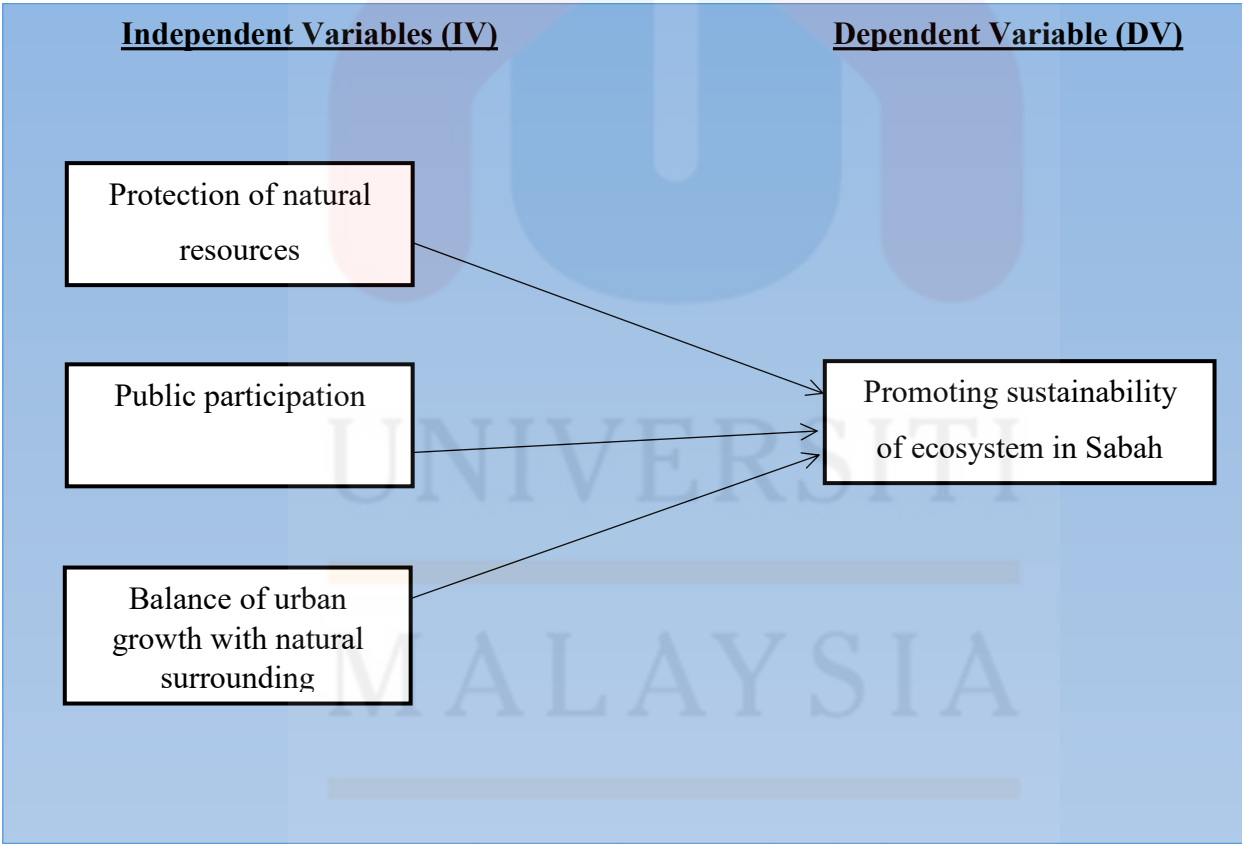


Figure 2.1: Conceptual Framework

The conceptual structure includes your thoughts on anonymously defining the research subject, the issue to be examined, the questions to be answered, the literature to be reviewed, the hypotheses to be applied, the methodology to be used, the processes, procedures, and tools, the data analysis and evaluation of results, suggestions, and conclusions to be drawn (Ravitch & Riggan, 2017). Figure 2.1 shows this study's independent (IV) and dependent (DV) components.

The independent variables are the strategies aim at making promotes of Sabah's ecosystem sustainability. On the other hand, the dependent variable (DV) is promoting sustainability of Sabah's ecosystem. This study identified three independent variables (IV), which are the protection of natural resources, participation public, and the balance between urban development and the natural environment. Figure 2.1 shows the connection between protection of natural resources, public participation, balance of urban growth with natural surroundings, and promoting sustainability of Sabah's ecosystem.

2.6 HYPOTHESES

This is a literature review that the independent variables which are the protection of natural resources, public participation, and balance of urban growth with a natural surrounding that indicate the promoting sustainability of ecosystem in Sabah. Therefore, the study plan to examine the level of promoting among these variables. Based on the literature review that had

been discussed in the research questions, the hypothesis of this study is summarized in the following manner.

H1

There is a relationship between protections of natural resources with the promoting sustainability of ecosystem in Sabah.

H2

There is a relationship between public participation with the promoting sustainability of ecosystem in Sabah.

H3

There is a relationship balance of urban growth with natural surrounding with the promoting sustainability of ecosystem in Sabah.

2.7 SUMMARY

In short, a variable is an attribute or characteristic that is stated in a specific or an applied way. Variables are things that can be measured, controlled, or manipulated in an investigation. A point in the case is to introduce the independent variables (IV) and dependent variable (DV) of this research. For this research, the variables are related to the component of this study. The

independent variables are the factors that give effect to dependent variables, which are the promoting sustainability of ecosystem in Sabah. On the other hand, the dependent variable (DV) is the promoting sustainability of ecosystem, while the other three are the independent variable (IV) which are the protection of natural resources, public participation, and balance of urban growth with a natural surrounding that indicate the promoting sustainability have been determined in this research. Based on the literature review that had been discussed in the research, there are three hypotheses developed to test the relationship between the variables studied.



CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

Methodology is the design framework for the execution of study or the creation of a protocol that is not in itself an instrument or method, or technique for doing things. The research methodology is a basic technique or method that is used to classify, choose, process and interpret knowledge on the subject. In research, the review section allows the reader to independently access the overall viability and reliability of the report. This chapter obviously defines the research method to complete this study. Besides, this study is considered as survey research with regard to the generalization of its findings. This research has selected a quantitative research method, case study approach for this research and these principles are explained in depth. In addition, this chapter describes and discusses the population, survey, analysis techniques, and data collection methodology of the study. This chapter will discuss the research design that is being used to carry out this study, target population, sample size, sampling method, data collection, research instrument, data analysis, and closed by the summary of this chapter.

3.2 RESEARCH DESIGN

The study is a thoughtful, structured way to solve problems and learn new knowledge (Thomas et al., 2011). The study may also be defined as being a systematic method of exploration and development of human knowledge. It should solve a dilemma or add innovatively to current information (Gratton & Jones, 2010). To be counted as analysis, it must be rigorous and methodical in its methodology and procedures and must follow applicable validity and reliability criteria and standards.

The design reflects on purposes, uses, purposes, intentions, and plans within the realistic constraints of place, time, money, and availability of the researcher (Hakim, 2000). Analysis architecture represents a researcher's thoughts. It helps avoid frustration by binding the study together with a framework strategy explaining how all the major pieces of the research work together to attempt to answer the research questions.

Therefore, less reliable approaches are most commonly applied and are natural observations, surveys, or experiments. In this case study, these are based on descriptive research architecture, providing information on problem-solving. The knowledge gained as a result of primary source measurement allows for identifying quantitative study.

Quantitative experiments are objective, applying systematic, objectively validated methods. Defines certain groups in this style of analysis and finds associations between them. The study is typically focused on surveys conducted among reasonably broad samples of respondents, most often representative for purposeful population, using statistical and mathematical methods to pick samples and compile data.

It consists of gathering data from respondents using formalized questionnaires, findings, and surveys. In this way, based on collected data, it can be mentioned how Sabah's community maintenance and advancement to conserve natural resources, active full citizen engagement, and matching urban growth with natural surroundings occur in fostering ecosystem sustainability.

The study was scanned to find case studies on fostering ecosystem preservation in Sabah. In this case, a search was limited to Sabah data. In the further point, material relates to topics such as sustainability environment, sustainability of natural resources, citizen engagement, and economic development, while without a doubt they are a critical element promoting Sabah's sustainability ecosystem.

3.3 POPULATION

According to Polit and Hungler (1999), the population is a set of features within a group that statisticians use to conclude a study's subjects. Statistically, a population is a whole pool from which a statistical survey is taken. The population can also refer to a category of individuals, things, activities, hospital visits, or measurements. Thus, a population may be assumed to be an abstract observation of subjects clustered by a shared attribute. Unlike a survey, there are no typical errors to record when statistical evaluating a population. This is because using a survey, such errors tell analysts how much their estimation can deviate from the actual population value. But since you're dealing with the actual population, you know the true meaning.

Typically the population of a city or state is reported from time to time where a population may be ambiguous or precise.

In this study, the targeted population aged will be 15 to 64 for those who live in Sabah or visited Sabah, because eco-tourism development can have more impact on future generations on this age. According to Hirschmann (2020), the population of Sabah, Malaysia is estimated to be around 3.91 million in 2020.

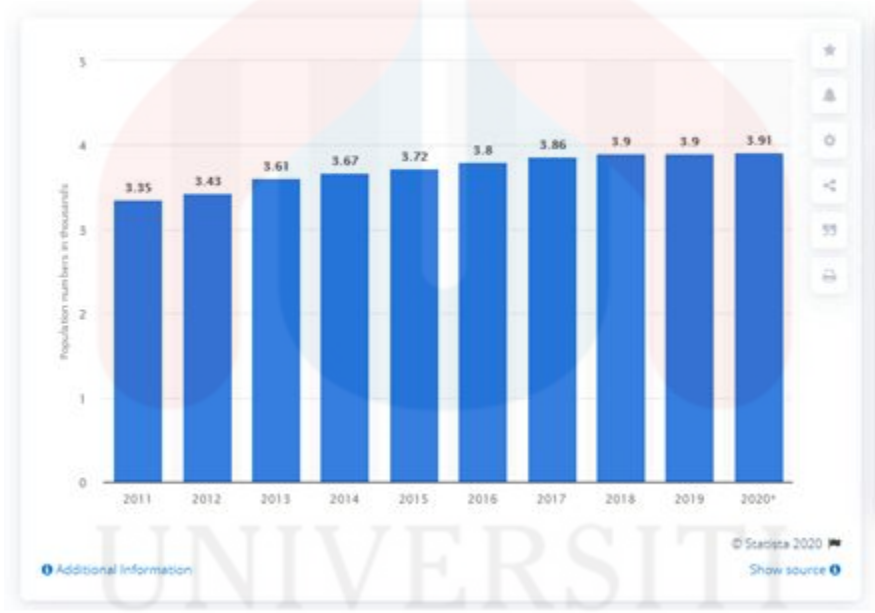


Figure 3.1: Population of Sabah from 2011 – 2020

Source : Hirschmann, 2020

According to the UNWTO (United Nations World Tourism Organization), ecotourism's essential characteristics can, among others, minimize negative impacts on the natural

environment and foster understanding of nature conservation. Sabah has some of the world's largest, wealthiest, and most diverse rain forests. To ensure the protection of the forest environment under its care, Sabah Foundation Group has set aside five conservation areas: Danum Gorge, Maliau Basin, Imbak Canyon, Silam Coast and Taliwas River. These forests are not only vital for protecting the atmosphere and maintaining biodiversity, but also for enhancing environmental health, mitigating stress, cooling the air and preventing storms, thereby providing a range of ecological benefits to modern society.

