YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF ECONOMICS

Ph.D. PROGRAMME

RESIDENTS' ATTITUDES TOWARDS TOURISM DEVELOPMENT IN NYAUNG SHWE TOWNSHIP

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JUNE, 2023

YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF ECONOMICS

Ph.D. PROGRAMME

RESIDENTS' ATTITUDES TOWARDS TOURISM DEVELOPMENT IN NYAUNG SHWE TOWNSHIP

This Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy (Ph.D.) in Economics,

Yangon University of Economics

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4 Ph.D Ba-3

YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF ECONOMICS

Ph.D. PROGRAMME

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I hereby certify that the content of this dissertation is wholly my own work unless otherwise referenced or acknowledged. Information from sources is referenced with original comments and ideas of the writer herself.

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ABSTRACT

Nyaung Shwe township is growing rapidly with international tourist arrivals, tourism receipts, and accommodation, on the other hand, the region is experiencing environmental impacts. Accordingly, this study aims to analyze the perceptions of residents regarding the impact of tourism in Nyaung Shwe township and to determine the factors which influence the attitudes towards tourism development. Data are collected from 383 respondents between May 2022 and September 2022 to meet the objectives of this study. Descriptive statistics and multiple regression analysis are used in this study. The findings indicate that residents perceive the positive impacts of tourism on economic, sociocultural, and environmental aspects. It is also found that age, living area, and education are determinant factors of the positive impacts of tourism development while income-related to tourism, and contact with visitors are influences on the negative impacts of tourism development. A majority of the residents express favorable attitudes towards further tourism development in the area. Those who perceive positive impacts across economic, sociocultural, and environmental aspects are more likely to favor further tourism development, while the negative environmental impacts are the main reasons for opposing such development. Based on the study's results, it is recommended that the local authority should address special requirements including supporting the improvement of the quality of handicrafts and traditional arts, providing vocational training in tourism and hospitality for the youth, and promoting cooperation with locals for short-term and long-term plans for the environmental conservation.

ACKNOWLEDGMENTS

I express my profound gratitude and admiration to the following people for their kind encouragement, guidance, and inspiration during my Ph.D. course, particularly during the writing of this dissertation.

First and foremost, my sincere gratitude goes out to Dr. Tin Tin Htwe, Rector of the Yangon University of Economics, for enabling me to submit this dissertation.

Secondly, I am grateful to Prof. Dr. Naw Htee Mue Loe Htoo, Head of the Department of Economics at the Yangon University of Economics and the Chairman of the Ph.D. Steering Committee, for her continuous support and encouragement throughout the dissertation writing process.

My deepest appreciation goes to my supervisor, Dr. Khin Thida Nyein, Pro-Rector of the Yangon University of Economics, for her invaluable guidance, enthusiasm, and moral support that contributed to the successful completion of this dissertation.

I am also indebted to external academics, including Prof. Dr. Kyaw Min Htun, Pro-Rector (Rtd), Yangon University of Economics, Prof. U Than Aung Yin, Pro-Rector (Rtd), Monywa University of Economics, Prof. Daw Nyunt Nyunt Swe (Rtd), Department of Applied Economics, Yangon University of Economics, Prof. Daw Myat Myat Thu (Rtd), Department of Economics, Meiktila University of Economics, Prof. Dr. Htay Htay Lwin, Acting-Rector, (Rtd), Co-operative University, Thanlyin, Prof. Dr. Khin Khin Htwe, Pro-Rector, (Rtd), Monywa University of Economics for their empathetic attitude, brilliant comments, suggestions, inspiration, and compassion.

Moreover, I express my gratitude to Dr. Cho Cho Thein, Pro-Rector, Yangon University of Economics, Dr. Tin Tin Wai, Pro-Rector, Yangon University of Economics, Prof. Dr. Su Su Myat, Head of the Department of Applied Economics, Prof. Dr. Yin Myo Oo, Department of Economics, Prof. Dr. Zin Zin Shwe, Department of Economics, and Prof. Dr. Aye Thida, Head of the Department of Statistics for their invaluable encouragement and academic guidance that enabled the successful completion of my dissertation.

Last but not least, I extend my heartfelt thanks to my family for their love, unwavering support, tolerance, and inspiration throughout my life.

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LIST OF ABBREVIATIONS

ASEAN	Association of South East Asian Nations
CBT	Community-Based Tourism
CFA	Confirmatory Factor Analysis
CIT	Community Involvement in Tourism
DPTOA	Domestic Pilgrimage & Tour Operators Association
EFA	Exploratory Factor Analysis
GAD	General Administration Department
GDP	Gross Domestic Product
GOM	Government of Myanmar
HMR	Hierarchical Multiple Regression
INGOs	International Non-government organizations
IQR	Interquartile Range
IRT	International Recommendations for Tourism Statistics
KMO	Kaiser-Meyer-Olkin
MHA	Myanmar Hoteliers' Association
MHTS	Myanmar Hotels and Tourism Services
MOECAF	Ministry of Environmental Conservation and Forestry
MOHT	Myanmar of Hotels and Tourism
MRA	Myanmar Restaurants Association
MSEA	Myanmar Souvenir Entrepreneurs Association
MTF	Myanmar Tourism Federation
MTM	Myanmar Tourism Marketing
MTTA	Myanmar Tourism Transportation Association
NGOs	Non-Government Organizations
PES	Payment for Environmental Services
RSTD	Residents' Satisfaction with Tourism Development
SEM	Structural Equation Model
SUS-TAS	Sustainable Tourism Attitude Scale
UMTA	Union of Myanmar Travel Association
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNWTO	United Nations World Tourism Organization
VFR	Visit Friends and Relatives
VIF	Variance Inflation Factor
WTTC	World Travel and Tourism Council

CHAPTER I
INTRODUCTION

Nowadays, tourism has become one of the most significant social and economic practices. The number of domestic and international travelers is steadily increasing. According to the World Travel and Tourism's Economic Impact and Trends (2021), the travel and tourism industries are the world's largest industries, approaching US$ 9.2 trillion in global GDP, employing 334 million people, and the world's leading industry contributors. Furthermore, international visitors' spending reached a total of US$1.7 trillion in 2019, accounting for 6.8% of total exports and 22.4% of global export services (WTTC, 2021).

In an attempt to bring economic, sociocultural, and environmental benefits, many countries are currently trying to develop the tourism sector since there are numerous advantages to hosting destinations. Tourism is promoted to increase economic revenue, create thousands of jobs, enhance infrastructure, and foster a sense of cultural exchange between visitors and residents. Furthermore, supporting a country's handicrafts and fine arts also contributes to the preservation of the beauty of nature and the cultural heritage of the country (UNWTO, 2019).

The tourism industry plays a crucial role in generating income, employment, and foreign exchange profits, which are top priorities for developing countries. In this regard, the tourism sector has the potential to be a significant factor in economic development (Konovalov E., 2016).

Tourism is regarded as one of the prospects for economic growth in developing countries, and it is an important source of income and employment, not only for developing countries but also for developed countries. Therefore, the governments of small countries prioritize the tourism industry more than large countries to achieve socioeconomic development while minimizing environmental consequences (Konovalov E., 2016).

After the development of tourism sectors and the exploitation of increasing numbers of new destinations, more attention is devoted to the impacts of tourism

development. The impacts can be short-term or long-term; direct or indirect; local, national, or global; and either positive or negative. The effects of tourism on the community are generally categorized into economic, social, and environmental impacts. While the literature on tourism often emphasizes the positive relationship between tourism and development, Harrison (1992) highlights that tourism can also have negative impacts on local communities, making it a mixed blessing for third-world countries. While tourism's economic benefits are highly favored by governments and policymakers, destinations and local people often suffer from the industry's undesirable impacts (Harrison, 1992).

Although research on the impact of tourism has historically focused on the economic and environmental impacts of tourism, meanwhile, sociocultural aspects receiving more attention. The impacts of tourism on society are often less visible compared to the economic and environmental impacts, making them difficult to quantify and measure directly. Thus, the difficulties in measuring sociocultural impacts led to the use of indirect measures, such as assessing resident perceptions of sociocultural impacts (Konovalov E., 2016).

The sociocultural impact of tourism encompasses its effects on various aspects of community well-being, including the lifestyle of residents, social life, daily routines, habits, beliefs, and family relationships, safety standards, moral behavior, creative expression, traditional ceremonies, and community organizations (Butler, 1980).

Despite the fact that the development of tourism can bring economic benefits, it has adversely affected both social and environmental impacts. On the other hand, tourism can bring economic benefits as well as social improvements, as in, improving infrastructure. Depending on the type and intensity of tourism development and the characteristics of the host community, the consequences of tourism have both positive and negative economic and sociocultural impacts. Therefore, it is crucial to understand the specific impacts of tourism development on the host community's perceptions (Kozhokulov et al., 2019).

Therefore, the diverse roles of the tourism sector can be harnessed as an effective tool for promoting regional and national socio-economic growth. The functions of tourism are mostly seen in specific regions, and the availability of natural resources in those areas determines the potential for tourism development of that area. Therefore, it is important to employ tourism as a tool for socioeconomic development at the local level. The accomplishment of several specific tasks, with the following as priorities: identifying and

assessing the social and economic impact of tourism in the region; developing effective techniques; and determining the direction of tourism development toward the desired socio-economic result, are all necessary to ensure the growing impact of tourism on the socio-economic condition of the region (Kozhokulov et al., 2019).

In addition, upholding positive tie between tourists, residents, governments, and private business owners is essential for the development of tourism in the community (Sharpley, 2014). From the locals' perspective, this success depends on the residents believing that the tourism benefits outweigh the drawbacks. In this regard, understanding the perceptions of the host community on the specific impacts of tourism development can contribute to establishing policies that maximize the positive impacts and prevent the negative impacts of tourism development (Sharpley, 2014).

1.1 Rationale of the Study

Tourism has become an important phenomenon in economic, social, and cultural terms. Tourism has transformed itself and is one of the most dynamic economic sectors at present. Tourism can contribute to achieving multiple Millennium Development Goals, such as economic growth, sustainable development, intercultural understanding, and peace between nations (UNEP, 2005).

Myanmar is known for its incredible natural attractions as well as its rich cultural history, which includes pagodas, temples, historic buildings, and the customs and traditions of more than a hundred different national races. Myanmar's landscape, covering a total area of 676,577 square kilometers, is rich in natural resources, including diverse ecosystems, which serve as strategic strengths for tourism (MOHT, 2013).

Since the start of democratic reforms in 2011, the tourism business has become important in driving the improvement of the country's economy. The World Travel and Tourism Council, 2021, international and domestic travelers in Myanmar spent US$ 2,842.8 million and US$ 1,499.0 million, respectively, and the tourism sector directly supported approximately 1,414.9 jobs in 2019 (WTTC, 2021).

The Master Plan for Tourism in Myanmar, 2013–2020, set a target of 7.48 million international visitors in 2020, which represents an increase of around 1.48 million tourists as of 2016. When compared to the year 015 and 2016, there were 9,132 hotel rooms at the end of 2015, and there was an increase of 11,207 at the end of November 2016. However, meeting the high demand for hospitality services remains a challenge for Myanmar in achieving its tourism industry target. The World Travel and Tourism Council predicts that

Myanmar's tourism sector will place second out of 184 countries in 2016, and it has the potential to grow more during the period that follows. Employment in the Myanmar tourism industry is expected to rise by 66 percent (MOHT, 2013).

In 2016, the Myanmar government established a clear investment law to encourage foreign direct investment, including the tourism sector. Furthermore, the government has upgraded the system by introducing online application forms and streamlining the process for renewing licenses for hotel operations, tour companies, tour guides, and tourist transportation. The government is attempting to increase investors' trust in Myanmar because the country's tourism sector's development depends on political reforms, economic stability, and transparent procedures for foreign investment. This can encourage foreign investors to invest in the tourism industry and promote tourism development. Moreover, the Myanmar Tourism Master Plan 2013–2020 has presented its vision to develop the tourism and hospitality sectors to create jobs and business opportunities for the Myanmar people (MOHT, 2013).

The Ministry of Hotels and Tourism (MOHT) provides Myanmar's visitor arrivals record, as there were 4,364,101 persons in 2019, compared with 3,443,133 persons in the previous year. Along with the increased visitor arrivals, visitors' expenditure on accommodation, food, and drink, local transport, entertainment, shopping, etc. increased from 1,651,000 dollars in 2018 to 2,818,753 dollars in 2019 (MOHT, 2019).

In addition, it provides employment opportunities and income generation for local people. Hence, tourism has generally been regarded as an engine for economic development. Myanmar has reaped many benefits from international tourism. The contributions of travel tourism to Myanmar's GDP increased from US$ 1.6 billion in 2011 to US$ 5.1 billion in 2019 (WTTC, 2021).

Myanmar has gained popularity as a travel destination for visitors worldwide due to its rich cultural and natural heritage, hospitable people, and spiritual values (MOHT, 2013). The most popular tourist sites in Myanmar are Yangon, Bagan, Mandalay, and Inlay Lake which is situated in Nyaung Shwe township. Yangon has the largest share of the arrivals of international tourists (94.3%), and Bagan stands at second place that has (27.5%), of international tourist arrival. Mandalay (27.3%) and Inle Lake (21.1%), respectively (BIF Burma, 2017).

In this regard, the tourism sector becomes an essential sector for the economic development of Myanmar. The tourism sector not only contributes directly to the

employment and income of the residents but also indirectly contributes to improving health, education, and infrastructure within the tourist destination areas.

Additionally, the government is adopting tourism sector growth strategies, plans, and programs with the aim of achieving economic goals. It is important to examine the perceptions of local residents about the impacts of tourism development in tourist destination areas. The development of the tourism sector can have significant economic, social, and environmental impacts both positively and negatively, which can influence the residents' attitudes towards tourism development. Residents of the area believe that resident involvement is necessary for good tourist planning in order to mitigate any negative impacts and make residents aware of the advantages of the tourism industry. Hence, it is important for community leaders and tourism developers to gain an understanding of the opinions and attitudes of residents toward tourism development (Diazceballos, 2017).

As Myanmar's tourism sector is experiencing rapid growth in international tourist arrivals and tourism receipts, it is crucial to observe and analyze the impacts of tourism. After that, it has been a significant topic of research for many years to examine locals' perceptions regarding tourists. How the community views the impact of tourism, both favorably and unfavorably, influences residents' attitudes towards tourism development. Therefore, this study investigates how the residents perceive the impact of tourism on the economy, sociocultural, and environment. Furthermore, this study examines the factors that influence residents' attitudes towards further tourism development in Nyaung Shwe township.

1.2 Statement of the Problem

Nyaung Shwe is the main tourism hub and service town of the region, Inle Lake and plays an important role in the tourism industry of Myanmar. Among tourist attractions across Myanmar, Inle Lake is well known for its unique biodiversity and culture because it is widely depicted as a unique region with original features.

The distance between Taunggyi, the capital city of Shan State, and Inle Lake, which is situated in Nyaung Shwe township, is about 39 kilometers. The tremendous highland lake is 22 km long and 900 m above sea level. It was recognized as one of the ASEAN Wildlife Heritage Parks in 2003 and is the second-largest lake in Myanmar. The lake is protected by the Ramsar Convention, which protects wetlands, as of 2018. For centuries, this unique territory has been a contact zone for several ethnic groups. The

majority of residents of Inle Lake are called Intha, and they live in traditional stilt homes made of wood and bamboo in the villages that surround the lake as well as on the water itself. Shan, Taungyo, Pah-O, Danu, Kayah, and Bamar live in this region. The Intha people, who are the majority residents of Inle Lake, are renowned for their distinctive leg-rowing method. Tourism and recreation have existed on a significant scale (Koppen, 2015).

According to the Myanmar Tourism Statistics (2019), Inle Lake is one of the top four destinations; namely Yangon, Mandalay, Bagan, and Inle Lake. It is a heritage site known as a floating village. It is also the second-largest lake and a major source of hydropower in Myanmar, and it also has important implications for economic, social, cultural, and ecological aspects. Inthars who are living in Nyaung Shwe township have efficiently managed the economy and established an excellent location: floating agriculture on the lake, high-quality handicrafts, and fishing. Their economic dominance and adaptability have also allowed them to take advantage of tourism (MOHT, 2019).

The region is a flagship destination in Myanmar, home to outstanding landscapes, cultural and natural heritage values, diverse communities, and stunning nature. The region is, however, experiencing environmental degradation from the combined effects of unsustainable resource use, increasing population pressures, climate variability, and rapid tourism development (Michalon, 2017).

Tourism is becoming an ever-increasing part of the local economy, with approximately 150,000 visits to Inle Lake annually (MOHT, 2019). The region is home to over a hundred hotels and guesthouses, offering more than 3000 rooms and generating over 2,400 direct jobs in the hotel sector alone. There are more than 1,000 licensed boats for tourists from 26 companies of the Inle Zone Transport Association, while field evidence shows that there are more than 100 restaurants with their respective staff. Handicrafts, silversmith showrooms, and souvenir shops leverage the size of the tourism sector (Michalon, 2017).

Tourism has a significant economic impact, with foreign visitors spending an average of 90 dollars per day. In 2019, the region received an estimated 173,959 visitors, with most staying for at least two days. Annual income from domestic and foreign visitors in 2019 was $ 6,651,838 (MOHT, 2019). Tourism in Nyaung Shwe township has had a substantial growth over the last decade, and the large-scale tourism development, concentrated in Inle Lake areas, has inevitably had an impact on local communities and wildlife habitats.

Inle Lake is a natural resource that attracts local and foreign travelers. Numerous villages are located on the lake, and they attract tourists with their floating gardens. Nyaung Shwe township is experiencing rapid growth in international tourist arrivals, resulting in increased tourism receipts and accommodation facilities. However, UNDP (2019) states that the region has been experiencing one of the most severe droughts in its history, bringing the lake to a record low, and this has badly affected the floating gardens since 2010. Therefore, the perceptions of residents regarding the impacts of tourism on residents in this area are needed to observe.

Accordingly, this study analyzes how the residents perceive the impact of tourism on this region and investigate which factors influence their attitudes towards further tourism development in Nyaung Shwe township.

1.3 Research Questions

The study attempts to provide answers to the following research questions:

(i) What is the current status of tourism development in Nyaung Shwe township?

(ii) What are the residents' perceptions on the impacts of tourism development in terms of economic, sociocultural, and environmental impacts?

(iii) How do the characteristics of residents affect their perception?

(iv) How do these perceptions affect the attitude of local residents toward further tourism development?

1.4 Objectives of the Study

The objectives of the study are as follows:

(i) To identify the existing status of tourism development in Nyaung Shwe township

(ii) To investigate the residents' perceived economic, sociocultural, and environmental impacts of tourism on Nyaung Shwe township

(iii) To analyze which factors have an effect on the residents' perceived impacts of tourism in all aspects: economic, sociocultural, and environmental

(iv) To examine these impacts of tourism on local residents' attitudes towards further tourism development

1.5 Method of Study

This study uses both descriptive and analytical methods based on primary and secondary data. In this study, a two-stage random sampling is used to conduct a survey. A sample of 2 quarters and 4 village tracts are chosen from 12 quarters and 7 village tracts which are the most popular tourist places. Then the sample households are proportionately chosen from the sample quarters and village tracts by using simple random sampling. A five-point Likert scale questionnaire is used to collect primary data.

Secondary data are obtained from various sources such as the Ministry of Hotels and Tourism (MOHT); Nyaung Shwe Township General Administration Department (GAD); Nyaung Shwe Township Development Administration Office; the Ministry of Labour, Immigration, and Population (MLP); the 2014 Myanmar Population and Housing Census; and statistical records from various books, research papers, periodicals, newspapers, and journals.

To analyze the data, multiple regression analysis is used in this study.

1.6 Scope and Limitations of the Study

This study analyzes the tourism development of Nyaung Shwe township. Based on the availability of data, the period of the study concerned with the tourism industry in Myanmar is covered from 2001 to 2021. The period of study concerned with the tourism industry in Nyaung Shwe township is covered from 2001 to 2022. The period of study concerned Nyaung Shwe township's profile and transportation is covered from 2018 to 2022. The source of drinking water, the source of lighting, and the availability of communication in Nyaung Shwe township are obtained from the 2014 population census in Myanmar. The survey is carried out from May 2022 to September 2022. Only one respondent who is 18 years old and above is collected from each household.

This study does not cover the COVID-19 pandemic impact and political impacts on the perception of residents in Nyaung Shwe township.

1.7 Organization of the Study

This study includes five chapters. Chapter One provides an introduction covering the rationale of the study, the statement of the problem, the objective of the study, the method of study, the scope, and the limitations of the study, and the organization of the study.

Chapter Two discusses the literature review of this study: the terms and concepts of tourism, types of tourism classification of the travelers, theories relating to tourism relationships, interactions, and transactions, factors affecting residents' perceptions of tourism impacts, positive and negative impacts of tourism, reviews on previous studies, and the analytical framework for the analysis.

Chapter Three details tourism development in Nyaung Shwe township, which encompasses the broader context of the tourism industry in Myanmar.

Chapter Four presents a detailed analysis, focusing on the residents' perceived impacts on tourism development, and how these perceptions affect their attitudes towards tourism development in this area. This chapter includes the research design, analytical models, and characteristics of the respondents. The latter part of chapter Four focuses on the analysis of survey data consisting of reliability tests, factor analysis, identifying outliers, descriptive analysis of measurement scales, and multiple regression analysis.

Chapter Five is the conclusion, including findings and suggestions.

CHAPTER II
LITERATURE REVIEW

Tourism is now widely recognized as a complex combination of activities, that has contradictory and sophisticated impacts on environmental, economic, and social-cultural aspects. As tourism rapidly expands in both industrialized and developing countries, it also brings along negative impacts, such as ecological and sociocultural disturbances. Tourism growth cannot be sustained unless it takes the community's needs into consideration (Gursoy et al., 2009). Tourism-based economies provide benefits such as increased employment opportunities, and the prosperity of small and medium enterprises through tour services, souvenir shops, local food services, and tour guide services. Similarly, countries that are not solely reliant on tourism can also benefit from other activities associated with the tourism industry (Gursoy et al., 2009).

2.1 Terms and Concepts of Tourism

Tourism has been defined by several experts, and in order to define tourism and describe its scope fully, it must consider the various groups that participate in and are affected by this industry. Their perspectives are vital to the development of a comprehensive definition.

According to Goeldner and Mcintosh (2009), there are four distinct perspectives on tourism:

(i) **The tourist**: The tourist seeks a wide range of experiences and satisfactions, which can be broadly categorized into psychic and physical aspects. The desires and preferences of tourists play a significant role in determining their destinations and activities (Goeldner and Mcintosh, 2009).

(ii) **The business providing tourist goods and services**: For business people, tourism represents a significant opportunity to generate profit by catering to the needs and desires of tourists. The tourism industry encompasses a wide range of goods and services, and successful businesses understand and respond to the demands of the

tourist market (Goeldner and Mcintosh, 2009).

(iii) The government of the host community or area: From the government's perspective, tourism is often viewed as a significant contributor to the economy, bringing in foreign exchange and generating income for the local population (Goeldner and Mcintosh, 2009).

(iv) The host community: The host community, which includes the local residents of the destination, perceives tourism in a distinct way compared to other stakeholders. Their perspectives are shaped by the direct impact of tourism on their daily lives, culture, and livelihoods. The interaction between large numbers of international visitors and residents can have both beneficial and harmful effects, and these can significantly influence the community's attitude toward tourism (Goeldner and Mcintosh, 2009).

As a result, it is possible to describe tourism as the procedures, activities, and consequences resulting from the relationships and interactions among tourists, tourism service providers, local governments, communities that receive tourists, and external surroundings that are concerned with attracting and welcoming visitors.

The United Nations World Tourism Organization (UNWTO) defines "tourism as, comprising the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes" (UNWTO, 1995).

There is international tourism such as Inbound tourism: Visits to a country by nonresidents, Outbound tourism: Visits by residents of a country to another country; Internal tourism: Visits by residents and nonresidents of the country of reference; Domestic tourism: Visits by residents of a country to their own country; and National tourism: Internal tourism plus outbound tourism (the resident tourism market for travel agents, airlines, and other suppliers) (UNWTO, 1995).

In 2008, UNWTO defines tourism as "Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes." These people are called visitors and tourism has to do with their activities, some of which imply tourism expenditure. Tourism, then, is more than just people traveling around for several different

reasons (UNWTO, 2008).

2.2 Types of Tourism and Classification of Travelers

Depending on the characteristics of tourism, the types of tourism are dynamic in time and vary a lot. According to Tureac & Turtureanu (2010), there are eight types of tourism:

(1) Pleasure tourism

When someone travels for pleasure, they do so to have fun, get some fresh air, satisfy their curiosity, unwind, explore something new, take in the breathtaking surroundings, and learn about local legends and quietness (Tureac & Turtureanu, 2010).

(2) Recreational tourism

Tourism for recreation is used to refresh the mind, regain physical and spiritual fitness, and alleviate fatigue and exhaustion. A shoreline, mountain, health facility, or resort are examples of places where this kind of tourism can be found. Recognizing that many tourists are attracted primarily by leisure amenities, the tourism industry. The invention, preservation, and administration of leisure activities, as well as the manufacture of goods or services across the entire sector, have all been heavily influenced by the government (Tureac & Turtureanu, 2010).

(3) Cultural tourism

This type can be formed by a variety of factors, such as research center study, learning the social mores, foundations, and various ways of life of the society, seeing historical monuments, historical artifacts, cultural and religious centers, music festivals, theater, folk dance, etc. (Tureac & Turtureanu, 2010).

(4) Sports tourism

The two categories of this tourism are as follows:

(a) ***Big sports event*** is the biggest sports event like Olympic Games, World Ski Championship, Boxing Championship, and other events to attract visitors or fans (Tureac & Turtureanu, 2010).

(b) ***Sporting tourism of the Practitioners*** is sports tourism for people who want to learn and practice by themselves like climbing the mountain, riding horses, hunting, fishing, etc. (Tureac & Turtureanu, 2010).

(5) Business tourism

Experts claim that this tourism falls under the category of professional travel or travel since it is associated with a person's employment or position and they are unable to choose the destination or the time they travel (Tureac & Turtureanu, 2010).

(6) Convention tourism

Convention tourism is favored by many nations because it attracts a higher number of tourists who stay longer in the country. The accessibility of a nation plays a significant role in the development of convention tourism infrastructure (Tureac & Turtureanu, 2010).

Tourism can be categorized into various forms based on different criteria. The criteria for the initial area and the destination include domestic tourism and international tourism. The number of participants distinguishes between individual tourism and group tourism. Organizational criteria classify tourism as organized, unorganized, or semi-organized. The season criterion categorizes tourism as continuous or discontinuous. The temporal criterion distinguishes between spending a lot of time traveling, long-duration tourism, and tourism of reduced duration. Transportation vehicles also serve as a criterion, including train, auto, marine, air, and other forms of tourism such as cycling or walking. Social criteria differentiate between private tourism and social tourism. The age and occupation of tourists result in types of tourism specific to youth, adults, or the older generation. Lastly, the type of destination can be categorized as mountain tourism, seasonal tourism, or others (Tureac & Turtureanu, 2010).

(7) Health and Wellness Tourism

This type of tourism focuses on enhancing health, well-being, and relaxation. It includes activities like spa retreats, yoga and meditation retreats, wellness resorts, and medical tourism for seeking specific medical treatments or procedures (Tureac & Turtureanu, 2010).

(8) Educational Tourism

Educational tourism focuses on learning and acquiring knowledge through travel. It includes educational tours, study abroad programs, language learning trips, and visits to educational institutions and cultural centers (Tureac & Turtureanu, 2010).

These distinctions in tourism types are made based on various factors, including the reasons for travel influenced by psycho-sociological factors, health, or personal circumstances. The average length contributes to the determination of different types of tourism.

Classification of Travelers: There is a basic difference between locals and guests

and the interest of travel and tourism practitioners in the characteristics of non-travelers as well as travelers. According to International Recommendations for Tourism Statistics IRT (2008), the classification of travelers can be defined as follow;

(1) Usual residence: The geographic area where the listed individual typically resides is known as the place where it is usually residence (IRT, 2008).

(2) Visitor: A visitor is a traveler who goes on a trip for less than a year, for a primary reason other than to work for a resident organization in the country or location, visited, to a main destination that is outside of his or her typical environment (IRT, 2008).

(3) Tourists (Overnight Visitors): Domestic, inbound, or outbound visitors are either considered tourists (or overnight visitors) if their trip involves an overnight stay in all other cases (IRT, 2008).

(4) Traveler: The term "traveler" describes a traveler's activity. A person who moves between various geographic regions for any reason and for any length of time is a traveler. Visitors are a specific category of travelers; hence tourism is the category of travel (IRT, 2008).

(5) Domestic Travelers: A visitor who stays within the borders of their home nation is referred to as a domestic traveler (IRT, 2008).

(6) International Travelers: If an individual is visiting another country for tourism purposes and is either a non-resident traveling within the country of reference or a resident traveling outside of it, they are considered to be international visitors with respect to the country of reference (IRT, 2008).

(7) Travel group: Individuals or travel parties that are traveling together are referred to as a travel group. Examples include tourists who are doing the same package tour or children who are attending a summer camp (IRT, 2008).

(8) Excursionists (Same-day Visitors): A visitor (domestic, inbound, or outbound) is considered a tourist if his or her trip also includes a day traveler (or excursionist) (IRT, 2008).

2.3 Tourism Development

Tourism development refers to the process of planning, implementing, and managing initiatives to enhance the tourism industry in a particular destination or region. It involves various stakeholders, including government bodies, tourism organizations, local communities, and private sector entities, working together to stimulate and support

the growth of tourism. The development of tourism typically encompasses several key areas namely infrastructure development, marketing and promotion, product diversification, capacity building, sustainability and responsible tourism practices, and stakeholder engagement (Butler, 1980).

In regard to tourism development, the concept of sustainable development has been promoted as a very important issue that may mostly change the character of tourism (Butler, 1980). Based on the World Tourism Organization's definition, sustainable tourism development depends on meeting and satisfying the requirements of both the visitors and the local community in addition to maintaining and increasing opportunities in the long run (UNEP, 2005).

Previous studies have recommended that the success and also the sustainability of tourism development depend on the community's perceptions of the visitors and the relevant tourism activities (Gursoy et al., 2009). More specifically, the UNWTO acknowledges three important stakeholders for sustainable tourism development: environmental sponsors, the local community, and also the tourism industry. The latter offers tourism services and amenities that generate accumulated employment opportunities, income, and revenue for the community (UNWTO, 2005).

The tourism industry depends on natural and sociocultural resources to attract visitors. To ensure a sustainable tourism industry, these stakeholders should work to balance the incoming tourist crowds and also the carrying capacity of the community and these resources (An Y, 2016). The public sector, specifically the local government, administers the optimum utilization of those resources to make sure of a foundation for long-term tourism development (An Y, 2016).

Residents' perceptions are necessary for the success of sustainable tourism development, which means their opinions ought to be considered by decision-makers, policy-makers, local government officials, tourism planners, and business owners since the success of sustainable tourism development depends on their support (Eshliki & Kaboudi, 2012).

Therefore, tourism development aims to maximize the positive economic, social, and cultural impacts of tourism while minimizing any potential negative consequences. It involves a comprehensive approach to planning, management, and promotion to create a sustainable, and competitive tourism industry that benefits both the destination and its visitors (An Y, 2016).

2.4 Theories Relating to Tourism Relationships, Interactions, and Transactions

In order to explain residents' differing perceptions toward impacts, Doxey's Theory and Social Exchange Theory are presented in this study.

2.4.1 Doxey's Theory

Doxey's (1975) Irridex considers the relationship between tourists and locals. Doxey's Irridex's core concept is that as tourism grew, natives would grow increasingly hostile to visitors. Figure (2.1) provides a summary of the procedure by which this happens.

Doxey's theory posits that destinations undergo changes and advancements over time. It does have a significant implication, though, which is that specific locations might not be able to develop unrestrainedly. Doxey's Irridex predicts that the number of visitors will eventually stop increasing at the same rate it had been and may even start to drop as natives grow more hostile to visitors (Doxey's, 1975).

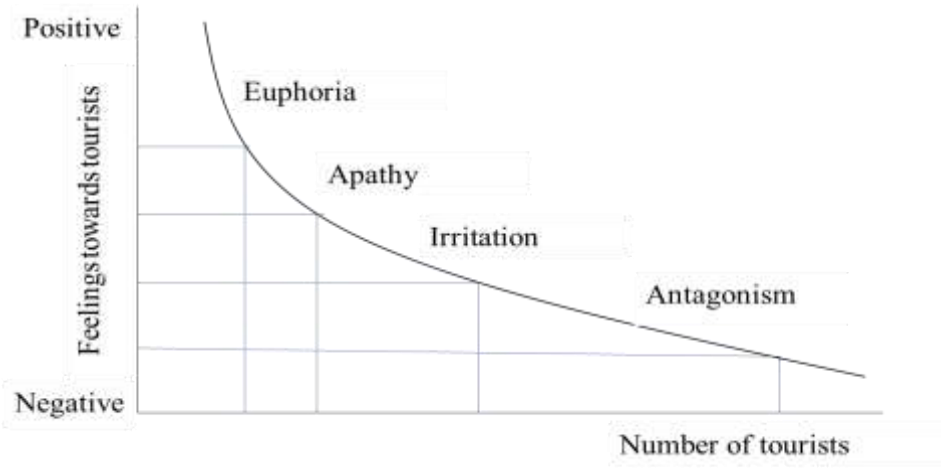
Figure (2.1) Doxey's Theory (1975)

Euphoria	Visitors are welcome and there is little planning
↓	
Apathy	Visitors are taken for granted and contact becomes more formal
↓	
Annoyance	Saturation is approached and the local people have misgivings. Planners attempt to control via increasing infrastructure rather than limiting growth
↓	
Antagonism	Open expression of irritation and planning is remedial, yet promotion is increased to offset the deteriorating reputation of the resort

Source: Doxey, 1975

Doxey (1975) assumed that residents' attitudes change as a result of interaction between hosts and visitors at different times of tourism development. The author also considered that the growing number of visitors is proportional to locals' growing discontent with tourists (Doxey's, 1975).