Visitors who visit the conservation areas have the opportunity to enjoy the beauty of nature without any pollution or human activity surrounded by the uniqueness and diversity of flora and fauna around it. Most of the villagers were directly or indirectly impacted by sustainable development in the area. The targeted population aged will be 15 to 64 years old because at that age shows the highest percentage in maintaining ecosystem sustainability in the area

For the present research, three important aspects need attention which is:

- a) Element: Factors in promoting sustainability of ecosystem in Sabah, Malaysia
- b) Sampling units: Among local people and tourists
- c) Location: Recreational forests in the Sabah area

3.4 SAMPLE SIZE

Sample size can be defined as a subset of a population which to make sure that there is a

sufficient amount of information to reach a conclusions (Sekaran & Bougie, 2010). To obtaining accurate, statistically significant results and successful research, the size of the sample is a key (Qualtrics, 2020). A larger sample size help researcher to better determine the average values of their data and eliminate errors created by evaluating a limited number of possible atypical samples.. In this study, the respondents of the sample that were obtained is a group of people who were went to Sabah or residents of Sabah who is aged 15 and above. According to Hirschmann (2020), around 73.4 percent of the population in Sabah is expected to be between the ages of 15 to 64, which is 2.86 million. The population is expanding, and so is the sample size. Therefore, relative to the population, then determine the sample size. Since there have 2.86 million in between the ages of 15 and 64 in Sabah, which is exceeds 1,000,000 people, the sample size of this study will be in 384 (Kerjcie and Morgan, 1970).

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.
S is sample size.

Figure 3.2: Determining Sample Size of Known Population.

Source : Krejcie and Morgan, 1970.

3.5 SAMPLING METHOD

Sampling is the process of choosing an appropriate number of rudiments from the population. There is neither time nor resources to a researchers to analyze the whole population but sampling method allows them to minimize the number of cases (Hamed, 2016). For this study, sampling is very important because it will directly influence the conclusion of this study if the researcher selects the wrong target respondent. The method of sampling can be classified into two categories which are probability sampling and non-probability sampling..

Probability sampling can be describe “there is an equal chance for every item of the population to be sampled” while non-probability sampling can be describe “there is no need to be representative or random for a sample of respondents or cases, but it requires clear reasons to include certain cases or people rather than others” (Hamed, 2016). Probability sampling which include simple random, stratified random, cluster sampling, systematic sampling and multistage sampling. For non-probability sampling, the type of methods such as quota sampling, snowball sampling, judgment sampling and convenience sampling. Simple random sampling which is one of the probability sampling method will be used in the study. In this sampling, the sampling frame is drawn from the entire population which is known as a subject sample and there is an equal opportunity for the selection of every member of the population. The study used simple random sampling to collected data because it ease of use and its accurate representation of the larger population.

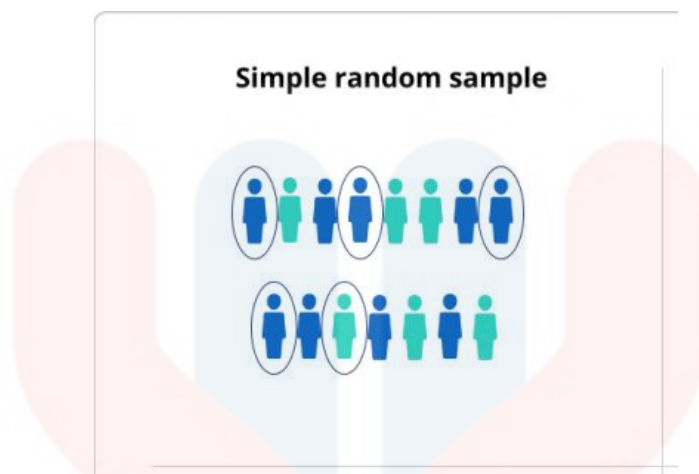


Figure 3.3: Simple Random Sample

Source : Shona McCombes, 2019.

Figure 3.3 shows simple random sample which will be used to choose that respondents that needed in this study. Simple random sampling happens when each individual is likely to be included in the survey and all possible samples of a given size are likely to be chosen in the same way (West, 2016).

3.6 DATA COLLECTION PROCEDURE AND METHOD

Data collection is the procedure to gather information from all appropriate sources in order to provide answers to study questions, test hypotheses, and evaluate outcomes (Business, 2020).

There have two categories for data collection which is primary data collection methods and

secondary data collection methods. Secondary data collection method can be defined as data that gathered by other people for his research work and has already been through the statistical analysis (Business, 2020). The secondary data also knows as the second-hand data which is easily accessible from other websites. Secondary data usually collected from journal or article, online website, and etc.

In this study, researcher will use primary data to gather the information of research questions. Primary data refers to the raw data, which collected by researcher for a specific research goal (Hox & Boeije, 2004). The primary data also known as the data collected in first hand into the study. By using the primary data to interpret the outcome, it is more accurate, trustworthy and meaningful for the result, which is the first hand data. Primary data collection methods included delphi technique, projective techniques, focus group interviews, questionnaire method and interview method. Since this study is using quantitative research method, questionnaire method will be more suitable for collecting primary data. Questionnaire method can be defined as the most obvious data collection method, which consists of a series of questions that relevant to research questions that can elicit information from respondents (Roopa & Rani, 2012). A questionnaire is simply a mimeographed or printed list of questions for a respondent to give his or her view (Roopa & Rani, 2012). Proper questions, the correct order of questions, the correct proportion or format of the questionnaire will make the survey useful because it can accurately represent the views of respondents (Roopa & Rani, 2012).

Researcher mostly used questionnaire method to compute statistical analysis. Moreover, there have several advantage by using questionnaire such as lower cost, accessibility to widespread respondents, time saving and the most important things during this pandemic time allow to reduce physical contact with others. There will be closed-ended questions for this study

questionnaire which replies from respondents are limited to a fixed collection of responses. The structure of the questionnaire is created and designed in English language and will be translate to Malay language to allow respondents can easy to understand and clear. The questionnaire will distribute by using Google Form.

3.7 RESEARCH INSTRUMENT

Besides, this form of analysis is typically cheaper than other approaches, and easier to track because it has standardized. Research instruments are measuring methods such as questionnaires, assessments or scales designed to help researchers collect valuable research subject data (Goldkuhl, 2012). In this study, the questionnaire was used to gather data to obtain all the input needed to complete this research. The questionnaire is a data collection tool comprising respondents answering a set of questions either written or orally.

The first part is section A, questions about the respondent's demographic information such as gender, age, race, income level, status, education level, and frequency of going to Sabah. This research also involved a large number of respondents so that researchers use this method because it is an efficient way of collecting data and information. Demographic data helps paint a more accurate picture of the group of persons that we trying to understand. By better understanding the type of people who are likely agree to our promotional strategies. Psychographic or life style questions are also included in the template forms.

The 5-Likert Scale being used in this study because the reactions are effectively quantifiable and abstract to the calculation of some scientific investigation (Likert and Araki, 1986). The structure of the questionnaires in section A using nominal and interval scale while in section B and section C using Likert Scale. Section B part, consists of questions related to the independent variable meanwhile section C part, consist of questions related to the dependent variable. The data obtained through questionnaires. Hence, measurements on the 5-Likert Scale are 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree. Besides, this 5-Likert Scale typically does not have two extreme options which are ‘very strongly disagree and ‘very strongly agree’ that usually being used in the 7-Likert Scale (Pearse, 2011).

3.8 DATA ANALYSIS APPROACH

According to Xia & Gong (2015), data analysis is a method of reviewing, washing, converting, and modeling data in order to find valuable information, inform assumptions, and help decision-making. The key aim of data analysis is to locate sense in data to use inferred information to make educated decisions. This data analysis has multiple facets and approaches, encompassing various techniques under a variety of names, and is used in various business, science, and social science domains. Data analytic is critical for organizations today, as data-driven choices are the only way to be fully secure in business decisions. On a hunch, some successful companies can be made, but almost all successful business decisions are data-based.

There have 3 types of data analysis that can be applied in this research, which is Descriptive Analysis, Reliability Analysis, and Pearson Correlation Analysis.

3.8.1 Descriptive Analysis

Descriptive statistics are used to assess the basic aspects of data in research. In other words, descriptive statistics are used to help describe and explain the properties of a given data collection by offering concise summaries of the data measurements. It will present demographic data in the form of a simple visual analysis, as well as a summary of the sample and estimate. Descriptive statistics may determine the frequency, mean, variance, and standard deviation from quantitative analytic data.

3.8.2 Reliability Analysis

The reliability analysis is carried out in SPSS using the factor and reliability commands, as well as the process sub-command, which allows users to select a matrix data set as input (Weaver & Maxwell, 2014). The techniques used to measure the data needed to characterize the range are known as reliability analysis. This method might also be used to assess the consistency of relationships between dependent and independent variables. The result of the reliability study may be described as a high degree of correlation, with a more dependable range. The cronbach's alpha and outcome are shown in Figure 3.4.

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Figure 3.4: Cronbach's Alpha Coefficient

Source: Lee Cronbach, 1951

3.8.3 Pearson Correlation Analysis

The goal of correlation analysis is to perform simple predictions such as predictive accuracy, which is determined by the R value magnitude and the overall model's statistical significance. The Pearson correlation analysis was done to investigate the connection between the dependent and independent variables (Statistics, 2019). Pearson's correlation analysis may be used to determine the strength of the relationship between two variables (University, 2019). Variables are important because they impact the precision of the outcome. Correlation Analysis can examine the fact and anticipate the event and object values in the future. Figure 3.5 illustrates the meaning of Pearson Correlation Coefficient value (r).

Correlation Coefficient Value (r)	Direction and Strength of Correlation
-1	Perfectly negative
-0.8	Strongly negative
-0.5	Moderately negative
-0.2	Weakly negative
0	No association
0.2	Weakly positive
0.5	Moderately positive
0.8	Strongly positive
1	Perfectly positive

Figure 3.5 : Meaning of Pearson Correlation Coefficient Value (r)

Source : Ratnasari et al. 2016.

3.9 PILOT TEST

Pilot testing, often known as pre-testing which refers to a small-scale trial run of a component. The questionnaire inaccuracy can be reduced with the aid of the pilot test (Singh, 2007). Pilot testing is necessary to confirm that the respondents understand the questions and that there are no issues with the language or measurement. A limited number of people are used in pilot testing to see if the questions are acceptable and if they are understood. In this research, there have 30 respondents that participated in pilot test of questionnaires. Table 3.1 shows the results of pilot test for this research’s questionnaire.

Table 3.1 : Reliability Statistic of Pilot Test

No.	Variable	Cronbach’s Alpha	No. of Item	N
1	Protection of Natural Resources	0.820	6	30
2	Public Participation	0.854	5	30
3	Balance of Urban Growth with Natural Surroundings	0.773	4	30
4	Promoting Sustainability of Ecosystem	0.824	5	30

According to the table 3.1, the results shows each variables have targeted with Cronbach's Alpha between 0.773 to 0.854. In the other words, all variables have reached the minimum criterion which is Cronbach's Alpha 0.6 with internal consistency is questionable. The greatest coefficient (0.854) was found for public participation, while the lowest value was found for balance of urban growth with natural surroundings (0.816).

3.10 SUMMARY

The methodology in the research is discussed in this chapter. An introduction is given at the opening of the chapter. The research design, population, sample size, sampling method, data collection procedure and method, research instrument, data analysis approach, and a summary of this chapter which has consider and describe the methodology used in this research. The methodology used in this chapter was used to conduct a proper survey.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 INTRODUCTION

The results of the research data were obtained from 384 respondents. In this study, the researcher used the Statistical Package for the Social Sciences (SPSS) version 24 software to analyze the data that have been collected. Furthermore, this chapter includes Descriptive Analysis, Reliability Analysis, and Pearson Correlation Coefficient Analysis.

4.2 RESULTS OF DESCRIPTIVE ANALYSIS

The researcher had analyzed the frequency which included percentage and sum of demographic profile of 384 respondents as well as mean and standard deviation for Section B

and Section C of independent variables and dependent variable stated in the questionnaire. Descriptive analysis provides simple summaries about the sample and the measures. Furthermore, descriptive analysis is used to estimates, summaries and arranged in tables to meet the objectives which are to analyze the effect of the independent variables which are the protection of natural resources, public participation, and balance of urban growth with a natural surrounding that indicate the promoting sustainability of ecosystem in Sabah

4.2.1 DEMOGRAPHIC PROFILE

4.2.1.1 GENDER

Table 4.1 : Gender of Respondents

Gender	Frequency (N)	Percent (%)
Male	170	44.3
Female	214	55.7
Total	384	100.0

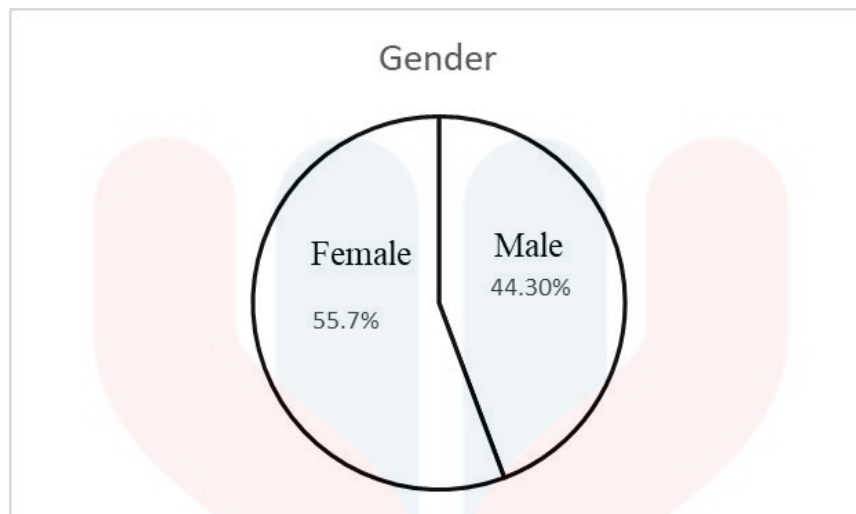


Figure 4.1 : The Percentage of Gender

Table 4.1 and figure 4.1 showed that 55.7% (214 people) of the respondents were female and 44.3% (170 people) of the respondents were male.

4.2.1.2 AGE

Table 4.2 : Age of Respondents

Age	Frequency (N)	Percent (%)
Below 20 years old	28	7.3
21-30 years old	211	54.9
31-40 years old	112	29.2
41 years old and above	33	8.6

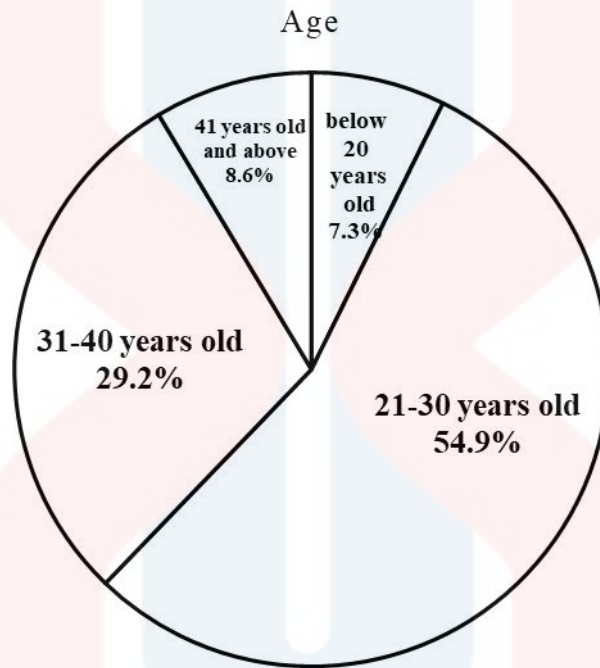


Figure 4.2 : The Percentage of Age

The respondents in various ages participating in the questionnaire are showed in Table 4.2 and Figure 4.2. The age of 20 years old and blow was the smaller group with just 28 respondents and 7.3% of the share. Next, 33 respondents were 41 years old and above and account 8.6%. With 211 respondents and 54.9% were the highest number of respondents in the 21-30 age groups. There will be 112 respondents aged 31-40 and 29.2%.

4.2.1.3 RACE

Table 4.3 : Race of Respondents

Race	Frequency (N)	Percent (%)
Malay	122	31.8
Indian	95	24.7
Chinese	149	38.8
Others	18	4.7
Total	384	100.0

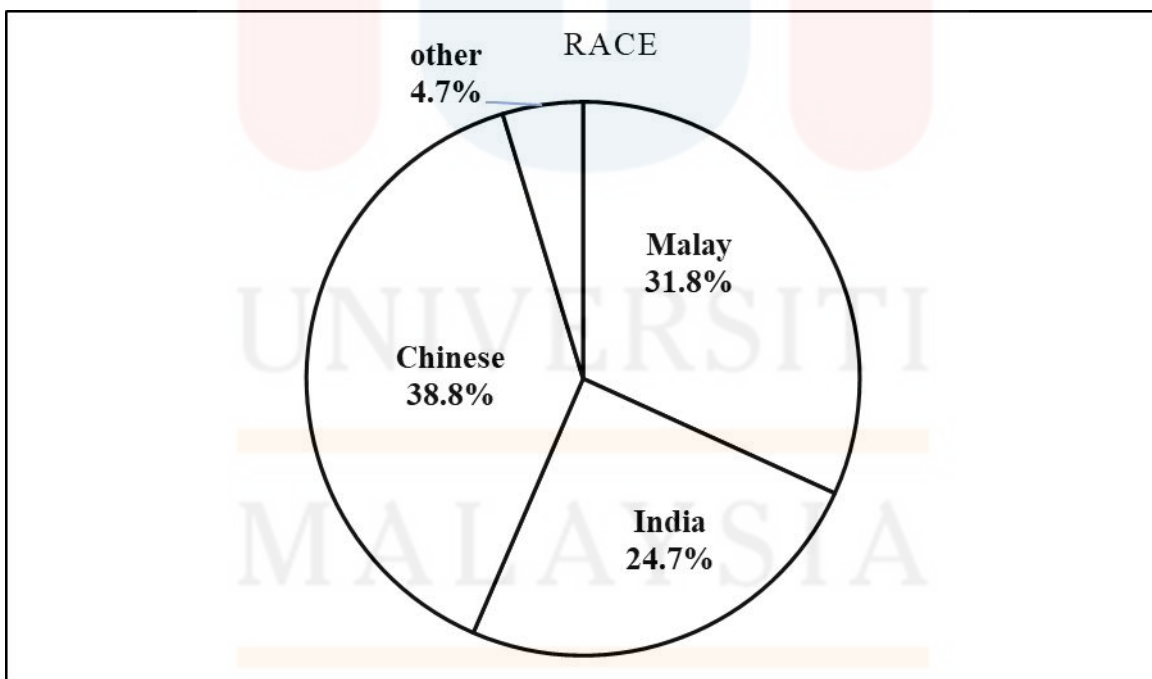


Figure 4.3 : The Percentage of Race

Table 4.3 and figure 4.3 showed the frequency of the respondents' race. There are four categories which is Malay, Indian, Chinese, and Others. Majority of the respondents fall under the category of Chinese which consists of 149 (38.8%) respondents', followed by Malay category which consists of 122 (31.8%) respondents', and Indian which consists of 95 (24.7%) respondents'. The lowest was Others category with 18 (4.7%) respondents.

4.2.1.4 WORKING STATUS

Table 4.4 : Working Status of Respondents

Working Status	Frequency (N)	Percent (%)
WORKING	116	30.2
NOT WORKING	34	8.9
STUDENT	171	44.5
SELF-EMPLOYED	63	16.4
Total	384	100.0

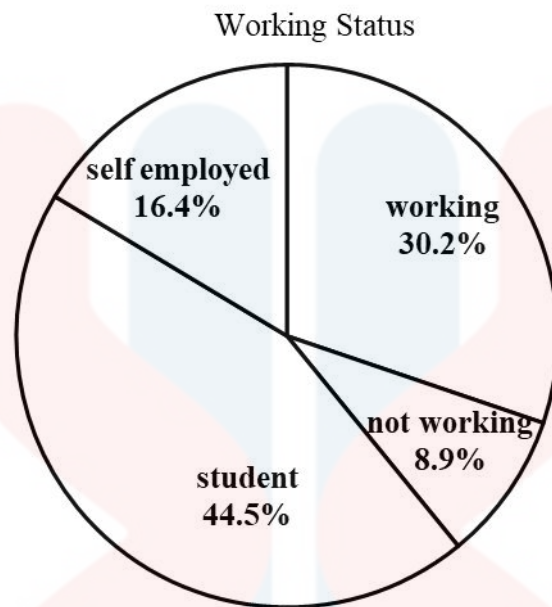


Figure 4.4 : The Percentage of Working Status

Table 4.4 and figure 4.4 showed working status of respondents. There are four categories which consist of working, not working, student and self-employed. Majority of the respondents fall under the category of student which consists of 171 (44.5%) respondents'. The second highest category was working which consist of 116 (30.2%) respondents'. Next, was self-employed which consists of 63 (16.4%) respondents'. Lastly, for not working category consists of 34 (8.9%) respondents'.

4.2.1.5 EDUCATION LEVEL

Table 4.5 : Education Level of Respondents

Education Level	Frequency (N)	Percent (%)
PT3/PMR/SPM	59	15.4
STPM	39	10.2
DIPLOMA	114	29.7
BACHELOR	151	39.3
MASTER	18	4.7
PHD	3	0.8
Total	384	100.0

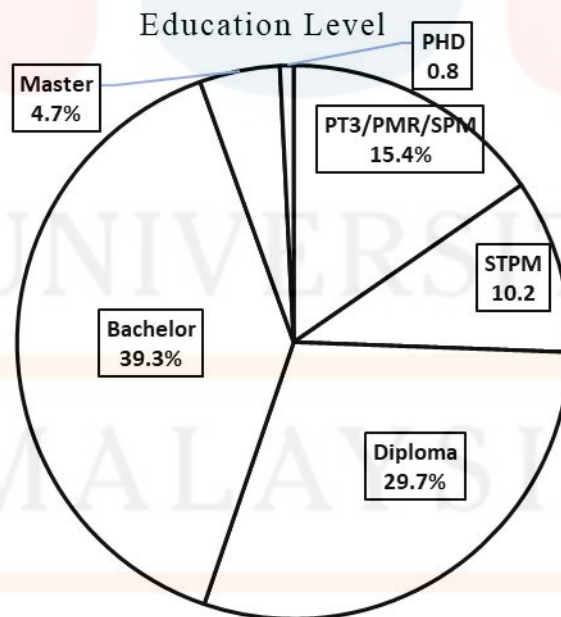


Figure 4.5 : The Percentage of Education Level

The education level of respondents is illustrated in table 4.5 and figure 4.5. The majority of respondents were bachelor's studies, with 151 individual and 39.3%. Then, there have 114 respondents were diploma studies, which contribute 29.7%%. Moreover, the PT3 / PMR / SPM was 15.4% for 59 people. The master's degree was 18 individuals with 4.7% while STPM was 39 individuals with 10.2%. Finally, there are 3 respondents were PHD with 0.8%.