Figure (2.2) Doxey's Irridex Model



Source: Doxey, 1975

Doxey's Irridex theory identifies four residential attitudes that range from euphoria to antagonism. Figure (2.2) shows a relationship curve and also presents the relationship between the number of tourists and residents' attitudes change. The beginning of tourism development can also be called the euphoria stage when the destination does not have many tourists, the host community welcomes visitors, and residents are interested in and curious about outsiders (Doxey's, 1975).

Along with further tourism development, the number of visitors increases and the local community has more opportunities to come into contact with visitors. In that case, locals' attitudes towards tourists are indifferent in that they neither like nor dislike visitors, and the interaction between hosts and visitors tends to be commercial (the apathy stage). In the stage of irritation, hosts' attitudes towards guests reach antipathy. At this stage, the host community begins to feel that its daily life is disturbed by tourists and starts to realize the negative effect of tourism. With tourism continuing to develop, sociocultural and environmental problems become more serious (Doxey's, 1975).

The landscape and sociocultural atmosphere experience a big change, as well as the local community became hostile toward visitors. That means the residents' attitudes towards visitors have moved into the final phase (the antagonism stage). This model demonstrates that residents' attitudes towards tourism will experience a series of changes (Doxey's, 1975). The host community's attitudes are originally positive but become negative when more visitors are added (Long et.al, 1990).

However, some scholars have raised problems with Doxey's Irridex theory.

Empirical studies have found mixed results regarding the applicability of the Irridex theory in predicting residents' attitudes towards tourism. Scholars have criticized the change in residents' attitudes towards tourism as a predictably single pattern of response; in other words, they think that the index theory is too simple and absolute. It implies that there is a sense of commonality in the attitudes and responses of locals to tourists. In reality, the residents in one host community have different perceptions of tourism in the same stage of tourism development. In support of this criticism, researchers have commented that a heterogeneous community response and diverse residents' attitudes simultaneously exist in a community (Butler, 1980; Wang et al., 2006).

A coastal town that witnessed rapid tourism growth had residents with different perspectives on the benefits and drawbacks of tourism. Some residents supported the economic benefits and job opportunities brought by tourism, while others expressed concerns about environmental degradation, loss of traditional values, and gentrification. These conflicting attitudes within the same community highlighted the existence of diverse responses to tourism (Wang et al., 2006).

2.4.2 Social Exchange Theory

Social exchange theory conceptualizes the exchange of resources between individuals and groups in an interaction situation (Brinberg & Castell, 1982), and thus provides a framework for understanding tourism relationships, interactions, and transactions. Long et al. (1990) first introduced the theory into tourism to harness its potential to explain residents' differing perceptions toward impacts. Ap (1992) uses a model of social exchange theory in tourism visitor-host interactions. Ap (1992) identifies four crucial phases: the start of an exchange, exchange creation, exchange transaction evaluation, and exchange implications evaluation.

The first stage of the exchange process, the initiation of an exchange, occurs during the pre-exchange period (Gachter & Fehr, 1999). Social exchange theory posits that during this period satisfaction of an actor motivates an exchange relationship; without a need to satisfy an actor, there is no reason to seek interaction. The initiation of exchange by an actor begins the process of interaction (Ap, 1992).

The second stage, known as the exchange formation, is made up of three interrelated parts: antecedents, the exchange relation, and the form of the exchange relation (Ap, 1992). The antecedents are the preceding conditions of interaction and represent opportunities or situations perceived by at least one actor before the exchange

relation forms. At this stage, an actor predicts if an exchange with another will result in rewards or benefits, and attempts to maximize the possible rewards and benefits or at least ensure that the resources to be exchanged are roughly equivalent (Gui, 2000). If either actor perceives the antecedents as inequitable, they have the option to withdraw before the actual exchange of resources. If the actors view the antecedents as favorable, then an exchange relation usually forms (Ap, 1992).

During the exchange relation, a series of temporally inter-dispersed exchanges of material, social, and or psychological resources transpires, determining the nature of the exchange (Ap, 1992). Important to note is that exchanges, though often financial in nature, do not necessarily involve economic or physical resources. The form of the exchange relation is a function of the power and dependency relationship between actors, which often manifests because of either a balanced or unbalanced exchange of resources during the exchange relation (Yamagishi & Cook, 1993).

The final two stages of the exchange process are the exchange transaction evaluation and the evaluation of exchange consequences (Ap, 1992). Both stages contribute to the overall post-exchange, during which each actor implements a procedure to assess the resource transaction and determine its effects (Cook et al., 1983). The evaluation also includes the actors to identify whether the exchange is positive or negative for the other actor(s) involved in the process (Ap, 1992). If either actor perceives the consequences of the exchange as negative, meaning the exchange relation is unbalanced and the transactions of resources are not gratifying, the actor has the option to withdraw from future exchanges (Emerson, 1987). A negative evaluation does not mean the actor will necessarily withdraw from the social exchange, as an actor may perceive the exchange as negative, but continue the exchange because of necessity (Lindberg et al., 2001).

The final stage of the exchange process focuses on the community evaluation of exchange consequences. The consequences of the exchange refer to the range of such as economic, environmental, and sociocultural impacts of tourism on communities (Hernandez et al., 1996).

Generally, participants involved in an exchange are bound to measure their gains and losses; the process of exchange could continue while both sides sense whether their benefits outweigh the costs or whether their benefits and costs are in equilibrium. By that measure, if one party finds that the gains from the exchange process are less than the cost, they might choose to drop out of the exchange relationship. The participants involved in interaction can include a single person or an entire community. By definition, the

motivation for the exchange is to meet the mutual interests and profit between the involvements of the participants (Ap, 1992). Tourists engaged in an exchange relationship have diverse travel purposes, which they perceive as their personal gain. In contrast, the motivation of the host population in this relationship is to derive benefits from tourism (Ap, 1992).

There is wide agreement that social exchange theory is an appropriate framework to use in developing an understanding of residents' perceptions of tourism (Ap, 1992). In terms of tourism, social exchange theory can predict the residents' attitudes towards tourism and can be used to explain why residents have different perceptions of tourism; in other words, social exchange theory can reflect the value of the host community and person unit. In the same way, as the term tourism impact, social exchange theory also examines economic, environmental, and sociocultural aspects, and then determines how residents respond to tourism development and future development (Andriotis & Vaughan, 2003).

Perdue et al., (1987) found that when residents gain benefits from tourism development, their perception on tourism is unrelated to their socio-demographic characteristics. This could explain why many popular destinations attract mostly non-native businessmen and these people almost always have more positive attitudes towards tourism. Still, Ap's (1992) conclusion is that residents who deem the costs of tourism development to be lower than the benefits could have a positive attitude toward further tourism development, but when residents find that an imbalance in the exchange relationship exists in tourism development and the benefits are lower than the costs, they might have a less positive perception on tourism development. In general, the results of a cost-benefit analysis determine how locals feel about tourism and whether they support additional tourism growth (Andriotis, 2005).

From the above statement, economic, sociocultural, and environmental components are known as the major elements provided by the host community (Yan, 2013). In the first stage of tourism development, the host community is more aware of its economic benefits and ignores its sociocultural and environmental costs in the exchange relationship. Along with tourism growth, residents not only assess the economic benefits but also consider the social and environmental benefits (Ap, 1992).

Most often, members of the host community are divided into different groups according to the number of benefits obtained from tourism. The same group's people have similar attitudes towards tourism development as usual; with this in mind, some

researchers depend on residents' careers (whether they are employed in tourism and related industries) (Ap, 1992).

Therefore, the social exchange theory is used for the interpretation between the tourism benefits/costs and the residents' attitudes towards tourism development, whereas Doxey's model is more inclined to the description of the phenomenon in the different phases of tourism development. This paper delves into the interpretation of the relationship between tourism benefits/costs and residents' attitudes towards tourism development, using the lens of social exchange theory. Then, the factors that influence residents' perceptions of tourism impacts, both positive and negative impacts of tourism, as well as their attitudes towards tourism development are examined in the subsequent sections.

2.5 Factors Affecting the Residents' Perceptions of Tourism Impacts

Based on several perspectives of researchers, the influencing factors of residents' perception on tourism will represent three major categories: socio-demographic factors, economic dependency factors, and spatial factors. These factors affect residents' feelings regarding tourism; so, generally, it's better to not take into account them on an individual basis. The following explanation reveals the result regarding the relationship between residents' perception on tourism impact and the three types of factors (Yan, 2013).

2.5.1 Socio-Demographic Factors

Socio-demographic factors are seen most often within the latest tourism research to be examined. The common variables are age, gender, education, community attachment (birthplace, length of residence, active membership of people's organizations, and ethnic heritage), ethnicity, and income. The variables listed above may be viewed as a necessary attribute of a specific person or community. Generally, some related analysis has used these variables among hypotheses to examine the relationship between demographic characteristics and perceived tourism impacts. Normally, the demographic characteristics of the resident have a corresponding reaction to tourism impacts (Yan, 2013).

Age: Age, as one of the basic variables, has been studied persistently in the previous literature. Older residents care less for the negative impacts of tourism development than younger residents and older residents are friendlier toward international visitors than younger residents (Tomljenovic & Faulkner, 2000). In distinction, older residents have more negative feelings toward tourism than younger residents, whereas they could assume that tourism development has a lot of negative impacts (Cavus &

Tanisevdi, 2003)

Gender: Relating to gender, ladies have a less favorable perspective toward tourism than men on account of the unsafe neighborhood and economic benefits. It may be related to tourism resulting in a rise in the crime rate and dynamic economic structure in the tourism region (Harrill, 2004).

Education: Regarding the education factor, education will facilitate predicting the perception on tourism's contribution to the standard of life (Wang et al., 2006). In addition, educated individuals are doubtless to be concerned regarding tourism impacts, whereas extremely educated residents tend to note the negative aspects rather than people with a low level of education (Andriotis & Vaughan, 2003).

Community Attachment: Another important variable is community attachment, residents with a powerful tie to at least one area typically have different attitudes and perceptions of tourism development from those that have weaker ties to a section (Yan, 2013). Residents' ties to a section may be seen as place attachments. Place attachment consists of the connections between an individual and a community. These connections will inspire native pride and create residents a lot of involvement with their community. Still, once residents think of themselves as a member of the community, they will have a robust feeling of attachment to the community that produces additional sensitivity to community development or modification. By this logic, they are willing to affix civic organizations and get involved in tourism decisions (Yan, 2013).

Birthplace: Birthplace as an associated integral part of place attachment will affect residents' perception on tourism and tourists (Brougham & Bulter, 1981). If people's birthplace is inconsistent with their current residence, relating to their perception on the tourism impact on their current living place, their attitudes could also be apt to be less positive or maybe indifferent. However, that is not continuously the case; residents' perceptions of tourism development are additionally influenced by another variable: length of residence (Brougham & Bulter, 1981).

Length of residence: The length of residence variable is another part of the place attachment. The length of the residence period is directly proportional to the sensitivity to the tourism impact: the longer a resident has lived in one space, the more sensitive he or she is to the perception on the tourism impact during this place (Yan, 2013). Long-term residents regard tourism as having an additional negative impact than short residents (McCool & Martin, 1994). Notwithstanding, whichever have long-term or short-term residents, will gain advantages from tourism are more involved in tourism development,

and have a tendency to possess a positive perception on tourism (Yan, 2013).

2.5.2 Economic Dependency Factors

The reason why the tourism industry has developed thus quickly and gained wide attention and recognition is attributed to the very fact that it brings significant economic benefits to the tourism area. To start with, tourism researchers hypothesize that a lot of economic benefits are received from the tourism industry, and a lot of positive responses from the residents' perception on tourism development. Residents support tourism development because tourism doubtless makes further taxes, attracts a lot of investment to the community, and builds additional job opportunities (Yan, 2013). Residents involved in the tourism industry generally hold more favorable views regarding the impacts of tourism compared to those not involved (Thomason et al., 1979). This can be attributed to the direct economic benefits that individuals associated with the tourism sector can gain, leading to a favorable perception on the industry's impacts. Therefore, logically, economic reliance could be a vital predictor of a positive perception of tourism and a negative perception on tourism is a significant predictor of support for authorities' management of tourism (Yan, 2013).

Despite tourism bringing potential financial gain and economic benefit to people and communities, it's not invariably welcome by native residents. Some residents think that with the expansion of tourism, their incomes cannot carry on with the rising prices (Cooke, 1982). Additionally, residents who work in different industries, such as manufacturing, hold fewer positive perceptions on tourism development. Although residents have a negative perception on the tourism industry, as well as poor economic benefits, they still favor this tourism development and additionally support future tourism development, since they are optimistic regarding it and hope for future economic benefits (Haralambopoulos & Pizam, 1996).

Despite tourism being considered an invisible and smokeless industry, it should influence the entire community from residents' lifestyles to the government's decision-making. Underneath these influences, the economic benefit that residents gain from tourism differs; some get great economic benefits whereas others receive very little economic benefit (Haralambopoulos & Pizam, 1996).

2.5.3 Spatial Factors

The variables of spatial factors embrace distance (the distance between the location's residential buildings and also the tourist area); size (the scope of the tourism zone); and location (the geographical position of the tourism zone). Typically, the residents who live nearer to the tourist zone might have additional opportunities to create contact with guests, even though they are indirectly used within the tourism industry or related industries. Guests and natives inevitably use similar public transportation and eat at the same restaurants within the tourism district, which ought to increase the number of interactions between guests and locals. Naturally, tourism and tourists have a profound impact on this part of residents' perspective and their life (Yan, 2013).

In particular, the nearer residents live to the tourism score; the more additional tourism can affect them (Yan, 2013). However, some researchers believe that the nearer the resident lives to concentrations of tourism activity, the additional negative perceptions of tourism can arise (Harrill, 2004). A significant concentration of tourism facilities and services in an exceeding concentration, the destination can tend to cause residents to possess a less positive perception of visitors and tourism (Pizam, 1978).

2.6 Positive and Negative Impacts of Tourism

Tourism is an important movement of people among countries all over the world, and a situation where its importance is uncontested but very difficult to assess fully. Much of the research in tourism is concerned with the economic impact made by tourism on states, nations, islands, or communities. Since there are countervailing forces at play within an economy, the cost and benefits accruing from tourism are not immediately qualifiable. What may be a benefit to one group may be a cost to another group within the same country or community. Hotel and restaurant operators may benefit from tourism; but permanent residents may suffer a cost in terms of crowding, pollution, noise, and, in some cases a change of life (Yan, 2013).

Tourism movements have significant economic, social, and environmental impacts on both tourist-generating and tourist-receiving countries. Although the serious limitations of tourism must be considered, most of these problems can be solved and, on balance, the negative factors of tourism are out weighted by the positive factors because tourism provides a base for long-run development (Ap, 1992).

Generally, tourism's impact is divided into three categories: economic impacts, sociocultural impacts, and environmental impacts. Even so, people first notice tourism's

positive economic impacts. However, just as for other industries, tourism development also has negative impacts on the tourism district. Since then, the negative impacts of tourism have attracted more and more attention in recent decades. Consequently, a large amount of literature has focused on tourism impacts, especially relating to tourism's negative effects (Weaver & Lawton, 2007).

2.6.1 Economic Impacts

In general, economic benefits can be divided into personal economic benefits and regional economic benefits; direct benefits, and indirect benefits. Based on the research, the positive economic impacts include the provision of more job opportunities and alleviation of employment pressures; increased foreign exchange earnings; driving the development of other industries and boosting the gross domestic product within the tourism district; improving the life quality of residents; and more commodities being available. Even better, the tourism business still has some advantages for development: low cost, quick effectiveness, and high profits (Davis et al., 1988).

The tourism business can stimulate the development of other industries, corresponding to the hotel industry, transportation, commerce, and recreation industry. The most common parameters assessed to measure the perceived economic impacts of tourism were employment opportunity, personal income and local business revenue, and food and land prices (Yan, 2013).

(a) Positive Economic Impacts

Employment Opportunity: The impact of tourism development on employment has been by far the most commonly examined as a positive one. Tourism increases employment opportunities (Cater, 1987; Gray, 1974; Hills & Lundgren, 1977; Jud, 1975; Lea, 1981) and reduces overdependence upon other industries as an additional provider of employment (Yan, 2013). Related to this, tertiary employment expands and tourism-related industries such as agriculture are intensified in response to increased demands for local products (Barker, 1982). However, there are limited employment opportunities for host residents because of a large influx of expatriate workers (Barker, 1982, and Bryden, 1973).

Personal Income and Local Business Revenue: Tourism also has a positive impact on increased personal incomes and local business revenue (Barker, 1982; Jud, 1975). Increased business revenues for the host community can be related to the structure

of the economy in general or specifically to the individual's wealth. In addition, tourism increases local business revenues in Scotland (Brougham & Butler, 1981), Victoria, Canada (Liu, 1979), Delaware, USA (Rothman, 1978), and tourism increases personal income in Gozo Malta, Scotland (Duffield & Long, 1981), Ohau (Knox & Suggs, 1979), Florida, USA (Milman & Pizam, 1988).