4.2.1.6 CITIZENSHIP

Table 4.6 : Citizenship of Respondents

Citizenship	Frequency (N)	Percent (%)
SARAWAK	144	37.5
SABAH	90	23.4
PENINSULAR MALAYSIA	149	38.8
NON-MALAYSIAN	1	0.3
Total	384	100.0

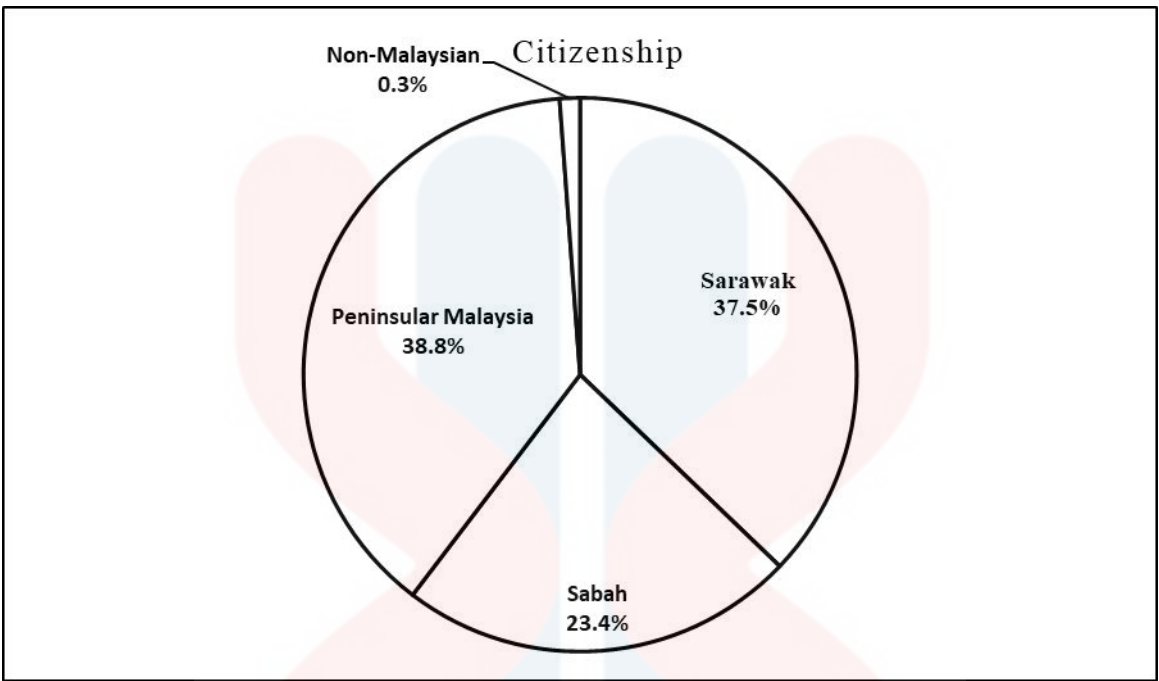


Figure 4.6 : The Percentage of Citizenship

There have four categories showed in table 4.6 and figure 4.6 which consist Sarawak, Sabah, Peninsular Malaysia and Non-Malaysian. The highest percentage was category of Peninsular Malaysia which was 38.8% and 149 individuals out of 384 respondents while the lowest percentage was Non-Malaysian with 0.3% and 1 individual. The following was Sarawak and Sabah which was 37.5% (144 respondents) and 23.4% (90 respondents) respectively.



4.2.1.7 NUMBER OF TRIPS TO SABAH

Table 4.7 : Number of Trips to Sabah of Respondents

Number of trips to Sabah (times)	Frequency (N)	Percent (%)
1-3	145	37.8
3-5	137	35.7
6-10	52	13.5
More than 10	50	13.0
Total	384	100.0

NUMBER OF TRIPS TO SABAH

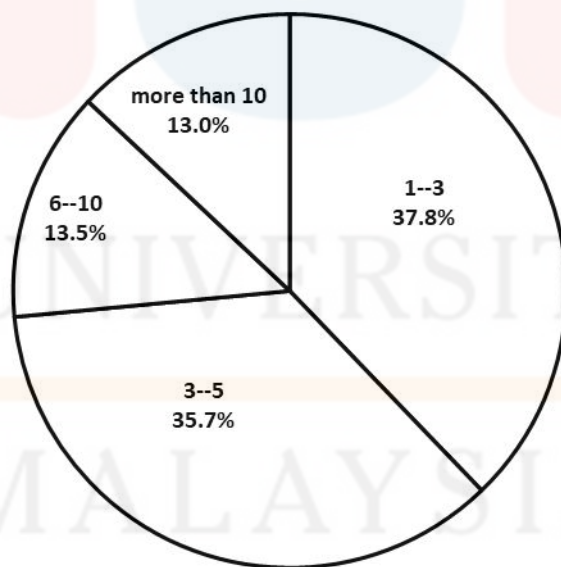


Figure 4.7 : The Percentage of Number of Trips to Sabah

Number of trips to Sabah were showed in table 4.7 and figure 4.7. The biggest group of number of trips to Sabah was 3-5 times, with 145 individuals and 37.8% while 137 individuals went to Sabah 3-5 times and contribute 35.7%. In addition, 52 individuals went to Sabah 6-10 times and pay 13.5% of the overall number. Lastly, the smaller group was more than 10 time at 13% and only 50 individuals.

4.2.1.8 REASON TO SABAH

Table 4.8 : Reason to Sabah of Respondents

Reason to Sabah	Frequency	Percent (%)
Travel	101	26.3
Work	40	10.4
I am from Sabah	54	14.1
Visiting relative	39	10.2
Travel, Visiting relative	58	15.1
Travel,Work	44	11.5
Work,Visiting relative	25	6.5
Travel,Work,Visiting relative	6	1.6
Travel, I am from Sabah	2	0.5
Work, I am from Sabah	4	1.0
I am from Sabah,Visiting relative	8	2.1

Travel,Work, I am from Sabah	1	0.3
Work,I am from Sabah,Visiting relative	1	0.3
Travel, I am from Sabah, Visiting relative	1	0.3
Total	384	100.0

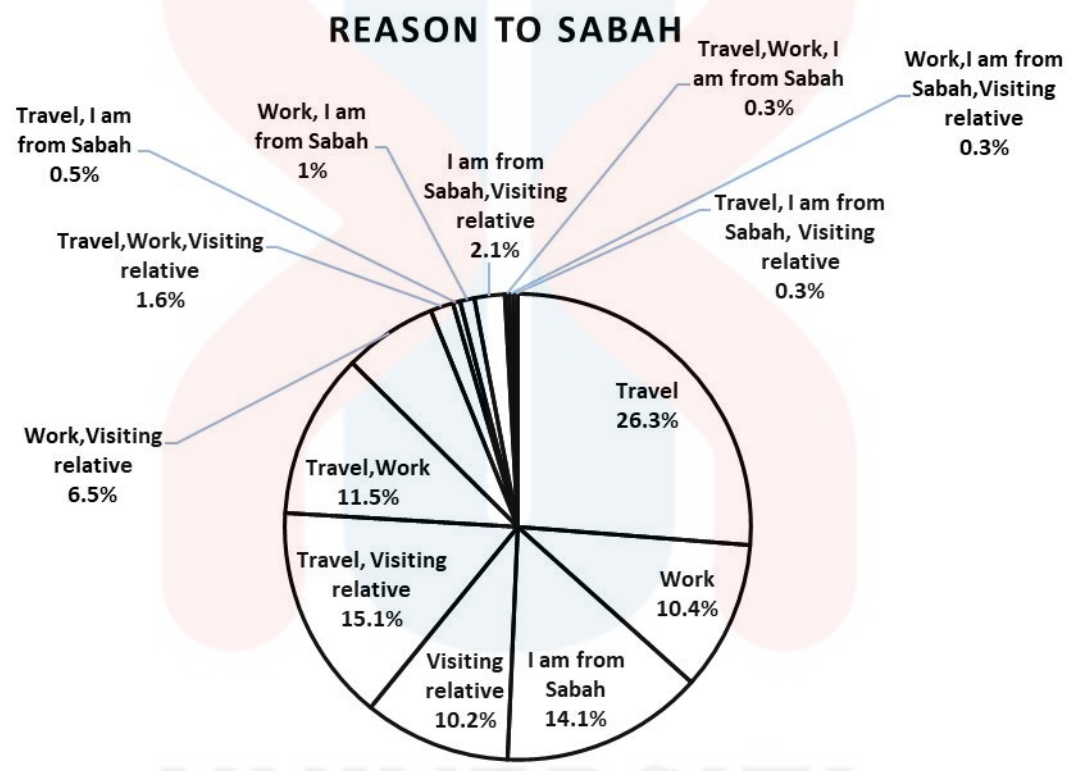


Figure 4.8 : The Percentage of Reason to Sabah

Table 4.8 and figure 4.8 indicated that reason to Sabah. There have 101 (26.3%) respondents that went to Sabah because want to travel while there have 40 respondents went to Sabah because of work. I am from Sabah occupied 54 (14.1%) individuals out of 394 respondents. 39 (10.2%) respondents went to Sabah because of travel and visiting relative. The

reasons of travel and work, work and visiting as well as travel, work and visiting relative was 44 (11.5%) respondents, 25 (6.5%) respondents and 6 (1.6%) respondents respectively. 2 (0.5%) individuals went to because they from Sabah and want to travel. The individuals that from Sabah and want to work was occupied 4 out of 348 respondents while the individuals that from Sabah and want to visiting relative was 8 with 2.1%. The reasons of travel, work and from Sabah, work, visiting relative and from Sabah and travel, visiting relative and from Sabah get the same data which was 1 individual with 0.3%.

4.2.2 Independent Variable (IV) and Dependent Variable (DV)

4.2.2.1 PROTECTION OF NATURAL RESOURCES (IV)

Table 4.9 : Protection of Natural Resources

No	Statement	N	Mean	Standard Deviation
1	Protecting of the natural resources is important to maintaining the sustainability of a community.	384	3.87	1.147
2	Natural resources offer ecosystem services that can offer a better quality.	384	3.93	0.969
3	Declining air quality and climate	384	3.92	0.940

	change will adversely affect the ecosystem.			
4	Biodiversity is vital to ecosystem functions and services.	384	4.03	0.994
5	Natural resources base to protect the natural capital of future generations can sustainable ecosystems.	384	3.95	1.027
6	Promote healthy wildlife can sustainable ecosystems.	384	4.08	1.019

Table 4.9 showed the number of respondents, mean and standard deviation of first independent variables which is protection of natural resources, the highest mean was question 6 which was 4.08 where respondents agreed that promote healthy wildlife can sustainable ecosystems. The lowest mean value from protection of natural resources was 3.87 where the respondents agreed with the question 1 that for protecting of the natural resources is important to maintain the sustainability of a community.

4.2.2.2 PUBLIC PARTICIPATION (IV)

Table 4.10 : Public Participation

No	Statement	N	Mean	Standard Deviation
----	-----------	---	------	--------------------

1	Public participation is important to promote the sustainability of the ecosystem.	384	3.97	1.068
2	Public participation can improve sustainability ecosystem planning and policy outcomes.	384	3.94	0.979
3	Promote strategies provides public involvement in ecosystem sustainability decision making.	384	3.97	0.988
4	Public participation can help achieve better performance in need of various of ecosystem sustainability.	384	4.01	1.005
5	Public participation goal at the empower level is to create a program that allows the public to make an informed decision.	384	3.94	1.034

Table 4.10 showed the number of respondents, mean and standard deviation of the second independent variables which is public participation. For public participation, the highest mean was question 4 which was 4.01 where respondents almost agreed that public participation can help achieve better performance in need of various of ecosystem sustainability. The lowest mean value from public participation variable was 3.94 where the respondents moderate respond with the question 1 and question 5 that they agreed with public participation is important to promote the sustainability of the ecosystem while question 5 is public participation goal at the empower level is to create a program that allows the public to make an informed decision.

4.2.2.3 BALANCE OF URBAN GROWTH WITH NATURAL SURROUNDINGS (IV)

Table 4.11 : Balance of Urban Growth with Natural Surroundings

No	Statement	N	Mean	Standard Deviation
1	Provides community programs and economic strategies can promote the sustainability of ecosystem.	384	3.93	1.086
2	Informal education from parents to their children is very important to urban growth.	384	3.93	1.000
3	Give more attention to upgrade urban growth with natural resources in areas that have experienced slower urban development.	384	3.93	1.019
4	Promote energy conservation through efficient land use planning and building design can promote the sustainability of ecosystem.	384	3.97	1.020

Table 4.11 showed the number of respondents, mean and standard deviation of the last independent variables which is balance of urban growth with natural surroundings. For balance of urban growth with natural surroundings, the highest mean was question 4 which was 3.97 where respondents agreed that promote energy conservation through efficient land use planning and building design can promote the sustainability of ecosystem. The lowest mean value from

last variable was 3.93 where the respondents almost agreed with the others question which are question 1, 2, and 3. The respondents agreed with that independent variables that provides community programs and economic strategies can promote the sustainability of ecosystem, informal education from parents to their children is very important to urban growth and give more attention to upgrade urban growth with natural resources in areas that have experienced slower urban development.

4.2.2.4 PROMOTING SUSTAINABILITY OF ECOSYSTEM IN SABAH (DV)

Table 4.12 : Promoting Sustainability of Ecosystem in Sabah

No	Statement	N	Mean	Standard Deviation
1	Practical methods allow for more strategic planning, through the protection of natural resources, active public participation, and the balance between urban growth and the natural environment to improve the sustainability of the ecosystem, thereby improving the quality of tourism products.	384	4.05	1.077
2	The demand for sustainable ecosystems has become more and more important.	384	3.97	1.019
3	Practical methods as a way to reduce errors and analyses the business environment.	384	3.97	0.982
4	Practical methods are used measuring the sustainability of Sabah's ecosystem.	384	4.07	0.971
5	Various sustainable measurement methods and methods have been developed in different	384	4.01	1.024

contexts to ensure their applicability and accuracy in measuring sustainability levels.

Table 4.12 showed the number of respondents, mean and standard deviation of the dependent variables which is Promoting sustainability of Ecosystem in Sabah. For the promoting sustainability of ecosystem in Sabah, the highest mean was question 1 which was 4.05 where respondents agreed that practical methods allow for more strategic planning, through the protection of natural resources, active public participation, and the balance between urban growth and the natural environment to improve the sustainability of the ecosystem, thereby improving the quality of tourism products. The lowest mean value from the dependent variable was 3.97 where the respondents moderate respond with both question 2 and 3 that the demand for sustainable ecosystems has become more important and the practical methods as a way to reduce errors and analyses the business environment.

4.3 RELIABILITY ANALYSIS

Reliability is referred to the degree of consistency of a measure. Reliability is a measure that helps the researcher to identify no questions that are answered twice and all the questions

must be answered by the respondents to facilitate their work to analyze the data that has been obtained. There are several general classes of reliability estimates which are inter-rater reliability, repeat ability, inter-method reliability, and internal consistency reliability. All of the above classes provide different functions in achieving the final results and reliability of all the answers in the questionnaire.

Table 4.13 : Result of Reliability Coefficient Alpha for the Dependent Variables and Independent Variable

Dependent Variable (DV)	Number of Items	Cronbach's Alpha Coefficient	Strength of Association
Protection of Natural Resources	6	0.866	Very Good
Public Participation	5	0.846	Very Good
Balance of Urban Growth with Natural Surroundings	4	0.825	Very Good
Independent Variable (IV)	Number of Items	Cronbach's Alpha Coefficient	Strength of Association
Promoting Sustainability of Ecosystem in Sabah	5	0.872	Very Good

The researchers had used the reliability analysis test to measure the reliability of the questionnaires. This measurement methods help to solve the reliability for each question found in

both sections. The pilot test had been conducted for a number of 30 respondents before it was distributed to 384 respondents through self-administrated questionnaire survey method.

Table 4.13 showed the value of Cronbach's Alpha Coefficient for both independent variables and dependent variables in this study. According to Table 4.13, all the variables were above the value of 0.800. Therefore, the questionnaires had been accepted. In measuring the protection of natural resources variable that influenced the factors in promoting sustainability of ecosystem in Sabah, Malaysia, there were six questions were used. The Cronbach's Alpha result for this section's was 0.866 which resulted as very good. Thus, the coefficient obtained for the questions in protection of natural resources variable were reliable. Next, in measuring the full public participation variable that influenced the factors in promoting sustainability of ecosystem in Sabah, Malaysia, there were five questions were used and the Cronbach's Alpha result for this section's question was 0.846 which indicated as very good. Therefore, the coefficient obtained for this question in full public participation actively variable were reliable.

Besides, in measuring the balance of urban growth with natural surroundings variable that influenced the factors in promoting sustainability of ecosystem in Sabah, Malaysia, there were four questions were used. The Cronbach's Alpha result for this section's was 0.825 which resulted as very good. Thus, the coefficient obtained for the questions in the balance of urban growth with natural surroundings variable were reliable. In measuring the promoting sustainability of ecosystem in Sabah, Malaysia, five questions were used and the Cronbach's Alpha result for this section's question was 0.872 which indicated as very good. Therefore, the coefficient obtained for this questions in measuring the promoting sustainability of ecosystem in Sabah were reliable.

4.4 PEARSON CORRELATION COEFFICIENT

Correlation Coefficient is a method to analyze the strength of putative linear association between the variables in the study (Mukaka, 2012). It is also one of the calculations to measure the level of effectiveness of the two variables found in the questionnaire. The objectives of this study are to analyze the effect of the independent variables which is protection of natural resources, full public participation actively, and balance of urban growth with natural surroundings towards the promoting sustainability of ecosystem in Sabah. This study use Pearson Correlation Coefficient on this objective due to analyze the strength of association between two variables.

Hypothesis 1

H¹ – There is an effect between the protection of natural resources and the promoting sustainability of ecosystem in Sabah.

From the result showed in Table 4.14, it showed that the p-value as 0.000 which was less than 0.05, it indicated that there is an effect between the protection of natural resources and the promoting sustainability of ecosystem in Sabah. The positive value of correlation coefficient 0.896 indicated that their relationship is high. It meant that the protection of natural resources was influencing the promoting sustainability of ecosystem in Sabah. Thus, it can be seen that 89.6% of dependent variable which was the effectiveness of promoting sustainability of

ecosystem in Sabah influenced by the protection of natural resources . Hence, H1 for the first research objective was accepted.

Table 4.14 : Correlation Between Protection of Natural Resources and Promoting Sustainability of Ecosystem in Sabah

		Protection of Natural Resources	The Promoting Sustainability of Ecosystem in Sabah
Protection of Natural Resources	Pearson Correlation	1.000	.896
	Sig. (2-tailed)	.	.000
	N	384	384
The Promoting Sustainability of Ecosystem in Sabah	Pearson Correlation	.896	1.000
	Sig. (2-tailed)	.000	.
	N	384	384

Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 2

H² – There is an effect between the public participation and the promoting sustainability of ecosystem in Sabah

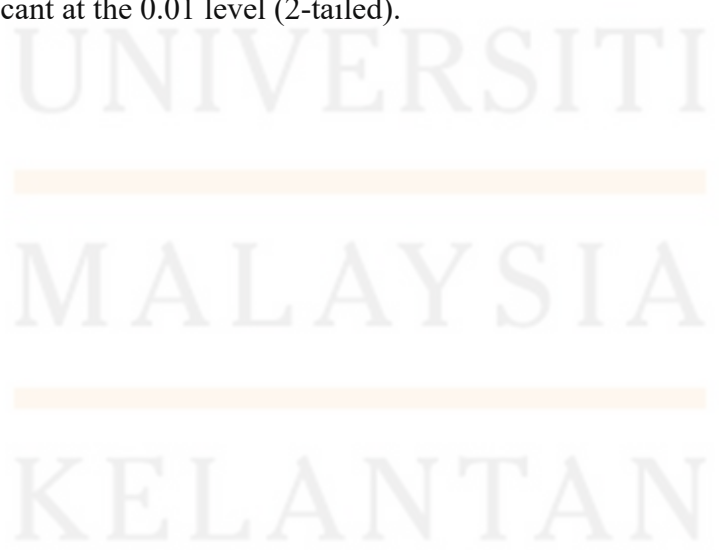
From the result showed in Table 4.15, it showed that the p-value as 0.000 which was less than 0.05, it indicated that there is an effect between the public participation and the promoting sustainability of ecosystem in Sabah. The positive value of correlation coefficient 0.863

indicated that their relationship is high. It meant that public participation was influencing the promoting sustainability of ecosystem in Sabah. Thus, it can be seen that 86.3% of dependent variable which was the promoting sustainability of ecosystem in Sabah influenced by the public participation. Hence, H2 for the second research objective was accepted.

Table 4.15 : Correlation Between Public Participation and Promoting Sustainability of Ecosystem in Sabah.

		Public Participation	The Promoting Sustainability of Ecosystem in Sabah
Public Participation	Pearson Correlation	1.000	.863
	Sig. (2-tailed)	.	.000
	N	384	384
The Promoting Sustainability of Ecosystem in Sabah	Pearson Correlation	.863	1.000
	Sig. (2-tailed)	.000	.
	N	384	384

Correlation is significant at the 0.01 level (2-tailed).



Hypothesis 3

H³ - There is an effect between balance of urban growth with natural surroundings and the promoting sustainability of ecosystem in Sabah

From the result showed in Table 4.16, it showed that the p-value as 0.000 which was less than 0.05, it indicated that there is an effect between balance of urban growth with natural surroundings and the promoting sustainability of ecosystem in Sabah. The positive value of correlation coefficient 0.860 indicated that their relationship is high. It meant that balance of urban growth with natural surroundings was influencing the promoting sustainability of ecosystem in Sabah. Thus, it can be seen that 86% of dependent variable which was the promoting sustainability of ecosystem in Sabah influenced by the balance of urban growth with natural surroundings. Hence, H3 for the second research objective was accepted.