Other Positive Economic Impacts: Tourism development has also been viewed favorably by residents as a catalyst for repopulation and economic revitalization (Barker, 1982), production of native handicrafts (Noronha, 1979), increase selection of goods, and increase foreign exchange (Jud, 1975; Lea, 1981), and improvement in the standard of living (Knox, 1979).

(b) Negative Economic Impacts

The increased cost of living: The increased cost of living in relation to food and land prices is one of the most frequently examined negative tourism impacts especially in developing countries where the economy is largely dependent upon tourism for development (Barker, 1982; Farrell, 1979; Hills & Lundgren, 1977; Noronha, 1979).

Other Negative Economic Impacts: The other negative economic impacts of tourism include shortages of commodities (Noronha, 1979), seasonal variations in food prices, and economic benefits for only a minority of the population (Noronha, 1979). Tourism development also results in increased stratification of wages, alienation of the host population from land (Noronha, 1979), and increase costs of government expenditure (Noronha, 1979). The balance of payments deficit, the financial overdependence upon tourism (Noronha, 1979), and the increase financial burden on the residents who provide the required infrastructure (Barker, 1982; Lea, 1981) are other economic impacts issues that affect host communities.

Even though the tourism industry provides economic ways to create economic benefits, the salaries in the tourism sector tend to be low and the economic benefit is unevenly distributed compared with other industries (Weaver & Lawton, 2007).

2.6.2 Sociocultural Impacts

Other studies have shown that the sociocultural impacts are more profound and broader than the environmental and economic impacts. There is a traditional view that sociocultural impacts are a combined impact because of the problem of distinguishing between sociological and cultural impacts (Cooper et al., 2008). The social and cultural

impacts can be summarized as follows: a change in the residents' values, the influence on neighbor and family relationships, the transformation of local norms, the influence of community attachment, a change in religious beliefs, and the influence on the traditional culture and way (Cooper et al., 2008).

Some of these are regarded as positive impacts, whereas others can also be deemed to be negative impacts, depending on different perspectives and levels of impacts. Nevertheless, these impacts result in social and cultural amendments. The changes can not only be provided for tourism development but can also be influenced by the difference between the visitors and the host population. In effect, tourism development accelerates the process of social change. Tourism development's influence on the host community can be divided into direct impacts and indirect impacts (Cooper et al., 2008).

For instance, under the influence of tourists, local residents change their traditional clothing style; this is a direct impact. Then, these residents come into contact with others within the host community, and these people are influenced by his/her to alter their dressing style which is deemed to be an indirect impact. It should be noted that most sociocultural impacts could not be identified immediately (Cooper et al., 2008).

(a) Positive Sociocultural Impacts

Understanding of different people through Cultural Exchange: There are some positive social impacts stated in the literature. Tourism creates social benefits arising from the widening of people's interests generally in world affairs (Farrell, 1979); promotes a new understanding of different people through cultural exchange (Pizam, 1978) contributes to the renaissance of traditional art and craft forms, and tourism, provides jobs for women and young people, slows the emigration of young people; and makes a positive contribution to demographic structure (Pawson et al., 1984). By providing employment opportunities for women, tourism can contribute to changing societal perception and promoting more inclusive and diverse societies. Moreover, involving women and young people in tourism-related activities, it promotes social integration and cultural exchange (Yan, 2013).

Identity and Confidence in the Residents' Way of Life: The positive social impacts perceived by the host population include: tourism is viewed as having positive effects on community integration by providing opportunities for residents to work together on projects such as the annual Winterfest carnival (Cooke, 1982), tourism reinforces a sense of identity and confidence in the residents' way of life (Noronha, 1979), individual

hosts benefit from the mere sight of tourists in their community (Brougham & Butler, 1981), and tourism increases the standard of living (Pizam 1978; Milman & Pizam, 1988).

Promoting Cultural Experiences: The sociocultural benefits of tourism development are principally displayed in the following several respects: promoting culture, communication, and integration (Ap & Crompton, 1998). Throughout tourism development, residents have more opportunities to make contact with foreign cultures, which can lead them to enhance their knowledge and broaden their horizons. Relating to the tourism trade as a bridge to connect the host population with outsiders, naturally, cultural exchange can be considered a part of tourism activity. Each tourist has different cultural experiences, even though they visit a similar destination (Cooper et al., 2008).

Enhance Residents' Pride: Tourism development helps to enhance residents' pride and self-confidence. With the development of society, modernization gradually replaces tradition. Owing to the requirement of the tourism market, locals will rediscover something valuable that is already overlooked by people in trendy life. In an age of globalization, old crafts, and traditional rituals and ceremonies will highlight the uniqueness of a specific community. This uniqueness not only brings economic benefits to destinations but can also enhance the sense of national pride (Besculides et al., 2002).

Naturally, seeing their community become a popular and well-known resort can improve the superiority and pride of residents. Tourism development is conducive to the protection of cultural heritage and historical relics. As mentioned above, there are several advantages to be gained from traditional cultures and crafts; so, these old skills or traditional things might naturally arouse more attention from the local government and people. On the other hand, the economic benefit obtained from tourism provides subsidized funds for the preservation of culture and heritage (Liu & Var, 1986).

Tourism development is improving the quality of people's lives with more cultural entertainment activities, such as art exhibitions and concerts (McCool & Martin, 1994), and improved local public services (Keogh, 1990).

(b) Negative Sociocultural Impacts

Social Disruptions: The effect of tourism development on host residents' way of life is one of the most frequently examined tourism social impacts. There are differences in the reported conclusions with respect to the extent to which tourism development is responsible for social disruption. The impacts or changes that occur in destination areas present a complex pattern: some aspects of community life are disrupted, while others

benefit, and still, others remain largely unchanged by tourism development. The degree to which tourism development is socially disruptive depends upon its relative importance to other sectors and the extent to which it fits local conditions (Doxey, 1975; Noronha, 1979). Tourism development negatively affected the way of life of host populations in the Highlands and Islands of Scotland and Pacific Island communities, by constraining family life and leisure activities (MacNaught, 1982).

Social Tensions: A number of studies investigated specific issues that may be related to the causes of social tensions. Social tensions stemming from tourism may be associated with increased drug abuse, alcoholism, and vandalism; or increased robberies, prostitution, and smuggling (Pizam, 1978).

Cultural Changes: Change in traditional culture and customs is also one of the most frequently studied negative impacts attributable to tourism development. Tourism has been accused of being 'culturally arrogant' for manipulating the traditions and customs of host people to make tourist experiences more interesting and satisfying (Mathieson & Wall, 1982).

Overcrowding: Overcrowding at tourist destinations has been generally operationalized by asking whether tourism development is perceived to cause overcrowding in a host community. reported negative perceptions of the effects of increasing numbers of tourists on overcrowding in destination Hawaii (Liu & Var, 1986). The negative sociocultural impacts of tourism are a rise in the crime rate even though it's hard to prove that tourism contains a direct relationship with crime, tourism development is a catalyst for the growth of criminal activities (Omondi, 2003)

Tourism development can bring health risks to the local community due to the potential transmission of diseases, along with the expansion in population density and more contact with people, traffic jams, and social stability (Cooper et al., 2008). Another concern associated with tourism development is the potential loss of cultural uniqueness within the local community. As tourism acts as a catalyst for globalization and unification, host communities often fact challenges in preserving their authentic cultural heritage (Cooper et al., 2008). One of the strongest indicators of such impacts is the decline in the use of native language due to the prevalence of tourist languages (Besculides et al., 2002).

2.6.3 Environmental Impacts

Tourism development has also been viewed in a more positive light as an opportunity to utilize development-induced change as a mechanism to further community

goals; infrastructural investment such as roads, water, hospital, and police protection has benefitted destination areas (Var et al., 1989); more beaches designated as parks, attraction development (Husbands, 1989); more and better leisure facilities available (Kariel, 1989; Rothman, 1978); and maintenance and restoration of works of historical architecture that would otherwise be destroyed (Barker, 1982). Similarly, through its stimulation of conservation, tourism has been instrumental in awakening an appreciation for natural beauty and historical monuments (Kariel, 1989).

During tourism growth, the landscape environment is inevitably modified to cater to visitors' requirements in a destination. Anyway, the environment is the basic and indispensable part of the tourism product and therefore the major issue to attract visitors to a specific destination. For this reason, the preservation and improvement of the local environment are necessary as a result of it being essential to the sustainable development of future tourism. The following presents the signs of positive and negative environmental impacts associated with tourism (Kariel, 1989).

(a) Positive Environmental Impacts

Improvement of Public Infrastructures: Regarding positive environmental impacts, firstly, some researchers have mentioned that tourism is beneficial to the improvement of public infrastructures, such as the water system, sewage system, and power system. The reason is that the economic benefits from tourism development provide relatively large amounts of funds for the development of urban infrastructure facilities. Furthermore, destinations with good infrastructures are necessary, due to insufficient infrastructure limiting the development of the travel industry (Weaver & Lawton, 2007).

Stimulation of Conservation: An attractive and unspoiled landscape is a primary attraction for several visitors, and even some tourism activities only happen in certain environments (such as diving trips and skiing), which have a better requirement for environmental quality. Based on the higher reasons, increasing numbers of people are realizing that the environment is a crucial parameter for tourism development; in other words, destinations have the incentive to protect and enhance the environmental assessment, which might facilitate to enhance the environmental awareness of residents (Weaver & Lawton, 2007).

(b) Negative Environmental Impacts

Environmental Destruction: Destruction of natural resources and deterioration of cultural or historical resources are major concerns associated with the environmental impact of tourism development. Tourism causes general degradation of the environment (Cater, 1987; Sheldon & Var, 1984). The other major detriments to the environment are efforts including the loss of meadows and grassland via new county lanes, slope construction, and tourist camps (Jordan, 1980); loss of land to tourism (Farrell, 1979), degradation of vegetation (Barker, 1982), and the failure to integrate resort infrastructure with natural and cultural environments (Hills & Lundgren, 1977).

Littering: Increased littering is commonly observed as an environmental impact of tourism (Barker, 1982; Farrell, 1979). Increased littering is perceived negatively by the host population in both developing countries such as Gozo, Malta, and developed countries such as Prince Edward Island, Canada, and Scotland (Brougham & Butler, 1981). With regard to the statistical evidence of littering, however, only 10% in the Prince Edward Island, Canada and 11% in the Scotland that is the sample of respondents perceived that tourism had a negative impact on the destination area (Brougham & Butler's, 1981).

Noise and Pollution: In terms of noise pollution, nightclubs, amusement parks, and entertainment venues are noisy with the growth of tourists, but so is public transportation. Concerning pollution, the most common kind is sewage and garbage poured into the river or ocean, and ships or boats leak oil throughout transit. water pollution (Rodriguez, 1987); transformation of land use; ad hoc development due to the sudden influx of tourists (Cohen, 1978); trespass on band property (Indian native reserve) and disregard for band privacy (Cooke, 1982); and the depletion of wildlife (Jordan, 1980). Particularly, the impact of a variety of coastal-based tourism development from water sports activities, fishing, and bird-watching resulted in the loss of terrestrial habitat as well as damage to the foreshore communities (Edwards, 1987).

Loss of Landscape: In terms of the landscape, in some destinations, the phenomena of billboards, recreation facilities, or new buildings produce disharmony within the whole atmosphere. These impacts can destroy the aesthetics of the landscape. Except for those mentioned above, the previous literature has also remarked on some negative impacts in additional detail, such as ancient buildings being destroyed by erosion, graffiti, or overuse and flora and fauna being disturbed by guests, which can lead to the wildlife and vegetation falling in number and changing the way of their survival, and

certain species can even become extinct (Yan, 2013). In general, visitors tend to create a lot of extravagant use of the resources of tourist destinations (such as electricity, water, or public facilities) than when they are at home. Worse still, with the destruction of human greed, the environment is being contaminated quicker than can be repaired by man or nature in several destinations. Therefore, the remedial measures and preservation need to continue with tourism development (Yan, 2013).

2.7 Residents' Attitudes Towards Tourism Impacts

Numerous studies in the literature have examined locals' perceptions of tourism-related changes and effects (Gursoy et al.,2002), as residents' opinions and attitudes towards the effects of tourism are likely to be a key planning and policy factor for effective creation, promotion, and management of current and upcoming tourist initiatives and programs (Haywood, 1975). Moreover, these adverse impacts should be minimized and they must be viewed favorably by the host population for tourism in a destination to thrive (Ap, 1992).

Research on resident attitudes towards tourism has been a productive area in tourism research for several decades. Residents' attitudes and perceptions of tourism impacts have been found to be determinants of residents' support for tourism development in host communities (Long et al., 1990; Lankford, 2001; McCool & Martin 1994; McGehee & Andereck, 2002; Gursoy & Jurowski, 2002; Wang & Pfister, 2006; Gursoy et al., 2009; Latkova & Vogt, 2012; Andereck, et al., 2016).

The importance to study and predict residents' support for tourism development based on the evaluation of the perceptions and attitudes of tourism impacts has been widely recognized for tourism planning and development in the host communities. Tourism development and its consolidation in the host community require a positive attitude and support from the local residents to be successful (Gursoy et al., 2009, and Andereck, et al., 2016).

Therefore, understanding the relationship between an attitudinal position express by an actor (e.g., resident) and a range of potential benefits (e.g., economic or non-economic) associated with an attitude has been widely explored in tourism research. Rural residents perceive tourism as a source of development of recreation facilities and community enhancement, although these positive attitudes are related to the level of tourism development and the total economic activity of the community (Perdue et al., 1987; Allen et al., 1993).

The model utilized regression analysis as a way to measure the interactive effects of various personal characteristics of respondents, the influence of those characteristics on impact perceptions, and the influence of personal characteristics and perceptions on support for tourism development in 28 small rural communities in Colorado (Perdue et al., 1987). Extend to the model, there is investigated tourism attitudes about diverse communities in Arizona within close proximity to each other with varying levels of tourism dependency. And, tourism attitudes have shown residents who are dependent on the tourism industry or perceive a greater level of economic gain tend to have a more positive perception on tourism's economic impact than other residents (McGehee & Andereck, 2002).

Numerous models aiming to determine the antecedents of residents' support for tourism development have been developed based on the Social Exchange Theory (SET) (Gursoy et al., 2009; Nunkoo & Ramkissoon, 2011). In most research, the diverse effects of tourism are classified as costs (negative) and benefits (positive) (Gursoy et al., 2009; Nunkoo & Ramkissoon, 2011).

With social exchange theory, residents evaluate tourism and its impact in terms of expected benefits and costs. In essence, residents weigh and balance factors that would influence their support of tourism. In turn, their support for tourism is dependent on residents' perceptions of tourism's impact. Hence, residents' attitudes towards the impact of tourism and their subsequent support for it will be influenced by the evaluation of the resulting outcomes in the community (Andereck & Vogt, 2000). Consequently, residents who perceive the exchange with tourism as beneficial, that is, having positive impacts, for example, employment opportunities and improved infrastructure, will support tourism. While those who perceive the exchange as costly with negative impacts, especially environmental detriments, will oppose tourism (Andereck, et al., 2016).

The exchange process has been used as a theoretical framework for describing host residents' perceptions of tourism's impacts by Long et.al., (1990), Ap (1992 and 1998), Hernandez et.al., (1996), Jurowski et.al., (1997), Gursoy & Jurowski (2002), McGehee & Andereck (2002), and Andereck & Vogt (2000) found that as long as residents are likely to gain benefits without incurring costs, they are inclined to have positive attitudes towards the impacts of tourism and support it.

2.8 Reviews on Previous Studies

The rapid growth of tourism and its potential as a development tool has given rise to pronounced economic, social, and environmental effects. Numerous impact studies have been conducted since the late 1970s, with a focus on assessing the economic impact of tourism on the host destination. However, there has been relatively little research into the effects of tourist growth on the social and environmental sectors of the host regions.

Yan (2013) investigates the attitudes of residents in Zhouzhaung Canal town toward tourism impacts. This study examines how residents' personal characteristics influenced their perceptions of tourism impacts and explored the relationships between residents' attitudes towards tourism impacts, their perceived personal benefits from tourism, and their support or restrictive attitudes towards further tourism development. The theoretical framework for the study was the social exchange theory, which provides a framework to understand the interactions between residents and the tourism industry.
The finding revealed that residents who perceived more positive impacts from tourism tended to gain more personal benefits from it. Conversely, those who perceived fewer benefits from tourism had a more negative perception on its impacts on the community. Additionally, the study suggested that tourism income played a crucial role in influencing residents' perceptions of tourism impacts (Yan, 2013).

Nayomi & Gnanapala (2015) examines the primary social and economic effects of tourist growth in Sri Lanka's Kandalama region on the local population. The main objective of the study is to determine how the local people perceived the growth of tourism in the area and to understand the social and economic impacts it has on the community. To achieve this, the researchers adopted a mixed methodology approach, which involved using structured questionnaire surveys, personal interviews, and discussions to gather data. The key findings of the study indicate that the local community has developed positive attitudes about tourism development in the Kandalama region. This suggests that the residents view the growth of tourism in a favorable light, indicating that they may perceive the benefits of tourism as outweighing the potential negative impacts (Nayomi & Gnanapala, 2015).