Table 4.16 : Correlation Between Balance of Urban Growth with Natural Surroundings and the Promoting Sustainability of Ecosystem in Sabah

		Balance of Urban Growth with Natural Surroundings	The Promoting Sustainability of Ecosystem in Sabah
Balance of Urban Growth with Natural Surroundings	Pearson Correlation	1.000	.860
	Sig. (2-tailed)	.	.000
	N	384	384
The Promoting Sustainability of Ecosystem in Sabah	Pearson Correlation	.860	1.000
	Sig. (2-tailed)	.000	.
	N	384	384

Correlation is significant at the 0.01 level (2-tailed).

Table 4.17 : Summary Result of Pearson Correlation Coefficient

Hypothesis	Result	Conclusion
H ¹ – There is an effect between the protection of natural resources and the promoting sustainability of ecosystem in Sabah.	r = 0.896 p = 0.000 High positive effect	Accepted
H ² – There is an effect between the public participation and the promoting sustainability of ecosystem in Sabah	r = 0.863 p = 0.000 High positive effect	Accepted
H ³ - There is an effect between balance of urban growth with natural surroundings and the promoting sustainability of ecosystem in Sabah	r = 0.860 p = 0.000 High positive effect	Accepted

Based on summary of table above, it demonstrated the last results of an effect between independent variables and dependent variable. As shown above, all of independent variables were significantly correlated. It showed that protection of natural resources was the most influence factors that lead to the promoting sustainability of ecosystem in Sabah. The significant was proved by the calculation of each p-value which is these three variables were less than significant value 0.05. Thus, all hypotheses were accepted.

Table 4.18 : Rules of Thumb of Correlation Coefficient

Size of Correlation	Strength of Association
± 0.91 to ± 1.00	Very Strong
± 0.71 to ± 0.90	High
± 0.51 to ± 0.70	Moderate
± 0.31 to ± 0.50	Small but define relationship
± 0.00 to ± 0.30	Slight, almost negligible

Sources: Mukaka, 2012.

As a human being, it has become a responsibility to protect natural surroundings from being affected by various environmental pollution such as logging, air pollution, flash flood, soil erosion and others from continuing to spread. This is because, it indirectly affects natural life such as plants and animals in the short term. Environmental conservation needs to be expanded among the community to achieve sustainability ecosystem in Sabah by maintaining cleanliness from the beginning. Next, assist in promoting and commercializing tourist attraction in Sabah to foreign tourists such as forest reserves, interaction areas, community-activities and so on.

The protection of natural surrounding has made Sabah one of the well-known tourist destinations and more interested in spending time with the whole family or partner during the holidays with the green life around it. The proof is that every year Sabah has reached a high number of tourists which consists of the local people and foreign tourists who come to visit to experience the beauty of the environment without any barrier.

In analyzing the effect between the two variables, the researcher use correlation analysis to analyze the effect between the independent variables and dependent variable. Thus, the dependent variable of this study is the factors in promoting sustainability ecosystem in Sabah, Malaysia and the independent variables are protecting the natural resources, full public participation and balance of urban growth with natural surrounding. A correlation coefficient of +1 indicated that the two variables were perfectly related in a positive (linear) manner, a correlation coefficient of -1 indicated that two variables were perfectly related in a negative (linear) manner, while a correlation coefficient of zero indicates that there was no linear relationship between the two variables being studied.

4.5 DISCUSSION BASED ON RESEARCH OBJECTIVES

The purpose of this research was to add to the body of knowledge about Sabah's ecosystem sustainability, whether protection of natural resources, full public participation, and balance of urban growth with natural surroundings moderated the factors in promoting sustainability of the ecosystems in Sabah. The results from a number of 30 respondents before it was distributed to 384 respondents through self-administrated questionnaire survey method, supported the expected hypothesis.

The results showed significant difference in the Cronbach's Alpha coefficient to protection of natural resources between full public participation. It was found that the coefficient obtained are significantly more attached to the questions in protection of natural resources (86.6%) than full public participation (84.6%), which are indicate that the variable were reliable. There was also a significant difference found in the Cronbach's Alpha coefficient result in balance of urban growth with natural surroundings between the other variables. For balance of urban growth with natural surroundings (82.5%) were significantly less than other variables.

The expected hypothesis was that the respondents would be more attached to protection of natural resources. In a study done by Bartlett (1991: 9), it was found that nature is a broad concept of three major dimensions such are ecological (ecosystem) dimension, the social(quality of life) dimension, and the economic (resource management) dimension. In line with this hypothesis natural protection display more human-like qualities, the research provides a new insight into the relationship between protection of natural resources and the promoting sustainability of ecosystem of Sabah. Respondents are more attracted to protection of natural resources, than other variables, however there can positively influence such as "the clean and green" environment awareness among the respondents.

Furthermore, numerous prior respondents have confirmed that protection of natural resources, full public participation actively, and balance of urban growth with natural surroundings variable can assist to improve in promoting sustainability of ecosystem in Sabah. This research provides further empirical evidence identifying that high protection of natural resources, followed with full public participation actively, and balance of urban growth with natural surroundings is associated with high promoting sustainability of ecosystem in Sabah, and ultimately improved promoting management and ecosystem development.

Sabah's sustainability of ecosystem promoting concept improves their market in Malaysia as well as around the world by promoting Sabah's sustainability of ecosystem management, and ecosystem development. This consequently increases Sabah's market performance. To be leading this specific industry Sabah should adopt and implement these variables, once Sabah implementing in their management and development that variables congruence has moderated the relationship between promoting sustainability of ecosystem in Sabah practice would benefit in leading to better outcomes via Tourism industry. A significant relationship between protection of natural resources, full public participation actively, and balance of urban growth with natural surroundings align with the promoting sustainability of ecosystem as an Sabah's management and development, this can strengthen Sabah's identification and assist in promoting Sabah's performance.

At the same time, people should be involved in each steps of project, which may safeguard local resources and culture. Other than local communities the government and international agencies play a very important role for promotion as well as demotion of any initiative. All stakeholders needs to be more responsible for sustainable tourism to safeguard public lands, protected forests, water bodies, violation of local and indigenous customary rights. The development of criteria and indicators is just a monitoring tool and need based implementation of activities. In this case, the cooperation of stakeholders such as government, local community and NGOs can play a very important role in order to achieve the sustainable tourism.

To sum up everything that has been stated so far, this promoting strategies will provide the public with balanced and objective information. This respondents will obtain public feedback

on analysis that are suitable for involving the public in the decision-making process, including the development of alternatives and the identification of the preferred solution.

4.6 SUMMARY

This chapter discusses the results of reliability analysis, descriptive analysis and Pearson Correlation Coefficient analysis of the data obtained from the questionnaire, followed by discussion based on research objectives and end with summary. Independent variables and dependent variables have a substantial connection. All of the hypotheses are accepted.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 INTRODUCTION

Chapter 5 is discussing about recapitulation of the findings which are the results of chapter 4. This chapter will continued follow by limitation, recommendations and closed with summary.

5.2 RECAPITULATION OF THE FINDINGS

This primary aim of this study was to explore the relationship between protection of natural resources, public participation, and balance of urban growth with natural surroundings towards factors in promoting sustainability of ecosystem in Sabah. Hence, this research study

was carried out to identify whether the elements of independent variables were affecting the dependent variable (factors in promoting sustainability of Sabah's ecosystem).

Data were collected through the distribution of questionnaire, where questions related to the elements of the research study were asked. 384 respondents were involved in the whole process of data collection. The Pearson Correlation Coefficient Analysis were used to answer all the research questions which have been stated in Chapter 1.

5.2.1 PROTECTION OF NATURAL RESOURCES

Research Objective 1: To identify the relationship between protection of natural resources towards promoting sustainability of ecosystem in Sabah.

Research Question 1: What is the relationship between protection of natural resources towards promoting sustainability of ecosystem in Sabah?

Hypothesis (H1): There is positive and significant relationship between protections of natural resources with the promoting sustainability of ecosystem in Sabah.

Based on the finding, it was showed that there was a relationship between protections of natural resources towards the promoting sustainability of ecosystem in Sabah. According to Pearson Correlation Analysis (Table 4.17), the result showed that the protections of natural resources was highly correlates on the promoting sustainability of Sabah's ecosystems. Based on

the result, a high positive correlation relationship between independent variable 1 (protections of natural resources) and dependent variable (the promoting sustainability of Sabah's ecosystems) at $r = 0.896$, $p < 0.000$ were shown. Based on Lyyanki & Muralikirshna (2017) study, a positive correlation occurred between protection of natural resources and ecosystem. Therefore, these natural resources offer ecosystem services that can offer a better quality to human life. This is because when the protection areas can be established to protect natural resources. In the cases of legally protected area under national laws and regulations, it is necessary to comply with the requirements specified in the prescribed protection zone management. These same findings are supported in this study too. In conclusion, the research objective 'To identify the relationship between protection of natural resources towards promoting sustainability of ecosystem in Sabah. While the research question 'What is the relationship between protection of natural resources towards promoting sustainability of ecosystem in Sabah?' was also answered through this research. Making the study's hypothesis (H1) formed was supported as well.

5.2.2 PUBLIC PARTICIPATION

Research Objective 2: To determine the relationship between public participation towards promoting sustainability of ecosystem in Sabah.

Research Question 2: What is the relationship between public participation towards promoting sustainability of ecosystem in Sabah?

Hypothesis (H2): There is a relationship between public participation with the promoting sustainability of ecosystem in Sabah.

Based on the finding, it was showed that there was a relationship between public participation towards the promoting sustainability of ecosystem in Sabah. According to Pearson Correlation analysis (Table 4.17), the result showed that the public participation was highly correlates on the promoting sustainability of ecosystem in Sabah. Based on the result, a high positive correlation relationship between independent variable 2 (public participation) and dependent variable (the promoting sustainability of Sabah's ecosystems) at $r = 0.863$, $p < 0.000$ were shown. Based on (Beard 2003) study, a positive correlation occurred between public participation and ecosystem. Thus, the public must seek a role in decision-making. Some forms of public participation can improve sustainability ecosystem planning and policy outcomes in Sabah. This is because this approach made us realize the importance of full public participation in the efforts to solve the problem. It is including the role of a local community, this place acknowledge allow the local community to be part of all planning decisions. These same findings are supported in this study too. In conclusion, the research objective 'To determine the relationship between public participation towards promoting sustainability of ecosystem in Sabah.' achieved and the research question 'What is the relationship between public participation towards promoting sustainability of ecosystem in Sabah?' is also answered through this research. Making the study's hypothesis (H2) formed was supported as well.

5.2.3 BALANCE OF URBAN GROWTH WITH NATURAL SURROUNDING

Research Objective 3: To study the relationship between balance of urban growth with natural surroundings towards promoting sustainability of ecosystem in Sabah.

Research Question 3: What is the relationship between balance of urban growth with natural surroundings towards promoting sustainability of ecosystem in Sabah?

Hypothesis (H3): There is a relationship balance of urban growth with natural surrounding with the promoting sustainability of ecosystem in Sabah.

Based on the finding, it was showed that there was a relationship between balance of urban growth with natural surroundings towards the promoting sustainability of ecosystem in Sabah. According to Pearson Correlation analysis (Table 4.17), the result showed that balance of urban growth with natural surrounding is highly correlates on the promoting sustainability of ecosystem in Sabah. Based on the result, a high positive correlation relationship between independent variable 3 (balance of urban growth with natural surroundings) and dependent variable (the promoting sustainability of Sabah's ecosystems) at $r = 0.860$, $p < 0.000$ are shown. Based on the study of (Hajer and Wagenaar 2003), a positive correlation occurred between balance of urban growth with natural surroundings and ecosystem. The community must practice, learn and act through practice. As long as people engage in practical activities, the community will understand the importance of urban development in the natural environment. These same findings are supported in this study too. In conclusion, the research objective 'To study the relationship between balance of urban growth with natural surroundings towards promoting

sustainability of ecosystem in Sabah.’ were achieved and the research question ‘What is the relationship between balance of urban growth with natural surroundings towards promoting sustainability of ecosystem in Sabah?’ was also answered through this research. Making the study’s hypothesis (H3) formed was supported as well.