An (2016) examines the relationship between tourism impacts, tourism development, and the potential moderating effect of residents' demographic variables on this relationship, as well as the correlation effect of economic dependency. This study aimed to determine the perceptions of tourism impacts and tourism development among residents of Greenville County. To achieve the study objective, data were collected through a structured questionnaire survey administered to a sample of 251 individuals

residing in Greenville County. The survey used a subset of 20 items from the 44 item SUS-TAS scale to measure tourism impacts including economic, sociocultural, and environmental aspects. The dependent variable in this study was evolutionary progress related to tourist activity, while the independent variables were categorized into economic impacts, sociocultural impacts, and environmental impacts. This study findings revealed that economic impact was the only significant predictor of residents' support for tourism development. However, residents' demographic variables such as age, gender, and length of residence, did not moderate the relationship. Additionally, the location of where respondents lived, whether downtown or in the county, did not appear to make any difference in their perceptions of tourism development (An, 2016).

Konovalov (2016) develops a systematic framework for measuring tourism impacts. This study adopts a comparative approach to identify specific links between the style and scale of tourism development and the social facet of community well-being, using a combination of objective and subjective measures. The investigation is conducted at two levels: the destination community level and the Individual resident level. Both primary and available secondary data are used in this study. To measure the components of the proposed theoretical framework relating to residents' experience with and perceptions of tourism, a questionnaire is developed. The findings indicate that a larger scale of tourism development is associated with a higher crime rate, lower participation in volunteering activities, and lower trust of people in the local community. However, socializing in public spaces, police services, public transport, airport facilities recreational services/ shops, and restaurants is found to be more frequent (Konovalov, 2016).

Diazceballos (2017) examines residents' attitudes towards tourism development options in Guthrie, Oklahoma. This study focuses on testing the Social Exchange Theory (SET) as a theoretical framework. Participants in the survey were residents of Guthrie who were at least 18 years old. The relationships between the study's variables are investigated using a series of multiple regression analyses. Additionally, an analysis of variance (ANIVA) is performed to identify differences in the level of support for increased tourism between citizens and entrepreneurs, whether they are employed in the tourism business or not. The findings of the study reveal that respondents' attitudes towards tourism in their region are favorable. The majority of respondents support more tourism growth in the area and believe that the benefits of tourism outweighed the drawbacks. Notably, entrepreneurs in the area show the strongest level of support among respondents for more tourism. Furthermore, the study's findings demonstrate that locals' perceptions of the beneficial

effects of tourism and their support for more tourism in the area had a significant impact on their support for tourism development alternatives in Guthrie (Diazceballos, 2017).

Fan (2017) examines the impact of tourism on the coastal ecosystem, with relatively less attention given to social and economic factors. The study employs qualitative techniques to investigate the social and economic effects of tourism on the coastal city of Kalmar. The main focus is on understanding the perspective of residents and business owners to reflect these effects. The study's findings indicate that the growth of the tourism sector has both economic and social effects on coastal cities. However, these effects are not uniform due to differences in cultural background and specific situations. For instance, in terms of the economic impact of the tourism business, the effect on the hotel is more noticeable than the effect on restaurants and bars (Fan, 2017).

Win Min Than (2017) investigates an integrated model of residents' satisfaction with tourism development (RSTD) in Inle Region and explores the antecedent constructs likely to affect RSTD. The model is analyzed using survey data collected from 470 residents of twenty-two villages in the Inle Region, obtained through a cluster random sampling method. The model RSTD has been constructed using Structural Equation Modelling (SEM) and comprises several key components, including community attachment, residents' expectations for tourism development, distribution of personal benefits from tourism, residents' participation in tourism development, perceived benefits of tourism development, perceived costs of tourism development, and residents' satisfaction with tourism development. The results from this study indicate that the most influential factors affecting RSTD are the perceived benefits of tourism development among the other influencing factors (Win Min Than, 2017).

Chang et al., (2018) examine the tourism impacts affecting indigenous hosts' support for tourism plans and their extent. This study uses discrete choice modeling in the experiment design for empirical data collection and employs mixed-logistic regression to evaluate the influence of each impact on residents' perceptions. The researchers rank the effects of socio-culture, economic, and environmental tourism impacts. The results of this study indicate that indigenous residents' support for tourist development is most positively impacted by cultural effects. Both regional and local economic effects are anticipated by the locals. However, the findings also indicate that the locals show readiness to address pollution in the wake of rising tourism. Practices that are likely to harm the environment are not well-liked by the locals. Interestingly, the possibility of hostility between locals and visitors is deemed unimportant to the locals. This study provides crucial information

for comprehending the effects of tourism from the perspective of the indigenous people (Chang et al., 2018).

Hlaing Hlaing Moe (2019) analyzes the causal relationship among the residents' attitudes towards community attachment, personal benefits from tourism, their perception on the impacts of tourism, and their support for tourism development using Structural Equation Modelling (SEM). The study focuses on survey data collected from 446 local residents living in the Bagan-Nyaung Oo area, Myanmar, obtained through a two-stage random sampling method. The results of this study indicate that residents' attitudes towards community attachment, personal benefits from tourism, and their perceptions of the economic and cultural impacts of tourism are important factors influencing their support for tourism development. The residents show agreement on the benefits of tourism and have positive perceptions of its economic and cultural impacts, which in turn support further tourism development (Hlaing Hlaing Moe, 2019).

Kozhokulov et al., (2019) investigate the impact of tourism on the socio-economic sphere in the Issyk-Kul region and provide a framework and methodology for identifying the key goals in the growth of tourism. The study estimates economic and social efficiency using integral indicators formed by applying weight coefficients calculated based on statistical data and forecasts for tourism development in the region. The findings of this study demonstrate that the impact of tourism on economic and social growth in the Issyk-Kul region is positive. Tourism significantly supports the region's economy as a whole, and its economic sector has a significant social impact. Forecasts indicate that the tourism industry will continue to grow steadily. Overall, this study offers an alternative perspective on the region's socioeconomic impacts of tourism (Kozhokulov et al., 2019).

Sandar (2020) uses a multiple regression model to examine the effects of tourism development on the preservation of cultural assets in Bagan. The study analyzes survey data from 375 respondents who are local residents living in the Bagan-Nyaung Oo area, in Myanmar. The model comprises seven independent variables, including residents' perceptions of economic impacts, cultural impacts, and environmental impacts of tourism development, as well as the effects of preventive measures adopted by stakeholders (Government, UNESCO, INGOs & NGOs, and Local Community). The dependent variable is the residents' perceptions of cultural heritage conservation in Bagan. The results of this study indicate that while there are positive economic and cultural impacts in the study area, there is also a negative environmental impact that destructs the cultural heritage in Bagan (Sandar, 2020).

2.9 Framework for the Analysis

Based on the literature reviews and previous studies, this conceptual framework attempts to point out how the variables namely, age, gender, living area, education, income related to tourism, contact with visitors, and length of residence relate positively and negatively to economic, sociocultural, and environmental impacts of tourism. In addition, this study investigates how those impacts (positive economic impacts, negative economic impacts, positive sociocultural impacts, negative sociocultural impacts, positive environmental impacts, and negative environmental impacts) influence the residents' attitudes towards further tourism development.

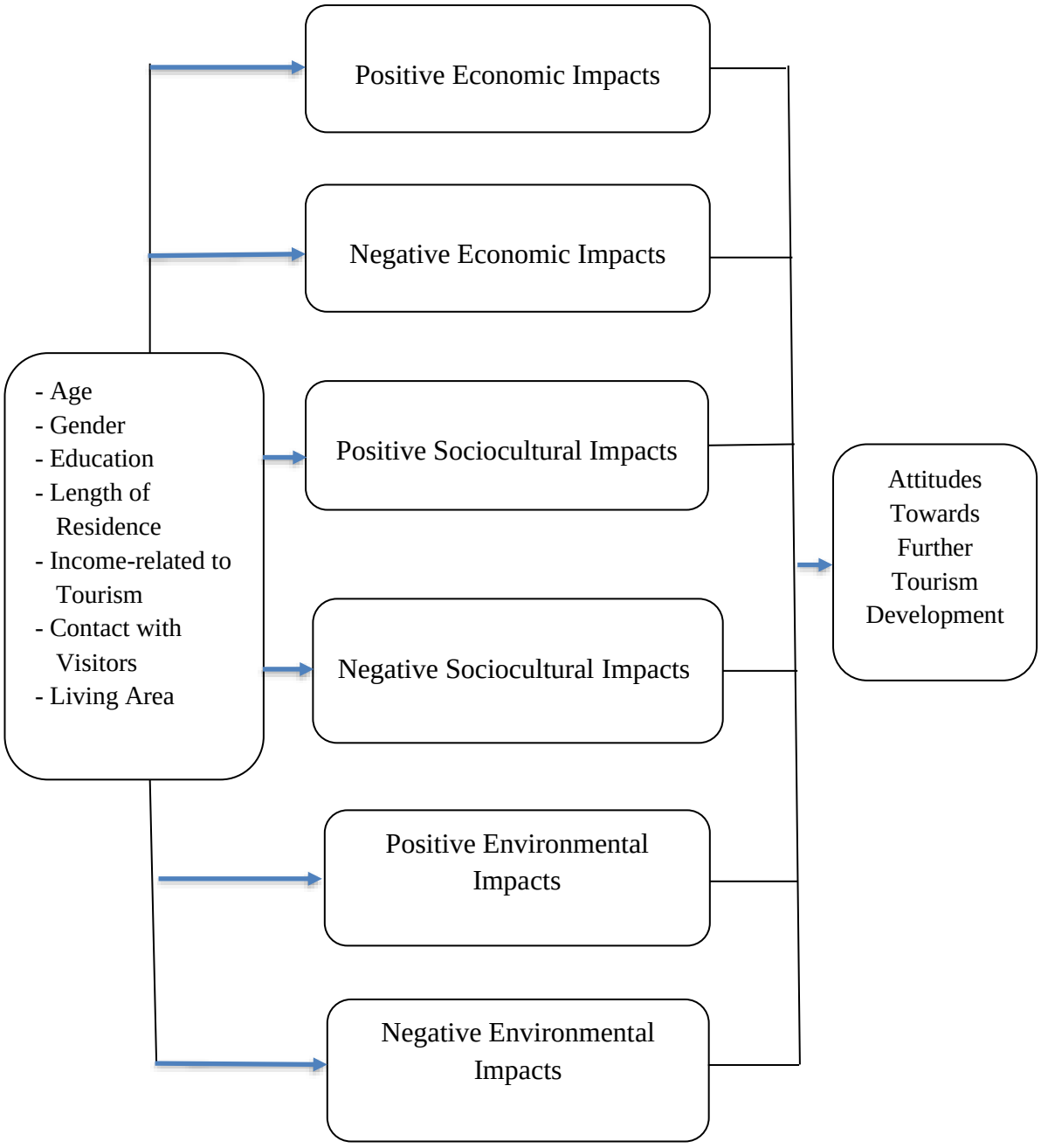
Table (2.1) The Relationships between Explained and Explanatory Variables

Sr. No.	Explained Variables	Explanatory Variables
1.	Positive Economic Impacts	Age, Gender, Education, Length of Residence Income-related to Tourism, Contact with Visitors, and Living Area
2.	Negative Economic Impacts	Age, Gender, Education, Length of Residence Income-related to Tourism, Contact with Visitors, and Living Area
3.	Positive Sociocultural Impacts	Age, Gender, Education, Length of Residence Income-related to Tourism, Contact with Visitors, and Living Area
4.	Negative Sociocultural Impacts	Age, Gender, Education, Length of Residence Income-related to Tourism, Contact with Visitors, and Living Area
5.	Positive Environmental Impacts	Age, Gender, Education, Length of Residence Income-related to Tourism, Contact with Visitors, and Living Area
6.	Negative Environmental Impacts	Age, Gender, Education, Length of Residence Income-related to Tourism, Contact with Visitors, and Living Area
7.	The Residents' Attitudes Towards Further Tourism Development	Positive Economic Impacts, Negative Economic Impacts, Positive Sociocultural Impacts, Negative Sociocultural Impacts, Positive Environmental Impacts, and Negative Environmental Impacts

Source: Own Compilation

Regarding the measurement of the impacts, the respondents' perceived impacts of tourism on the economic, sociocultural, and environmental conditions, and the attitudes towards further tourism development are employed in this study.

Figure (2.3) Framework for the Analysis of the Impacts of Tourism Development on Local Residents



Source: Own Compilation

CHAPTER III
TOURISM DEVELOPMENT IN NYAUNG SHWE TOWNSHIP

3.1 Overview of Tourism Industry Development in Myanmar

Myanmar, one of South East Asia's largest and most diverse countries, remains as an enigmatic and undiscovered destination, offering a plethora of natural wonders. From pristine beaches and virgin jungles to snow-capped mountains, the country presents all the traditional delights of Asia. Its heritage spans over two thousand years, evident in awe-inspiring monuments and ancient cities. The vibrant culture is showcased by its 135 different ethnic groups (ASEAN, 2022).

Myanmar's tourism infrastructure caters to various preferences, featuring five-star properties, boutique hotels, family guest houses, mountain retreats, and beach resorts. Notably, the country boasts an impressively low tourist crime record, providing visitors with a carefree holiday experience (MOHT, 2021).

The Republic of the Union of Myanmar is experiencing remarkable tourism growth. Visitor arrivals surged by 29.7% between 2011 and 2012, surpassing one million international visitors for the first time in its history. Contributing to this growth are factors such as expanded inbound flights, eased tourist visa-on-arrival privileges, improved business and investment conditions, and increasing demand for international travel from regional and long-haul markets (MOHT, 2021).

Despite possessing extensive cultural, natural, and historic assets, Myanmar's tourism potential is still in its infancy. The driving factors supporting tourism development in the country include historical, geographical, demographic, and natural aspects, which together contribute to its emerging status as an enticing destination for travelers worldwide (MOHT, 2021).

(i) Historical Factors

Myanmar's illustrious history dates back to the early 11th century when King Anawrahta founded the first Myanmar Empire, unifying the country. This Empire, with its capital in Bagan, flourished until the late 13th century. In the mid-16th century, the

second Myanmar Empire was established by King Bayinnaung. Later, King Alaungpaya founded the last Empire in 1752, with Mandalay serving as the final capital. However, the British took control of Myanmar after the Myanmar-Anglo wars in 1885, and British rule prevailed until Myanmar gained independence in 1948 (MOHT, 2019).

Throughout its history, Myanmar's various empires and rule by different civilizations have left a rich legacy of historical sites and ancient structures, including pagodas and monasteries. The abundance of such cultural heritage has positioned Myanmar as a potential destination for tourism activities in recent years. The allure of exploring these historical treasures, along with the country's natural beauty and diverse culture, has contributed to the growing interest in Myanmar as a tourist destination (MOHT, 2019).

(ii) Geographical Factors

Myanmar's geographical location presents a significant advantage for its tourism growth. Situated along the eastern coasts of the Bay of Bengal and the Andaman Sea in Southeast Asia, it is the largest mainland in the region, covering an area of 676,577 square kilometers. With a vast coastline of 2,832 kilometers (1,760 miles) to the west and south, Myanmar boasts beautiful coastal landscapes (MOHT, 2019).

The country shares borders with several neighboring countries: Bangladesh and India in the northwest; China in the northeast; Laos in the east, and Thailand in the southeast (MOHT, 2019).

Myanmar's topography is diverse, with seven main regions. These include the Northern Hills, the Western Hills, the Rakhine Coast in the southwest, the Shan Plateau in the east, the Central Belt, the Lower Ayeyarwady Delta, and the Tanintharyi Coastal Area in the south. This variation in landscapes allows for a wide range of tourism experiences, from exploring mountains and plateaus to enjoying coastal retreats (MOHT, 2019).

Regarding the climate, Myanmar experiences three seasons. The dry season runs from mid-February to mid-May, followed by the rainy season from mid-May to mid-October. The cold season occurs from mid-October to mid-February. Rainfall patterns vary across the country, with coastal areas receiving an average of 250 centimeters annually, while the central region averages around 70 centimeters of rainfall (MOHT, 2019).

The climatic diversity adds to the country's appeal to tourists, as they can choose the best time to visit based on their preferences for weather and activities. Overall,

Myanmar's advantageous location, varied topography, and diverse climate contribute to its growing popularity as an enticing destination for travelers (MOHT, 2019).

(iii) Demographic Factors

Myanmar's population was approximately 56 million in 2014 census data. It is a diverse nation, consisting of eight major national races: Myanmar, Chin, Kachin, Keyah, Kayin, Mon, Rakhine, and Shan. In addition to these major races, there are over a hundred ethnic minorities in the country, adding to its cultural richness (MOHT, 2019).

Despite being geographically situated between two significant civilizations, India and China, Myanmar has managed to preserve its unique culture. Many tribal groups within the country still adhere to their own traditional customs, cultures, customers, and lifestyles, showcasing the country's cultural diversity (MOHT, 2019).

Buddhism plays a predominant role in Myanmar's religious landscape, with more than 80% of the population embracing Theravada Buddhism. The influence of Buddhism is evident in the daily lives of the people, shaping their values and beliefs (MOHT, 2019).

Myanmar's society places a high value on close family ties, leading to a culture of tolerance and contentment among its people. These characteristics have contributed to the warm and welcoming nature of the Myanmar population (MOHT, 2019).

Overall, Myanmar's cultural and ethnic diversity, coupled with its strong Buddhist influence and emphasis on family values, enriches the travel experience for visitors, offering them an opportunity to immerse themselves in a unique and harmonious cultural environment (MOHT, 2019).

(iv) Natural Factors

Myanmar has long been known for its exceptional conservation efforts, leading to the preservation of extensive forests and diverse biodiversity. As a result, the country boasts a vast and varied natural forest with a rich array of flora and fauna (MOHT, 2019).

The flora in Myanmar is incredibly diverse, with various vegetation types found across the country. Sub-alpine forests thrive on the snow-capped mountains in the northern regions, while dry and moist deciduous forests and tropical monsoon forests dominate the southern areas. Additionally, mangroves can be found along the coastal regions, and offshore areas showcase vibrant coral reefs (MOHT, 2019).

In these diverse ecosystems, more than 7,000 recorded plant species can be found, with 1,071 of them being endemic to Myanmar. The country is also home to about 100

species of bamboo, 30 species of rattan, and an impressive 800 species of orchids. The fauna in Myanmar is equally remarkable, boasting a wide range of species. With approximately 1,000 bird species, Myanmar accounts for 12% of the world's total bird species. Additionally, there are about 360 known species of reptiles and roughly 300 mammal species in the country. Notably, Myanmar is recognized as the fifth richest country in the world in terms of swallowtail butterflies, with 68 different kinds found within its borders (MOHT, 2019).

These exceptional levels of biodiversity have earned Myanmar the title of the last frontier of global biodiversity in Asia. The country's commitment to preserving its natural heritage and diverse ecosystems makes it an enticing destination for eco-tourism, providing travelers with the opportunity to experience and appreciate the wonders of nature in its most pristine form (MOHT, 2019).

3.2 The Role of the Government in Tourism Development

In the late 1990s, the role of government in the late 1990s concerning human resource development in the tourism industry, tourism promotion, and regional integration was significant for Myanmar. In June 1990, the Myanmar Tourism Law was passed, laying the foundation for the development and regulation of the country's tourism sector. Moreover, this law ensures the sustainable development of tourism. The government also plays a significant role in facilitating foreign investment in the tourism industry. In 1989, The Foreign Investment Law was passed, and foreign investors are allowed to participate in various tourism-related projects, such as the development of hotels, resorts, and travel services. Apart from these, the Ministry of Hotels and Tourism (MOHT) was formed on 24th September 1992. There are three divisions: the Minister's Office, the Directorate of Hotels and Tourism, and the Myanmar Hotels and Tourism Services (MHTS) (MOHT, 2021).

The Ministry laid out general policies for tourism as follows:

1. Tourism is a means to foster international understanding and to promote a positive image through cultural exchange;
2. Tourism as a potential growth sector is to generate foreign exchange earnings and create employment opportunities;
3. Tourism will be developed with proper planning and control to avoid the negative impacts of mass tourism;

4. Development of tourism will be kept in balance with the country's economy and social capability of absorbing tourism growth; and
5. Preservation and safeguarding of national character and traditional values always take precedence over short-term benefits and rapid growth.

In order to ensure that the social and economic benefits of tourism are distributed equitably, and to improve national employment and income generation, six programs consisting of 38 projects costing USD 486.8 million have been put in place over 2013-2021 (MOHT, 2021). (See Appendix B-1)

After forming the Ministry, it has led the tourism industry in Myanmar to reap all the economic benefits of international tourism. Hence, the Ministry has taken necessary measures.

Due to the income-generating and employment-generating opportunities it creates, tourism is a global industry with special economic significance to developing countries. Consequently, the Government of Myanmar (GOM) has prioritized tourism development in its Framework for Economic and Social Reforms. To help ensure that tourism growth delivers broad and equitable social, economic, and environmental benefits, GOM adopted the Myanmar Responsible Tourism Policy in 2012. The policy is also endorsed by the Myanmar Tourism Federation (MTF) and highly acclaimed by both civil society and development partners (MOHT, 2021).

This policy has been implemented by the multi-stakeholders. The public sector also needs to involve policy implementation at the national level. Local authorities also take responsibility to participate the tourism activities. All tourism stakeholders are responsible to actively involved in activities: enjoying environmentally friendly transportation and opportunities for cultural exchange with local people, minimizing waste, and conservation work altogether (MOHT, 2021).

The Policy on "Community Involvement in Tourism" (CIT) was developed on how community involvement must be in practice. After establishing the CIT Policy, stakeholders have to involve in Myanmar's Community-Based Tourism (CBT) programs, which offer numerous benefits to both local communities and tourists alike (MOHT, 2021).

The primary objective of the CIT Policy is to maximize the positive contributions of tourism to the overall well-being of the communities involved. By actively involving local residents in tourism activities, the policy aims to ensure that the benefits of tourism are equitably distributed throughout the community. The CBT programs foster a sense of

ownership and empowerment among local residents, as they actively participate in and benefit from tourism-related initiatives. Through these programs, local communities have the opportunity to showcase their cultural heritage, traditions, and unique way of life to visitors, enhancing the overall tourism experience. For tourists, CBT programs offer the chance to gain authentic insights into the local culture and customs. Interacting with community members allows travelers to develop a deeper understanding and appreciation for the destination they are visiting (MOHT, 2021).

Indeed, Myanmar has significant potential for tourism development, and it is essential to promote the role of tourism in various ways to fully harness these attractions. Several measures such as preservation of the natural environment, maintenance, and preservation of cultural heritage, development of infrastructure, community-based tourism initiatives, promoting responsible tourism practices, and marketing and promotion can be taken to enhance the tourism industry and make it more appealing to visitors. By adopting these approaches and emphasizing responsible and sustainable tourism, Myanmar can unlock the full potential of its tourism industry while preserving its natural and cultural heritage for future generations (MOHT, 2021).

3.3 Main Types of Tourism in Myanmar

In Myanmar, there are three main types of tourism in Myanmar which are cultural tourism; ecotourism; festivals, and special interest tourism (MOHT, 2019).

Cultural Tourism: Traditionally, Myanmar with its long history, sophisticated culture, and religion has many pagodas, temples, and religious monuments. Myanmar also has many natural endowments, resources, and cultural heritage that are major attractions for international tourists. Thus, Myanmar tourism is mostly based on cultural tourism, covering all aspects of travel whereby people learn about each other way of life and thought. Among cultural tourist destinations, Bagan and Mandalay are famous for their cultural attractions (MOHT, 2019).

Eco-tourism: Apart from this, Myanmar's richness of a diverse array of species and ecosystems possesses one of the biological reservoirs in Asia. Consequently, Myanmar's natural environment is an important attraction for international tourists. Recognizing the fact that the natural forests and biodiversity in Myanmar create opportunities for the development of ecotourism, the MOHT has taken responsibility for creating ecotourism sites in Myanmar by cooperating with the Forestry Directorate. The Ministry of Forest initiated eco-tourism in 1995 by declaring to open nature reserves and

wildlife sanctuaries for its development. Ecotourism is being promoted by undertaking projects in locations that are more or less close to existing tourist destinations. The fifteen ecotourism sites have been established in Myanmar. Among them, Inle is renowned for ecotourism in Myanmar due to its unique features and better transportation facilities (MOHT, 2019).

Leisure Tourism: Furthermore, Myanmar possesses a long coastline from the mouth of the Kissapanadi (Kaladan) River to the border city of Kaw Thaung, the southern edge of Myanmar. There are many un-spoilt beaches being strongly attractive to beach lovers. Moreover, the Government has emphasized beach holidays. Thus, leisure tours are developed in Myanmar (MOHT, 2019). They are as follows;

1. Chaung Tha Beach (located in the West of Pathein);
2. Kan Thaya Beach (located 290 km from Yangon near Gwa on the Rakhine Coast);
3. Maung-Ma-Gan Beach (located in Thaninthayi Division)
4. Ngwe Saung Beach (located in the West of Pathein); and
5. Ngapali Beach (located on the Rakhine Coast).

Popular Destinations in Myanmar

Yangon, Mandalay, Bagan, and Inle are among the most popular and standard destinations for tourists visiting Myanmar. Each of these places offers unique attractions and experiences that showcase the country's rich cultural heritage, historical significance, and natural beauty (MOHT, 2019).

1. Yangon – Yangon lies in the fertile delta region of southern Myanmar far from about 30 kilometers from the sea. Evergreen and cool with lush tropical trees, shady parks, and beautiful lakes. Yangon has earned the name of the Garden City of the East. The iconic Shwedagon Pagoda, one of the most sacred Buddhist sites in the world, is a must-visit attraction. The city's colonial-era buildings, vibrant markets, and diverse culinary scene add to its allure (MOHT, 2019).
2. Mandalay – Mandalay is the last capital of the Myanmar Kings and is located in the central part of Myanmar. It is known as the cultural heart of Myanmar; Mandalay is a city steeped in history and tradition. The ancient Mandalay Palace and the impressive U Bein Bridge are some of the prominent landmarks. Mandalay is also renowned for its traditional arts and crafts. The three most impressive traditional arts in Mandalay are handicraft makings, gold-leaf making, and bronze casting. Moreover, several markets and handicraft shops are opened throughout the city (MOHT, 2019).

3. Bagan – The ancient city of Bagan is a UNESCO World Heritage site and one of Myanmar's most iconic destinations. The vast archaeological zone is dotted with over 2,000 ancient temples and pagodas, offering a mesmerizing landscape and a glimpse into Myanmar's glorious past (MOHT, 2019).
4. Inle – Situated in Shan State, Inle Lake is a serene and picturesque destination. The lake's unique floating gardens, stilted villages, and the famous leg-rowing fishermen create a magical atmosphere. Visitors can also explore traditional markets and observe the diverse ethnic communities living around the lake. There are also floating markets and many silversmiths, lacquerware-making firms, cheroot-making firms, and weaving in Inle Lake (MOHT, 2019).

These destinations, with their historical landmarks, cultural significance, and natural wonders, attract travelers from around the world. They provide a glimpse into Myanmar's rich heritage and offer a range of experiences that cater to different interests, making them essential stops for anyone exploring the country (MOHT, 2019).

3.4 Tourism Industry in Myanmar

The Ministry has encouraged the private sector, both local and foreign to make investments and opportunities for tourism development and to create investment opportunities on a large scale in the industries for private entrepreneurs. According to the Myanmar Hotels and Tourism Law (1993), the Ministry issues the following licenses to private entrepreneurs (MOHT, 2019). The enterprises and businesses are as follows;

1. Tour Enterprises;
2. Tourist Transport Businesses;
3. Hotel and Lodging-House Businesses; and
4. Tour Guide Businesses.

In addition, having recognized the role of Public-Private Partnership, the Ministry cooperates closely with the following organizations;

1. Myanmar Tourism Marketing (MTM);
2. The Union of Myanmar Travel Association (UMTA);
3. Myanmar Hoteliers Association (MHA);
4. Myanmar Tourism Federation (MTF);
5. Myanmar Restaurants Association (MRA);
6. Myanmar Souvenir Entrepreneurs Association (MSEA);
7. Myanmar Tourism Transportation Association (MTTA); and

8. Domestic Pilgrimage & Tour Operators Association (DPTOA).

The MOHT has encouraged the tourism industry and also foreign ones to make investments on a large scale in the private industries. The Ministry issues the following licenses to private entrepreneurs. Table (3.1) present the number of tour companies in Myanmar from 2001 to 2021.

Table (3.1) Number of Licensed Tour Companies in Myanmar, 2001-2021

Type / Year	Foreign Company	Joint Venture Company	Local Company	Total
2001	1	14	612	627
2002	1	16	514	531
2003	1	18	557	576
2004	1	18	667	686
2005	1	18	638	657
2006	1	17	697	715
2007	1	16	750	767
2008	1	16	692	709
2009	1	16	574	591
2010	1	17	640	658
2011	1	15	743	759
2012	1	17	1,008	1,026
2013	1	25	1,324	1,350
2014	1	33	1,589	1,623
2015	1	39	1,906	1,946
2016	1	42	2,410	2,453
2017	1	40	2,552	2,593
2018	1	41	2,670	2,712
2019	1	42	3,145	3,188
2020	1	40	3,331	3,372
2021	1	39	3,335	3,375

Source: Ministry of Hotel and Tourism, 2023

Table (3.1) shows the number of foreign companies, joint venture companies, and local companies in Myanmar from 2001 to 2021. These data show that private participation in the tourism industry has increased after 2010. There was one foreign company, 14 joint venture companies, and 612 local companies in 2001. In the subsequent years, the number of foreign companies remained unchanged, while the number of joint venture companies and local companies fluctuated. The data indicates that the highest

number of joint ventures and local companies was observed in 2019, with 42 joint ventures and 3,145 local companies, contributing to a total of 3,188 companies.

The number of licensed tour guides and the type of transportation in the tourist industry are shown in Appendix Tables. The number of licensed tour guides is shown in Appendix (B-2). Among the types of licensed tour guides, the number of English-speaking guides is more than other language-speaking tour guides namely Japanese-speaking tour guides, French-speaking tour guides, Chinese-speaking tour guides, Thai-speaking tour guides, German-speaking tour guides, Russian-speaking tour guides, Italian-speaking tour guides, and Korean-speaking tour guides. The total number of tour guides across all languages has fluctuated over the years, with a general increase until 2016 and a slight decrease afterward because tour guides' licenses were rechecked and renewed at that time. The highest number recorded was 5,042 in 2021.

The tourist transport businesses are shown in Appendix (B-3). The total number of transportation businesses across all types of transportation has shown some fluctuations over the years. There was an overall increase until 2017 with the highest number recorded at 2,534. Remarkably, hot air balloon services have been established since 1999. These days there are three licensed companies offering hot air balloon flights in Myanmar and the destinations have expanded beyond Bagan to include Inle Lake and Ngapali Beach. The Ministry of Hotels & Tourism of the Republic of the Union of Myanmar issued the Order with respect to the Tourist Transport Business carried out for international tourists and foreign visitors in 2011 and the tourist transport business license law was repealed in 2018 (MOHT, 2022).

Table (3.2) Number of Licensed Hotels, Motels, and Guest Houses in Myanmar, 2001-2021

Year	Number of Hotels, Motels, and Guest Houses	Percentage change in the number of Hotels, Motels, and Guest Houses	Number of Rooms	Percentage change in the number of rooms
2001	527		15,795	
2002	533	1.14	15,848	0.34
2003	563	5.63	17,039	7.52
2004	596	5.86	18,317	7.50
2005	603	1.17	19,040	3.95
2006	604	0.17	19,506	2.45
2007	619	2.48	19,961	2.33
2008	621	0.32	20,357	1.98
2009	631	1.61	20,942	2.87
2010	691	9.51	23,454	12.00
2011	731	5.79	25,002	6.60
2012	787	7.66	28,291	13.15
2013	923	17.28	34,834	23.13
2014	1,106	19.83	43,243	24.14
2015	1,279	15.64	49,946	15.50
2016	1,432	11.96	56,429	12.98
2017	1,590	11.03	63,978	13.37
2018	1,704	7.17	68,167	6.55
2019	1,984	16.43	79,855	17.15
2020	2,204	11.09	89,732	12.37
2021	2,269	2.95	92,076	2.61

Source: Ministry of Hotel and Tourism, 2023

Table (3.2) provides data on the number of hotels, motels, and guest houses, as well as the percentage change in their numbers, and the number of rooms, along with the percentage change in the number of rooms, for the years 2001 to 2021.

The number of hotels, motels, and guest houses continued to rise over the years, with fluctuations in the growth rate. By 2021, the number had reached 2,269, representing a 2.95% increase compared to the previous year. The total number of rooms in these establishments also experienced steady growth over the years. In 2001, there were 15,795 rooms, which increased to 92,076 rooms by 2021.

The growth rate in the number of hotels, motels, and guest houses and the growth rate of the number of rooms fluctuated but generally showed an upward trend. The highest growth rate occurred in 2014, with a 19.83% and 24.14% respectively increase compared to the previous year. During that period, Myanmar experienced a significant increase in tourist arrival, and the government implemented reforms and policies to attract foreign investment in the tourism sector, resulting in increased hotel development to accommodate the growing number of visitors.

During the COVID-19 pandemic, with international travel restrictions still in place, domestic tourism became a significant driver of the hospitality industry in Myanmar. Many people within the country chose to explore domestic destinations instead of traveling abroad. This shift in travel patterns created an increased demand for hotels and accommodations in Myanmar itself.

3.4.1 International Tourist Arrivals and Tourism Receipts in Myanmar

International tourist arrivals and tourism receipts of Myanmar are studied in this section. Tourists enter Yangon and Mandalay are the main gateways for tourists entering the country by air transport. Nay Pyi Taw Gateway receives only domestic flights and international charter services. Mawlamyine Gateway started the Mawlamyine-Chin Mai flight only in 2013. According to Visit Myanmar Year 1996, Myanmar opened checkpoints along the borders with neighboring countries such as China, Thailand, and Laos. These border checkpoints allowed to enter the tourists by means of border passes without requiring visa entry stamps. Table (3.3) shows tourist arrivals and expenses of tourists in Myanmar.