5.3 LIMITATION OF STUDY

Limitation is a condition that affects the researcher while conducting the study either directly or indirectly. There are several limitation of this research study. Firstly, the limitation of this study is on data collection and data analysis. Data collection is a task carried out on several respondents from a questionnaire where prepared by the researchers according to the criteria that have been set. This method spends a lot of time in collecting and analyzing data. This is because, it is possible that some problems may occur between respondents while completing the questionnaire such as not providing correct and accurate information, not ready to answer and feel inconvenient and also not concentrating in answering the questionnaire. So, it will affect the result to be invalid and need to find another respondent again. The use of (Statistical Package Social Science) SPSS is important in performing data analysis and it will take a long time for the researcher to get the right answers to produce a complete research.

Next, the limitation of the study is the current situation that happens in our country has posed difficulties for researchers to collect the number of respondents and requires adequate internet network to complete this research. This is because, the study conducted by the researcher is focused on the population in Sabah and will cause some probability that the percentage of respondents who can answer the questionnaire is low. Moreover, the need for the internet is important among students and some researchers who face access problems will cause some information and assignments cannot be completed in time. Lastly, researchers are also faced with time constraints where researchers have to complete other tasks such as assignment, tutorials and needs to involve with university activities and subjects. Besides, to fulfill the requirements of this research need to take a long time but students only has a short time to finish the research.

5.4 RECOMMENDATION

Recommendations are the outcome of interpretation of collected data. In other words, procedure of converting raw data collected into useful information is called as recommendation. Usually this section serves the study to understand the problem existing and to design the solution. Recommendation are very important for a research or a study. With the help of this study, the researcher can give the following recommendation and suggestion.

In order to maintain vitality, Sabah needs to continue to provide an environment conducive to supporting sustainable development to increase efficiency and improve the quality of life in a healthy environment. This positively shows that the sustainability of the ecosystem will encourage developers, communities, and governments. It will continue to invest in Sabah's tourism industry. The City needs to have a better understanding of the needs of existing ecosystem, one of the basic tenets of sustainable development is making the best use of existing resources. It is within this context that the retention and nurturing of existing ecosystem must be the highest priority for the future.

To improve the Sabah's economic well-being of all city residents, the developers have to make decisions that recognize the interdependence of humans, and nature in a common ecosystem. For cities, it is also important to consider the environment, economy, and benefits under development before using resources, products, and services. In addition to the productive and sustainable use of existing local resources, these types of opportunities also benefit communities in a variety of ways by supporting local well-being and development. the surrounding traditional supports that lead to high quality of life.

Another asset that needs more attention is the role that the educational institutions play in developing and sharing new research and technologies into Tourism Industry. At present the greatest opportunities for future success given their growth potential, Sabah's competitive advantages, and their fit within broader community-based objectives of the city. Sustainable development must also consider value-added manufacturing and processing of sustainability of ecosystem. Opportunities include additional to support responsible development that are promotes sustainability of ecosystem in Sabah.

5.5 SUMMARY

Overall, it can be said that the relationship between independent variable and dependent variable was significant. Researchers have a better understanding of the relationship between the independent and dependent variables, which were protection of natural resources, public participation, balance of urban growth with natural surroundings and factors in promoting sustainability of ecosystem in Sabah. The research's limitations should be addressed, and the direction for future research should be improved. The researcher can concentrate on which popular platform, such as Wechat or Facebook, will be easier to obtain respondents. To attract more respondents willing to help fill out the survey form, the survey design should be more creative and innovative. The findings also provided recommendations for Sabah on what to do, which areas need to be improved, and how to develop the ecosystem's sustainability in Sabah.

REFERENCES

- Abbasi, D. S., & Mohamed, B. (2013). Local perception of tourism development: A conceptual framework for the sustainable cultural tourism. *Journal of Management and Sustainability*, 3(2), p.31.
- Adams, C. A., & Frost, G. R. Integrating sustainability reporting into management practices. *Accounting Forum*, vol. 32, no. 4, pp. 288-302, Dec. 2008.
- Cambridge Dictionary. (2021). Balance of Urban Growth with Natural Surrounding. Retrieved from <https://dictionary.cambridge.org/dictionary/english/balance>
- Chan, J.K.L., & Baum, T. (2007) (b). Ecotourists' Perception of Ecotourism Experience in Lower Kinabatangan, Sabah, Malaysia, *Journal of Sustainable Tourism*, 15(5):574-590.
- Dr Ambu, L. Sustainability and Wildlife Conservation Updates : the Malaysian Perspectives. Retrieved Jan 16 2012, from <http://www.mpoc.org.my/upload/P3-DrLaurentiusAmbu.pdf>
- Dwyer, L., Gill, A., & Seetaram, N. (Eds.). (2012). *Handbook of Research Methods in Tourism: Quantitative and Qualitative Approaches*. Edward Elgar Publishing.
- EcoCampus Action Plan (2013) Kota Kinabalu: Universiti Malaysia Sabah.
- Environment and Ecology. (2017). Environmental Sustainability. Retrieved from <http://www.environment-ecology.com/what-is-sustainability/247sustainability.html>
- Gössling, S. Hall, C.M. Weaver, D.B. *Sustainable Tourism Futures. Perspectives on Systems, Restructuring and Innovations*; Routledge: New York, NY, USA, 2009.
- Guru99. (2021). What is Data Analysis. Retrieved from <https://www.guru99.com/what-is-data-analysis.html>
- Hardy, A.L., & Beeton, R.J. (2001). Sustainable tourism or maintainable tourism: Managing resources for more than average outcomes. *Journal of Sustainable Tourism*, 9(3), 168-192.
- Hox, J. J., & Boeije, H. R. (2004). Data Collection, Primary vs. Secondary. In *Encyclopedia of Social Measurement* (pp. 593–599). Investopedia. (1999). Population Definition. Retrieved from <https://www.investopedia.com/terms/p/population.asp>
- Jayaraman, K., Lin, S. K., Yap, L. L., & Ong, W. L. (2010). Sustainable Ecotourism: The Case of East Malaysia. *TEAM Journal of Hospitality and Tourism*, 7(1), 27-44.
- Jintao, Z., Wei, M., & Fang, Z. Analysis on synergistic effects of the ecological environment construction and the economic growth — a case study of Shandong Province, China. Retrieved from Open Access proceedings *Journal of Physics: Conference series* (iop.org)
- Kennedy, P.W. (1999). *Urban Environmental Problems in Malaysia: The Role for Economic Instruments*. Retrieved June 8, 2018.

- Krejcie, R. V., & Morgan, D. W. (1970). Table for determining sample size from a given population. *Educational and Psychological Measurement*, 30(3), 607-610. doi:10.1177%2F001316447003000308
- Kumpulan Yayasan Sabah. (2021). Environmental Management. Retrieved from http://www.yayasansabahgroup.org.my/bm/conservation_management.cfm
- Lew, A. (1992). Perceptions of Tourists and Tour Guides in Singapore. *Journal of Cultural Geography* 12(1):45-52.
- MayLing, S., Ramachandran, S., Shuib, A., & Afandi, S.H.M. (2014). Barriers to community participation in rural tourism: A case study of the communities of Semporna, Sabah, Malaysia. *Life Science Journal*, 11(11), 837-841.
- Ministry of Tourism and Culture (MOTAC). (2012). Homestay Statistic.
- Mudalige, U.J., Weersink, A., Deaton, B.J. & Trant, M. (2007). Effect of urbanization on the adoption of environmental management systems in Canadian agriculture.
- Mukaka, M. (2012, September). A guide to appropriate use of Correlation coefficient in medical research. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576830/>
- MUQL, "Kualiti Hidup Bandar di Malaysia, Malaysia Urban Quality of Life." Prime Ministry, Putra Jaya, 2002.
- NORTH, D. C. 1955. Location theory and regional economic growth. *The Journal of Political Economy*, 63(3): 243–258.
- Oh, T. H., Pang, S. Y. and Chua, S. C. "Energy policy and alternative energy in Malaysia: Issues and challenges for sustainable growth," *Renewable and Sustainable Energy Reviews*, vol. 14, no. 4, pp. 1241-1252, May 2010.
- Paimin, F. V., S, M., Mogindol, S. H., Johnny, C., & A, T. J. (2014). Community participation and barriers in rural tourism: A Case Study in Kiulu, Sabah. *EDP Sciences*, 12(3), 1-7.
- Performance Management & Delivery Unit (PEMANDU). (2013). Tourism NKEA Factsheet.
- Planning Talk. (2014). What is Urban Growth. Retrieved from <https://planningtank.com/urbanisation/urbanisation-urban-growth>
- Plos One. (2020). Emerging Challenges for Sustainable Development. Retrieved from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0229614>
- Saadatian, O., Salleh, O. M. T., & Dola, K. "Observations of Sustainability Practices in Malaysian Research Universities: Highlighting Particular Strengths," *Pertanika Journal of Social Sciences and Humanities* Vol. 17 (2) Sept. 2009, p. 225.

- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th Ed.). West Sussex, UK: John Wiley & Sons Ltd. Socratic Q&A. What is Sustainable Ecosystem.
- Singh, K. (2007). *Quantitative social research methods*. New Delhi, India: Sage Publication.
- Statistics Solutions. (2019a). *Statistics Solutions*. Retrieved from Pearson's Correlation Coefficient: <https://www.statisticssolutions.com/pearsons-correlation-coefficient/>
- The National Academies of Sciences Engineering Medicine. (2011). *Sustainability and The U.S. EPA*. Retrieved from <https://www.nap.edu/read/13152/chapter/6>
- Tourism Notes. (2018). *Tourism*. Retrieved from <https://tourismnotes.com/travel-tourism/>
- UKEssays, (2003). *What is mass Tourism*. Retrieved from <https://www.ukessays.com/essays/tourism/what-is-mass-tourism-tourismessay.php>
- University of the West of England. (2019). *University of the West of England*. Retrieved from Pearson's Correlation Coefficient: <http://learntech.uwe.ac.uk/da/Default.aspx?pageid=1442>
- Weaver, B., & Maxwell, H. (2014). *Exploratory factor analysis and reliability analysis with missing data: A simple method for SPSS users*. *The Quantitative Methods for Psychology*, 10(2), 143–152. <https://doi.org/10.20982/tqmp.10.2.p14>
- Wikipedia. (2021). *Public Participation*. Retrieved from https://en.wikipedia.org/wiki/Public_participation
- Willis, J. (n.d.). *Sustainability Theory*. Retrieved from https://www.berkshirepublishing.com/assets_news/sustainability/Spirit_SustainabilityTheory.pdf
- WWF Malaysia. (2018). *Sustainable Growth in Sabah*. Retrieved from <https://www.wwf.org.my/?26305/State-Government-Must-EnsureSustainableGrowth-in-Sabah>
- Youmatter. (2020). *What is sustainability*. Retrieved from <https://youmatter.world/en/definition/definitions-sustainability-definitionexamples-principles/>
- Youmatter. (2020). *Sustainability principles and examples*. Retrieved from <https://youmatter.world/en/definition/definitions-sustainability-definitionexamples-principles/>

APPENDICES

QUESTIONNAIRE /

BORANG KAJI SELIDIK



UNIVERSITI
MALAYSIA
KELANTAN

**UNDERSTANDING THE DETERMINANT FACTORS IN PROMOTING
SUSTAINABILITY OF ECOSYSTEM : THE CASE OF SABAH, MALAYSIA**
***MEMAHAMI FAKTOR-FAKTOR DALAM MEMPROMOSIKAN KEBERKESANAN
EKOSISTEM : KES SABAH, MALAYSIA***

Dear Respondents,

We are undergraduate of Bachelor degree in Entrepreneurship (Tourism) with honour, from Faculty Hospitality, Tourism and Wellness (FHPK), University Malaysia Kelantan. Currently, we are conducting a survey on the title research is "Understanding The Determinant Factors in Promoting Sustainability of Ecosystem : The Case of Sabah, Malaysia". This questionnaire is only for people who have ever been to Sabah. The survey will take approximately 5 minutes. Your honest response is highly valued, and will be treated confidentially. Please answer the following question thoughtfully and accurately. The information and response will be only used for academic purpose only. Thanks for your cooperation.