Table (3.3) Total International Tourist Arrivals and Total Tourists' Expenses in Myanmar, 2001 - 2021

Year	Number of International Tourist Arrival	Total Tourists' Expenses (US $ Million)
2001	475,106	90
2002	487,490	99
2003	597,015	116
2004	656,910	136
2005	660,206	153
2006	630,061	164
2007	716,434	182
2008	731,230	165
2009	762,547	196
2010	791,505	254
2011	816,369	319
2012	1058,995	534
2013	2044,307	926
2014	3081,412	1,789
2015	4681,020	2,122
2016	2,907,207	2,197.15
2017	3,443,133	1,969
2018	3,551,428	1,651
2019	4,364,101	2,818.753
2020	903,343	544.613
2021	130,947	30.231

Source: Ministry of Hotel and Tourism, 2023

Table (3.3) shows the total number of international tourists starts at 475,106 in 2001 and gradually increases over the years. The highest number recorded is 4,364,101 in 2019. However, due to the COVID-19 pandemic, there was a significant decrease in international tourist arrivals in 2020 and 2021. The total amount of money spent by tourists is 90 million US dollars in 2001 and shows an upward trend, reaching a peak of 2,818.753 million dollars in 2019. Similarly, there was a significant decrease in tourist expenses in 2020 and 2021 due to the impact of the pandemic.

From 2015 to 2019, the number of tourists visiting Myanmar experienced a steady increase. However, despite the rise in tourist arrivals, the total amount of money spent by these visitors did not show a significant upsurge. Notably, in the years 2017 and 2018,

there was even a decrease in the total amount of expenses incurred by tourists. The reason for this situation can be attributed to a modification in the system of calculating tourist expenses. Previously, the average spending per tourist was recorded as US$200 and the average length of stay were assumed to spend only 2 days on average, but with the system modification, average spending was revised to US$220 and the average length of stay were assumed to spend 3 days on average during 2014 and 2019 (MOHT, 2022).

The data suggests that there has been a general increase in both the number of international tourist arrivals and the total expenses over the years, indicating growth in the tourism sector. However, the COVID-19 pandemic has had a substantial negative impact on both international tourist arrivals and tourists' expenses, resulting in a significant decline in 2020 and 2021.

Table (3.4) Tourists in Myanmar by Region, 2001-2021

Region / Year	Asia (%)	West Europe (%)	North America (%)	Oceania (%)	East Europe (%)	Middle East (%)	Africa (%)	Others America (%)
2001	60.5	27.3	7.7	2.5	0.8	0.6	0.2	0.4
2002	57.8	29.2	7.8	2.7	1.0	0.9	0.2	0.4
2003	59.0	28.0	7.7	2.9	1.1	0.6	0.2	0.5
2004	60.7	26.0	8.0	2.9	1.0	0.7	0.2	0.5
2005	57.7	27.8	8.4	3.1	1.5	0.8	0.2	0.5
2006	56.8	29.1	8.1	2.9	1.5	0.8	0.2	0.6
2007	61.5	22.7	7.0	3.0	1.7	0.7	0.2	3.2
2008	66.4	19.2	7.9	3.1	1.9	0.7	0.3	0.5
2009	66.2	20.0	7.2	3.3	1.9	0.6	0.3	0.5
2010	68.4	19.3	6.1	2.8	2.0	0.6	0.3	0.5
2011	66.6	20.7	6.5	2.6	2.00	0.7	0.3	0.6
2012	64.1	22.0	7.4	3.5	1.5	0.6	0.3	0.6
2013	70.0	17.6	7.0	3.1	1.1	0.4	0.3	0.5
2014	71.4	16.5	6.6	3.0	1.2	0.4	0.3	0.6
2015	72.1	16.1	6.4	2.7	1.2	0.5	0.3	0.7
2016	67.9	18.7	7.2	3.1	1.3	0.6	0.3	0.9
2017	70.0	16.1	6.4	2.8	1.5	0.9	0.4	1.9
2018	76.4	13.1	5.4	2.3	1.3	0.4	0.3	0.8
2019	82.84	9.53	4.03	1.56	0.97	0.31	0.23	0.53
2020	74.83	15.0	4.78	1.83	1.95	0.51	0.37	0.73
2021	82.99	6.13	3.39	1.19	4.28	0.75	0.94	0.33

Source: Ministry of Hotel and Tourism, 2023

Table (3.4) shows international tourists' arrival in Myanmar from 2001 to 2021, the percentage of international tourist arrivals from Asia shows an increasing trend over the years, starting at 60.5% in 2001 and reaching 82.99% in 2021. The percentage of international tourist arrival from West Europe fluctuates but generally shows a decreasing trend. It is at 27.3% in 2001 and decreased to 6.13% in 2021. The percentage of international tourist arrival from North America, Oceania, and other America shows some fluctuations but remains relatively stable. The percentage of international tourist arrival from East Europe, the Middle East, and Africa remains relatively low.

Overall, the data indicates that Asia is the primary source of international tourist arrivals, with a significant increase in its share over the years. This is because the government has implemented new tourism entry regulations. Visa-Free Entry, Visa on Arrival, and E-Visas were given to South Korea, Hong Kong, Macau, and other Southeast Asian countries. West Europe and North America also contribute a notable percentage, although their shares have decreased. Oceania, East Europe, the Middle East, Africa, and other regions of America contribute smaller percentages to the overall international tourist arrivals. Therefore, it likes to extend the tourism market for Europe and America. Stakeholders of the tourism sector have to emphasize tourism promotion for international tourists from those regions.

3.5 Tourism Industry in Nyaung Shwe Township

Tourism development needs tourist attractions and tourism businesses. The former consists of features of a destination that attract tourists. There are four groups of attractions: natural sites, natural events, cultural sites, and cultural events. The latter includes goods and services provided mainly to tourists. Moreover, natural and cultural resources influence the ability of a tourism destination to attract investment in infrastructure; consequently, tourism-related infrastructure is related to the development of tourism (MOHT, 2019).

The attraction of Nyaung Shwe township destination has been solely focused on its historical and cultural site, events, and scenic values. Inle Lake which is situated in the heart of the Nyaung Shwe township been the key attraction for hundreds of years. It has been listed as an important heritage area for South-East Asia and would qualify for listing as a wetland of international importance for migratory water birds. Moreover, since its physical resources must be effectively used for sustainability, cultural and environmental

conservations have been taken up in Nyaung Shwe township. Therefore, the whole Nyaung Shwe township is chosen for this study area (MOHT, 2019).

This section studies tourism-related factors, which enforce sustainable tourism development in Nyaung Shwe township. The first part introduces the historical and demographic background of Nyaung Shwe township in the context of the tourism industry. This section also studies the driving factors that enforce the development of the tourism industry such as background history, geographical factors, population factors, and cultural attractions in the township. The second section is concerned with socioeconomic status, comprising health, education, and economic sectors. The third one deals with the analysis of the development of tourism-related infrastructure. The next part highlights international tourism growth, presenting types of tours, tourism businesses, and international tourist arrivals to show the overview of the tourism development in Nyaung Shwe township (MOHT, 2019).

3.5.1 Historical and Demographic Background

International tourism to Inle Lake traces its beginning back to the early 1970s when the first organized trips were initiated. However, due to limited one-week tourist visas at that time and the lack of tourism infrastructure, most visitors stayed overnight in Taunggyi and visited the lake as a day trip. It was not until the "Visit Myanmar Year" in 1996 that tourism development in the region gained momentum. Following this, the construction of resorts on the lake and the opening of guesthouses in Nyaung Shwe township marked the significant growth of tourism facilities and infrastructure (MOHT, 2019).

Inle Lake has since become one of the top four destinations in Myanmar, boasting robust tourism infrastructure. The area is equipped with a wide range of accommodations including resorts, guesthouses, and hotels, catering to the needs of the tourists. Tour agencies, guides, restaurants, and transportation facilities are also well-established, providing visitors with a comfortable and enjoyable experience (MOHT, 2019).

Nyaung Shwe and Inle Lake serve as the main focal points for exploring the wider region, which includes the popular trekking destination of Kalaw. The area is not only significant for tourism but also plays a crucial role in agriculture, particularly in the production of fruits, vegetables, and freshwater fish. Inle Lake's unique floating gardens also support a large tomato production. Additionally, the lake serves as a major source of the Law Pi Ta hydroelectric power plant, supplying electricity to southern Myanmar, Shan State, and the Mandalay region (MOHT, 2019).

With its thriving tourism infrastructure and rich agricultural contributions, Inle Lake and its surrounding areas continue to attract international tourists, offering them a delightful blend of natural beauty, cultural experiences, and modern amenities (MOHT, 2019).

The formation of Nyaung Shwe township is shown in Table (3.5).

Table (3.5) Formation of Nyaung Shwe Township

Township / Associated Township		Number of Quarters and Village Tracts				
		2018	2019	2020	2021	2022
Nyaung Shwe township (561.42 square miles)	Urban Area	8 Quarters	8 Quarters	12 Quarters	12 Quarters	12 Quarters
	Rural Area	35 Village Tracts	35 Village Tracts	34 Village Tracts	34 Village Tracts	34 Village Tracts

Source: General Administrative Department, Nyaung Shwe township, 2023

There are 8 quarters and 35 village tracts comprising 446 villages within Nyaung Shwe township in 2018 and 2019. Nyaung Shwe township is reformed as 12 quarters and 34 village tracts and comprising 435 villages in 2020. In 2020, one of the village tracts in Nyaung Shwe township, the Nan Pan Village tract, was approved for reforming as quarters, and 11 villages in this village tract were formed into four quarters, from Nan Pan quarter No (1) to Nan Pan quarter No (4). Nan Pan village tract has tourist attractive places such as a number of cheroot (traditional cigarette) factories and there is also a variety of floating gardens where the Intha farmers grow tomatoes, flowers, squash, and vegetables on long trips to floating land.

Of these 34 village tracks, 14 village tracts lie within the lake and 5 village tracts lie partially within the Lake and partially on dry land. The remainder 15 village tracts lie on land in the vicinity of the Lake.

(a) Geographical Factors

Nyaung Shwe township is located between North Latitude 20° 18’ and 20° 53’ and East Longitude between 96° 50’ and 96° 57’, covering an area of approximately 1449 km^2 (550 square miles). The region is characterized by mostly flat plain situated between two mountain ranges, with Inle and Sakar Lake nestled in between. Both lakes are relatively

shallow, with average maximum depths of 6 meters (20 feet) during the wet season and 3.6 meters (12 feet) in the dry season (GAD, 2023).

The altitudes of Nyaung Shwe township and the surrounding area are approximately 884 meters (2950 feet), situated within an elongated, flat-bottomed valley flanked by parallel mountain ranges reaching heights of up to 1500 m (5000 feet). Sakar Lake is an integral part of the Law Pi Ta Dam and hydroelectric station, providing around 30% of Myanmar's electricity. Consequently, Inle Lake acts as a feeder lake for the hydroelectric system, with a dam regulating its water level at the outfall (GAD, 2023).

The climate in the region is influenced by various factors such as temperature, humidity, rainfall, and wind velocity. Inle Lake experiences a warm, humid, and temperate climate. The minimum temperature in Nyaung Shwe township occurs around 7.6˚C in December, while the maximum temperature reaches around 37.7˚C in April and May. During the Cold Season, the area experiences severe cold nights, with temperatures dropping as low as 1˚C to -1˚C in Kalaw and Pinlaung Townships. Humidity ranges from less than 40% in March to 90% in August. In the summer, prevailing winds are warm and southwesterly tropical winds originate from the Bay of Bengal. In the Cold Season (December to February), winds shift to northeasterly cold winds originating from Central Asia. The Rainy Season extends from April to November, with peak rainfall occurring in August and September (GAD, 2023).

(b) Population Factors

The population is an important factor, which must be taken into consideration when studying the development of tourist destinations and tourism impacts on the place, and then it is very important for the future development of tourism and the increasing volume of tourism. The population, urban/rural ratio the distribution of races, religion, and the distribution of occupations of Nyaung Shwe township will be presented (GAD, 2023).

Table (3.6) provides population data for urban and rural areas for the years 2018 to 2022. The population is divided by gender, with specific figures for males and females.

Table (3.6) The Population of Nyaung Shwe Township

Urban / Rural Area	Population									
	2018		2019		2020		2021		2022	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Urban Area	6,765	7,186	6,679	7,368	9,271	10,166	9,271	10,166	9,370	10,244
Rural Area	79,061	79,811	85,654	87,456	82,767	85,016	82,767	85,016	82,905	85,484
Total	85,826	86,997	92,333	94,824	92,038	95,182	92,038	95,182	92,275	95,728

Source: General Administrative Department, Nyaung Shwe township, 2023

In 2018, the urban area had a population of 6,765 males and 7,186 females. In 2019, the urban population slightly decreased to 6,679 males and 7,368 females. However, from 2020 to 2022, the urban population experienced a significant increase. In 2020, there were 9,271 males and 10,166 females, which further increased to 9,271 males and d10,166 females in 2021. By 2022, the urban area had 9,370 males and 10,244 females.

The rural area had a much larger population compared to the urban area. In 2018, there were 79,061 males and ds79,811 females in the urban area. The population slightly increased in 2019 to 85,654 males and 87,456 females. However, from 2020 to 2022, the urban population remained relatively stable. In each of those years, the rural area had 82,767 males and 85,016 females. By 2022, the rural area had 82, 905 males and 85,484 females.

Overall, the total population of the area was 85,826 males and 86,997 females in 2018. From 2019 to 2022, the total population continued to grow with 92,038 males and 95,182 females in each of those years. By 2022, the total population reached 92,275 males and 95,782 females.

Table (3.7) shows the number of households in Nyaung Shwe township.

Table (3.7) Number of Households in Nyaung Shwe Township

Urban / Rural Area	Number of Households				
	2018	**2019**	**2020**	**2021**	**2022**
Urban Area	2,343 (6.52 %)	3,314 (7.25 %)	4,702 (10.13 %)	4,702 (10.13 %)	4,919 (10.44 %)
Rural Area	33,619 (93.48 %)	42,405 (92.75 %)	41,714 (89.9 %)	41,714 (89.9 %)	42,179 (89.56 %)
Total	35,962	45,719	46,416	46,416	47,098

Source: General Administrative Department, Nyaung Shwe township, 2023

The 2018 annual report of GAD presented 35,962 households in Nyaung Shwe township. In 2019 and 2020, the number of households increased to 45,719 and 46,416 respectively. In 2022, the number of households increased to 47,098. The number of households that lived in the urban area increased by about 1 % between 2018 and 2019 and increase by about 3% between 2019 and 2020. This is because of Nan Pan village tract was approved as a quarter and the urban area has become more spacious.

Regarding races, the dominant ethnic groups settled in the Nyaung Shwe are Inthas, Shans, Pa-O, Da-Nu, and Burma. Concerning their religions, the majority of the people were Buddhist, whereas the minority were Christians in Nyaung Shwe township. The number of Muslims was the smallest proportion in the township (GAD, 2023).

In addition, the distribution of the population's occupation is crucial for a study of tourism development and its impacts on the economy of tourism destinations. Table (3.8) shows the different types of occupations and the number of individuals engaged in each occupation for the years 2018 to 2022. The table also includes the percentage of each occupation within the total employment.

Table (3.8) Occupational Distribution of the Residents

Sr. No.	Type of Occupations	2018	2019	2020	2021	2022
1	Government Staff	2,838 (2.76%)	2,838 (2.76%)	2,981 (1.56%)	2,981 (1.56%)	2,981 (1.56%)
2	Service	22,457 (21.85%)	22,457 (21.85%)	5,246 (2.84%)	5,246 (2.84%)	5,246 (2.84%)
3	Agriculture	23,101 (22.48%)	23,101 (22.48%)	126,667 (68.51%)	126,667 (68.51%)	126,667 (68.51%)
4	Livestock	827(0.80%)	827 (0.80%)	11,596 (6.27%)	11,596 (6.27%)	11,596 (6.27%)
5	Trading	2,322 (2.26%)	2,322 (2.26%)	558 (0.30%)	558 (0.30%)	558 (0.30%)
6	Industry	1,558 (1.52%)	1,558 (1.52%)	4,807 (2.60%)	4,807 (2.60%)	4,807 (2.60%)
7	Fishery	3,416 (3.32%)	3,416 (3.32%)	3,000 (1.61%)	3,000 (1.61%)	3,000 (1.61%)
8	Casual Work	33,243 (32.35%)	33,243 (32.35%)	3,726 (2.02%)	3,726 (2.02%)	3726 (2.02%)
9	Others	13,004 (12.65%)	13,004 (12.65%)	26,317 (14.23%)	26,317 (14.23%)	26317 (14.23%)
	Total	102,766	102,766	184,898	184,898	184,898

Source: General Administrative Department, Nyaung Shwe township, 2023

Among the employed persons, in 2018 and 2019, there were 23,101 individuals involved in agricultural activities, which constituted 22.48% of the total employment. However, in 2020, 2021 and 2022, the number significantly increased to 126,667 individuals, making up 68.51% of the total population. This suggests a substantial reliance on agriculture in the area. Moreover, in 2018 and 2019, there were 827 individuals engaged in livestock-related occupations, accounting for 0.80% of total employment. The number increased to 11,596 individuals in 2020, 2021, and 2022, representing 6.27% of the total employment.