Responden yang dihormati,

Kami merupakan mahasiswa Ijazah Sarjana Muda Keusahawanan (Pelancongan), dari Fakulti Hospitaliti, Pelancongan dan Kesejahteraan (FHPK), Universiti Malaysia Kelantan. Kami

sedang menjalankan kajian yang bertajuk "Memahami Faktor Penentu Yang Menggalakkan Kelestarian Ekosistem: Kes Sabah, Malaysia". Kajian soal-selidik ini hanya bagi orang yang pernah pergi ke Sabah. Soal-selidik mengambil masa lebih kurang 5 minit. Kejujuran anda sangat dihargai, dan informasi yang diberi adalah sulit. Sila jawab soalan berikut dengan teliti dan tepat. Maklumat yang diberikan hanya akan digunakan untuk tujuan akademik sahaja. Terima kasih atas kerjasama anda.

Researchers/ Penyelidikan :

SIGANG UNG SHIO YIEN (H18A0562)

NURUL AIDA BINTI NOR AZHAR (H18A0464)

NUR SYAZWANA BINTI ZABIDI (H18A0426)

NURUL SYAFIQAH RAMLEE (H18A0510)

UNIVERSITI
MALAYSIA
KELANTAN

SECTION A : DEMOGRAPHIC PEOPLE**BAHAGIAN A : PROFIL DEMOGRAFI****INSTRUCTION: Please specify your answer by tick (✓) on the relevant answer provided.****ARAHAN: Sila nyatakan jawapan anda dengan menandakan (✓) pada jawapan yang telah disediakan.**

1. Gender / Jantina

Male / Lelaki

Female / Perempuan

2. Age / Umur

Below 20 years old / bawah 20 tahun

21 – 30 years old / 21 – 30 tahun

31 – 40 years old / 31 – 40 tahun

41 years old and above / 41 tahun dan ke atas

3. Race / Bangsa

Malay / Melayu

Chinese / Cina

Indian / India

Others / Lain-lain

4. Working Status / Status Pekerjaan

Working / Bekerja

Student / Pelajar

Not Working / Tidak Bekerja

Self-employed / Bekerja sendiri

5. Education Level / Peringkat Pendidikan

PT3 / PMR / SPM

Bachelor / Ijazah Sarjana Muda

STPM

Master / Master

Diploma / Diploma

PhD / PhD

6. Citizenship / Kewarganegaraan

- Malaysian Citizens of Sarawak / Rakyat Malaysia Warganegaraan Sarawak
- Malaysian Citizens of Sabah / Rakyat Malaysia Warganegaraan Sabah
- Malaysian Citizens of Peninsular Malaysia / Rakyat Malaysia Semenanjung
- Non Malaysian / Bukan Rakyat Malaysia

7. Number of trips to Sabah / Jumlah perjalanan ke Sabah

- 1- 3 times / 1- 3 kali
- 3-5 times / 3-5 kali
- 6 – 10 times / 6 – 10 kali
- More than 10 times / Lebih daripada 10 kali

8. Reasons to Sabah / Sebab ke Sabah

- Travel / Melancong
- I am from Sabah / Saya asal dari Sabah
- Work / Kerja
- Visiting Relative / Melawat saudara-mara

INSTRUCTION: Please indicate your level agreement to the respective statements by tick (✓) only one answer for each statement.

ARAHAN : Sila nyatakan tahap kebersetujuan anda dengan pernyataan masing-masing dengan tanda (✓) hanya satu jawapan untuk setiap pernyataan.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<i>Sangat Tidak Setuju</i>	<i>Tidak Setuju</i>	<i>Neutral</i>	<i>Setuju</i>	<i>Sangat Setuju</i>

SECTION B : FACTORS IN PROMOTING SUSTAINABILITY OF ECOSYSTEM

BAHAGIAN B : FAKTOR PENENTU YANG MENGGALAKKAN KELESTARIAN EKOSISTEM

1. Protection of Natural Resources / Perlindungan Sumber Asli

No.	Statement / Kenyataan	1	2	3	4	5
1.	Protecting of the natural resources is important to maintaining the sustainability of a community. <i>Melindungi sumber semula jadi penting untuk menjaga kelestarian masyarakat.</i>					
2.	Natural resources offer ecosystem services that can offer a better quality. <i>Sumber semula jadi menawarkan perkhidmatan ekosistem yang dapat menawarkan kualiti yang lebih baik.</i>					
3.	Declining air quality and climate change will adversely affect the ecosystem. <i>Penurunan kualiti udara dan perubahan iklim akan memberi kesan buruk kepada ekosistem.</i>					
4.	Biodiversity is vital to ecosystem's functions and services. <i>Keanekaragaman hayati sangat penting untuk fungsi dan perkhidmatan ekosistem.</i>					
5.	Natural resources base to protect the natural capital of future generations can sustainable ecosystems. <i>Asas sumber semula jadi untuk melindungi modal semula jadi generasi akan datang dapat ekosistem lestari.</i>					
6.	Promote healthy wildlife can sustainable ecosystems. <i>Menggalakkan hidupan liar yang sihat dapat ekosistem yang lestari.</i>					

2. Full Public Participation Actively / *Penyertaan Awam Penuh Secara Aktif*

No.	Statement / Kenyataan	1	2	3	4	5
1.	Full public participation actively is important to promote the sustainability of the ecosystem. <i>Penyertaan orang ramai secara aktif adalah penting untuk meningkatkan kelestarian ekosistem.</i>					
2.	Full public participation can improve sustainability ecosystem planning and policy outcomes. <i>Penyertaan orang ramai sepenuhnya dapat meningkatkan hasil perancangan dan dasar ekosistem kelestarian</i>					
3.	Promote strategies provides full public involvement in ecosystem sustainability decision making. <i>Mempromosikan strategi memberikan penglibatan masyarakat sepenuhnya dalam pengambilan keputusan kelestarian ekosistem.</i>					
4.	Full public participation can help achieve better performance in need of various of ecosystem sustainability. <i>Penyertaan orang ramai dapat membantu mencapai pencapaian yang lebih baik dalam kepelbagaian kelestarian ekosistem.</i>					
5.	Full public participation goal at the empower level is to create a program that allows the public to make an informed decision. <i>Tujuan penyertaan orang ramai sepenuhnya di peringkat pemberdayaan adalah untuk membuat program yang membolehkan orang ramai membuat keputusan yang tepat.</i>					



3. Balance Of Urban Growth With Natural Surroundings / Keseimbangan Pertumbuhan Bandar Dengan Kawasan Semula Jadi

No.	Statement / Kenyataan	1	2	3	4	5
1.	Provides community programs and economic strategies can promote the sustainability of ecosystem. <i>Menyediakan program kemasyarakatan dan strategi ekonomi dapat mempromosikan kelestarian ekosistem.</i>					
2.	Informal education from parents to their children is very important to urban growth. <i>Pendidikan tidak formal dari ibu bapa kepada anak-anak mereka sangat penting untuk pertumbuhan bandar.</i>					
3.	Give more attention to upgrade urban growth with natural resources in areas that have experienced slower urban development. <i>Perhatian lebih harus diberikan untuk meningkatkan kelestarian ekosistem di kawasan yang mengalami pembangunan bandar yang lebih perlahan.</i>					
4.	Promote energy conservation through efficient land use planning and building design can promote the sustainability of ecosystem. <i>Menggalakkan penjimatan tenaga melalui perancangan penggunaan tanah yang cekap dan reka bentuk bangunan dapat mempromosikan kelestarian ekosistem.</i>					

SECTION C : PROMOTING SUSTAINABILITY OF ECOSYSTEM

SEKSYEN C :MENGREALISERKAN KELESTARIAN EKOSISTEM

No.	Statement / Kenyataan	1	2	3	4	5
1.	<p>Practical methods allow for more strategic planning, through the protection of natural resources, active public participation, and the balance between urban growth and the natural environment to improve the sustainability of the ecosystem, thereby improving the quality of tourism products.</p> <p><i>Kaedah praktikal memungkinan perancangan yang lebih strategik, melalui perlindungan sumber semula jadi, penyertaan masyarakat yang aktif, dan keseimbangan antara pertumbuhan bandar dan persekitaran semula jadi untuk meningkatkan kelestarian ekosistem, sehingga meningkatkan kualiti produk pelancongan.</i></p>					
2.	<p>The demand for sustainable ecosystems has become more and more important.</p> <p><i>Permintaan untuk ekosistem lestari menjadi semakin penting.</i></p>					
3.	<p>Practical methods as a way to reduce errors and analyses the business environment.</p> <p><i>Kaedah praktikal sebagai cara untuk mengurangkan kesilapan dan menganalisis persekitaran perniagaan.</i></p>					
4.	<p>Practical methods are used measuring the sustainability of Sabah's ecosystem.</p> <p><i>Kaedah praktikal digunakan untuk mengukur kelestarian ekosistem Sabah.</i></p>					
5.	<p>Various sustainable measurement methods and methods have been developed in different contexts to ensure their applicability and accuracy in measuring sustainability levels.</p> <p><i>Pelbagai kaedah dan kaedah pengukuran lestari telah dikembangkan dalam konteks yang berbeza untuk memastikan kebolehlaksanaan dan ketepatannya dalam mengukur tahap keberlanjutan.</i></p>					

Thank you for your cooperation and participation.

Terima kasih atas kerjasama dan penyertaan anda.

T47

ORIGINALITY REPORT

22% SIMILARITY INDEX	21% INTERNET SOURCES	8% PUBLICATIONS	% STUDENT PAPERS
--------------------------------	--------------------------------	---------------------------	----------------------------

PRIMARY SOURCES

1	eprints.utar.edu.my Internet Source	3%
2	teamjournalht.files.wordpress.com Internet Source	1%
3	umkeprints.umk.edu.my Internet Source	1%
4	journals.sagepub.com Internet Source	1%
5	www.burlingtonvt.gov Internet Source	1%
6	hdl.handle.net Internet Source	1%
7	dlc.dlib.indiana.edu Internet Source	1%
8	mafiadoc.com Internet Source	1%
9	burlingtonpublishing.escribemeetings.com Internet Source	<1%

10	researchonline.jcu.edu.au Internet Source	<1%
-----------	---	---------------