On the other hand, in 2018 and 2019, there were 22,457 individuals engaged in service occupations, representing 21.85% of the total employment. In 2020, 2021, and

2022, the number of individuals in service occupations decreased to 5,256, accounting for 2.84% of the total employment. In 2018 and 2019, there were 2,322 individuals involved in trading, making up 2.26% of the total population. In 2020, 2021, and 2022, the number decreased to 588 individuals, accounting for 0.30% of the total employment. In 2018 and 2019, there were 3,416 individuals engaged in fishery activities, making up 3.32% of the total employment. In 2020, 2021, and 2022, the number decreased to 3,000 individuals, accounting for 1.61% of the total employment. Then, in 2018 and 2019, there were 33,243 individuals engaged in casual work, representing 32.35% of the total employment. In 2020, 2021, and 2022, the number decreased to 3,726 individuals, accounting for 2.02% of the total employment.

The number and percentage of government staff, industry, and others remained the same in 2020, 2021, and 2022. Therefore, there are significant changes in occupations especially the service and agriculture sectors during the COVID-19 pandemic, indicating shifts in employment patterns in the area.

3.5.2 Tourist Attractions Area

Nyaung Shwe township offers a variety of tourist attractions that draw visitors from near and far. These popular places, highlighted by the Ministry of Hotels and Tourism (MOHT), have become significant destinations for tourists in recent years:

Sakar Village: This quaint and secluded village, established in 1479, is chosen as the base for the government's Community-based Tourism project. Tourists can engage in meaningful and educational interactions with locals. Additionally, a ruined royal capital can be explored on the southern side of Inle Lake. which involves meaningful and educational interaction between locals and tourists. A ruined royal capital can also be found at Sakar, located on the southern side of Inle Lake (MOHT, 2022).

Alotawpauk Pagoda: It is known as one of the religious sites on Inle Lake, this pagoda stands on stilts and features four different Buddhas in the shrine. Originally built by Kinge Thiri Dhamma Thawka and later rebuilt by King Alaungsithu, the pagoda is adorned with jewelry, pearls, ivories, gold, and silver (MOHT, 2022).

Shwe Indein Pagoda: A whitewashed stupa in Indein village holds a Buddha image, surrounded by a cluster of ancient stupas. Tourists can reach the village by a 5-kilometer boat journey from Ywama (MOHT, 2022).

Phaung Daw Oo Pagoda: Five small images of Buddha can be found in the pagoda. These Buddha images are covered in gold leaves on the images, and the monastery is open to both locals and tourists (MOHT, 2022).

Floating Garden: The Inthas showcase their farming skills by cultivating vegetables on floating islands in Inle Lake. Visitors can witness this unique farming technique and even purchase the entire floating garden (MOHT, 2022).

Floating Market: Unlike typical river floating markets, this market takes place on the lake. Vendors row their boats along the lake to sell or trade vegetables, rice, and freshly caught fish (MOHT, 2022).

Inle Lake Wildlife Sanctuary: Founded in 1995, this sanctuary protects numerous plant and animal species found only in Inle. Visitors can explore and discover the rich flora and fauna within the protected area (MOHT, 2022).

Nyaung Shwe Saw Bwa Museum: Once the residential area of Nyaung Shwe Sawbwa, one of the rulers of Shan State, this museum showcases ancient sculptures and majestic architecture. It houses the belongings of the Saw-Bwas, including thrones, divans, attires, and images (MOHT, 2022).

These attractions offer a glimpse into the cultural heritage and natural beauty of Nyaung Shwe township and contribute to the growth of tourism in the region. Visitors can explore the diverse landscapes, learn about local traditions, and appreciate the unique charm that Inle Lake and its surroundings have to offer (MOHT, 2022).

(a) Traditional Festivals

Nyaung Shwe township boasts several traditional festivals that attract tourists from around the globe, adding to the allure of the region's pagodas and culturally rich sites (MOHT, 2022). The three main festivals in the area are as follows:

Phaungdawoo Pagoda Festival: This festival is centered around the revered Phaungdawoo Pagoda, which was built after King Alaungsithu's visit to Inle Lake. The festivities include processions and boat races held on specific dates in the Lunar Calendar. The pagoda, which used to house five Buddha images, now holds four due to a storm that caused some of them to fall into the lake. In September, thousands of locals and visitors gather at Inle Lake to partake in the Phaungdawoo Pagoda Festival. They make donations to the pagodas, witness traditional song and dance performances by locals, and enjoy the thrilling one-legged boat race, participated in by male locals. In the same month, the

Manuha Pagoda Festival is also celebrated, with locals parading the streets with offerings and displaying figurines representing Lord Buddha's reincarnations (MOHT, 2022).

Thadingyut Festival: This three-day light festival is a significant celebration during which locals illuminate their homes with lights and candles, symbolizing the stairways built for Lord Buddha during his descent to the mortal world after preaching to his mother in heaven. The Thadingyut Festival is celebrated in Inle Lake with great enthusiasm and fervor. During Thadingyut, locals in Inle Lake illuminate their homes, streets, and pagodas with beautiful lights and candles, creating a mesmerizing spectacle. One of the highlights of the Thadingyut Festival in Inle Lake is the lighting of paper lanterns. These lanterns, adorned with intricate designs and wishes written on them, are released into the night sky, symbolizing the sending of good wishes and positive energy. The sight of hundreds of glowing lanterns floating up into the heavens creates a magical and unforgettable experience for both locals and tourists (MOHT, 2022).

Thingyan Festival: the Thingyan Festival is one of the most anticipated and widely celebrated events in Inle Lake and throughout Myanmar. It takes place annually in April, making the traditional Myanmar New Year. The festival usually spans four to five days and is characterized by joyous water-throwing festivities, symbolizing the cleansing of the old year's sins and the welcoming of the new year with a fresh start. In Inle Lake, the water festivities take on a unique twist due to the lake's water-based lifestyle. Boat races and water-based activities are common during the festival, adding to the vibrant atmosphere. Locals also decorate their boats with colorful flags and flowers, creating a picturesque scene on the water. Amidst the water-throwing and merrymaking, traditional cultural performances and entertainment take place. Folk dances, music, and performances are held at various locations, providing a rich cultural experience for both locals and tourists (MOHT, 2022).

These traditional festivals showcase the vibrant culture and traditions of Nyaung Shwe township, providing an enriching experience for both locals and tourists alike. The festivities, deeply rooted in local customs, offer a unique glimpse into Myanmar's rich cultural heritage and add to the appeal of the region as a must-visit destination for travelers (MOHT, 2022).

3.5.3 Tourism Related-Infrastructure

All the infrastructure networks are to be placed before tourism activity takes place. The operation of tourism facilities, services, and amenities is often dependent on several

travel infrastructure networks. These networks consist of transportation, water supply, energy/power, waste disposal, post and telecommunications, and recreation.

(a) Transportation

Two roads are leading to Nyaung Shwe township. Table (3.9) shows the highway roads leading to Nyaung Shwe township.

Table (3.9) Highway Roads Leading to Nyaung Shwe Township (2018-2022)

Sr. No.	Name of roads	Length	Type of Roads
1	Ayetharyar-Nyaung Shwe- Mine Tout- Nan Pan- Ton Hone	37 miles 4 furlongs	Asphalt
2	Taung lay lone- Inle Spa- Khaung Taing	8 miles 2 furlongs	Asphalt
3	Shwe Nyaung – Nyaung Shwe	7 miles 4 furlongs	Asphalt
4	Ton Hone – Sakar - Loikaw	23 miles	Asphalt
5	Ton Hone – Loimoon	10 miles 7 furlongs	Asphalt
6	Se Saing – Sakar	14 miles	Asphalt
7	Kyun Taung – Kyaut ta lone gyi – Naung Yar Saing – Saike Kaung – Pun Chaung – Maunt Mal Road	2 miles 6 furlongs	Asphalt

Source: General Administrative Department, Nyaung Shwe township, 2023

In 2019, there are six highway roads which are leading to Nyaung Shwe township. Ayetharyar-Nyaung Shwe- Mine Tout- Nan Pan- Ton Hone Road is 37 miles and 4 furlongs, followed by the second-longest way leading to Sakar from Se Saing. All roads are asphalt types. In 2021, a new highway road, Kyun Taung – Kyaut ta lone gyi – Naung Yar Saing – Saike Kaung – Pun Chaung – Maunt Mal Road, was constructed. This road is 2 miles and 6 furlongs long and that is asphalt types. From 2018 to 2022, the length of the highway roads was not changed.

There were many travel services operated in the township for easy access to the township as follows;

(i) Shwe Inle (Hilux Association);

(ii) Maw Cherry (Hilux Association);

(iii) Pyi Khaing Phyo (Hilux Association);

(iv) Shwe Inle (Express);

(v) Aung Myanmar (Express); and

(vi) Shwe Wings (Hilux Association)

(b) Water Transportation

Inle Lake is situated in the heart of the Nyaung Shwe township and the villages are located around Inle Lake. Thus, it is accessible to these destinations by water.

Table (3.10) Water Transportation in Nyaung Shwe Township (2018 -2022)

Sr. No.	Name of Roads	Length
1	Nyaung Shwe – Phaung Daw Oo	13 miles
2	Nyaung Shwe – Sakar	40 miles
3	Making Thaught – Nyaung Shwe	7 miles
4	Khaung Taing – Phaung Daw Oo	7 miles
5	Indein – Nyaung Shwe	21 miles
6	Nan Pan – Phaung Daw Oo	1 mile

Source: General Administrative Department, Nyaung Shwe township, 2023

Every day, the residents and tourists can use private boats to go around Inle Lake. Tourists can voyage by boat from Nyaung Shwe to some tourist attraction destinations such as Phaung Daw Oo, Sakar, Indein, etc.

(c) Water Supply

The tourism industry has a higher demand for water consumption than residents worldwide. Increases in tourism will increase the demand for water for bathing and drinking as well as systems for dealing with wastewater.

One of the most important requirements for the development of tourism facilities is an adequate supply of safe water for drinking purposes as well as domestic and recreational use. In Nyaung Shwe township, 63.6 percent of households use improved sources of drinking water (tap water/piped, tube well, borehole, protected / spring, and bottled water/water purifier). The sources of drinking water in urban/rural areas in Nyaung Shwe township is shown in Table (3.11).

Table (3.11) Source of Drinking Water by Urban/Rural

Sr. No.	Source of Drinking Water	Total (%)	Urban (%)	Rural (%)
1	**Total improved drinking water**	**63.6**	**97.2**	**61.1**
	Tap water, Piped	17.3	0.5	18.6
	Tube well, borehole	23.0	37.2	21.9
	Protected well/ Spring	16.6	7.0	17.4
	Bottled water/ Water Purifier	6.7	52.5	3.2
2	**Total unimproved drinking water**	**36.4**	**2.8**	**38.0**
	Unprotected well/Spring	7.8	0.9	8.3
	Pool/Pond/Lake	4.6	-	5.0
	River/stream/canal	9.8	-	10.5
	Waterfall/Rainwater	13.0	0.2	14.0
	Others	1.2	1.7	1.1
	Total	**100**	**100**	**100**

Source: 2014 Census Data, Nyaung Shwe township, 2017

In Nyaung Shwe township, 63.6% of household use improved sources for drinking water including tap water/piped (17.3%), tube well, borehole (23.0%), protected well/spring (16.6%) and bottled water/water purifier (6.7%). About 36.4% of the households in Nyaung Shwe township use water from unimproved sources for drinking water including unprotected wells/Spring (7.8%), Pools/Ponds/Lakes (4.6%), Rivers/ streams/canals (9.8%), Waterfalls/Rainwater (13.0%) and others (1.2%) which is the residents use water from Inle Lake as a source of drinking water. Some residents use boiled water as a drinking water for removing the infections and calcium. In rural areas, 38.0 % of households use water from unimproved sources for drinking water.

In Nyuang Shwe township, 60% of the population has accessed to improve drinking water, whereas about 40% of the population is still using unimproved drinking water.

(d) Electrical Energy

Power demand reflects the expectations of international visitors who want the standard of services to which they are accustomed. The sources of lighting in urban/rural areas in Nyaung Shwe township is shown in Table (3.12).

Table (3.12) Sources of Lighting by Urban / Rural

Sources of Lighting	Total (%)	Urban (%)	Rural (%)
Electricity	37.5	96.5	32.9
Solar System/ energy	30.0	0.3	32.3
Battery	15.1	0.3	16.2
Kerosene	5.7	-	6.1
Candle	5.5	2.4	5.7
Water mill (private)	3.2	-	3.5
Generator (private)	2.1	0.1	2.3
Others	0.9	0.4	1.0
Total	**100**	**100**	**100**

Source: 2014 Census Data, Nyaung Shwe township, 2017

In Nyaung Shwe township, 37.5 percent of households use electricity for lighting. Then, 96.5 percent of households in urban areas use electricity for lighting. In rural areas, 32.9 percent of households use electricity for lighting. However, households in rural areas mainly use electricity, solar system/energy, and battery. Only 0.9 percent of households use other sources that are not mentioned above sources of lighting such as oil lamps, rechargeable light bulbs, etc.

Communication

The accessibility of post and telecommunications services is crucial; hence many visitors use mobile services, smartphones, and Internet technology for communication to access tourism information when traveling. The number of line phones, mobile phones, and Internet at home in Nyaung Shwe township is described in Table (3.13).

Table (3.13) Availability of Communication in Nyaung Shwe township

Types	Total (%)	Urban (%)	Rural (%)
Landline Phone	1.9	14.8	0.9
Mobile Phone	35.1	75.4	32.0
Internet at home	3.8	26.4	2.0

Source: 2014 Census Data, Nyaung Shwe township, 2017

In Nyaung Shwe township, about 75 percent of the households in urban areas have mobile phones and 32.0 percent of the households in rural areas have mobile phones. Although about 14.8 percent of households in urban areas have a landline phone, there are a few landline phones in rural areas. And only 26.4 percent of households in urban areas and 2.0 percent of households in rural areas have Internet access at home. It seems apparent that communication services would need better in the future in the township.

3.6 International Tourism Growth in Nyaung Shwe Township

In this section, types of tours, tourism businesses, and international tourism in Nyaung Shwe township will be highlighted (MOHT, 2022).

(a) Types of Tours

Three types of tours are developed in the township. They are as follows:

1. Cultural Tour _ As mentioned, there are the most attractive eight destinations on the list that tourists can visit (MOHT, 2022).
2. Trekking Tour _ Tourists can enjoy the beauty of nature by taking the trekking tour, the popular ones are the 3-day Kalaw trekking tour and full-day Inle Lake trekking (MOHT, 2022).
3. Inle Bike, boat, and Kayak Tour _ International tourists to Myanmar have been inspired by the leg-rowers of Inle Lake. Tourists can explore Inle Lake by boat and Kayak Tour and continue their bike tour for 2.5 hours and enjoy the sunset over the wine yard (MOHT, 2022).

3.6.1 Number of Accommodations Development in Nyaung Shwe Township

The number of licensed hotels, motels, and guest houses and the rate of rooms are shown in Table (3.14).

Table (3.14) Number of Licensed Hotels, Motels, and Guest Houses in Nyaung Shwe Township, 2001 – 2022

Year	Number of Hotels, Motels, and Guest Houses	Percentage Change in Number of Hotel, Motels, and Guest Houses	Number of Rooms	Percentage Change in Number of Rooms
2001	33		984	
2002	33	0.00	984	0.00
2003	34	3.03	1,060	7.72
2004	36	5.88	1,142	7.74
2005	37	2.78	1,192	4.38
2006	37	0.00	1,192	0.00
2007	39	5.41	1,241	4.11
2008	40	2.56	1,288	3.79
2009	40	0.00	1,288	0.00
2010	42	5.00	1,336	3.73
2011	42	0.00	1,336	0.00
2012	42	0.00	1,336	0.00
2013	47	11.90	1,445	8.16
2014	65	38.30	2,014	39.38
2015	78	20.00	2,438	21.05
2016	88	12.82	2,731	12.02
2017	102	15.91	3,229	18.24
2018	103	0.98	3,362	4.12
2019	104	0.97	3,388	0.77
2020	113	8.65	3,714	9.62
2021	114	0.88	3,794	2.15
2022	110	-3.51	3,554	-6.33

Source: Hotels and Tourism Office, Taunggyi District, 2023

The table indicates a general upward trend in the number of hotels, motels, and guest houses, as well as the number of available rooms, over the years. This shows that there is an increasing demand for accommodation in Nyaung Shwe township. In 2022, the number of accommodations and the number of rooms in Nyaung Shwe township declined by 110 and 3,554 respectively. During the COVID-19 pandemic, the growth of number of

accommodations and growth of the number of rooms declined and become negative in 2022.

The number of licensed tour guides and regional guides in Nyaung Shwe township is shown in Table (3.15).

Table (3.15) Number of Licensed Tour Guides and Regional Guides in Nyaung Shwe Township, 2012-2022

Year	Number of Tour Guides	Number of Regional Guides
2012	12	-
2013	24	-
2014	29	118
2015	38	118
2016	52	225
2017	69	220
2018	88	350
2019	89	343
2020	110	340
2021	126	338
2022	112	72

* Nyaung Shwe township was permitted to begin applying for licenses for travel agencies in 2012.

Source: Hotels and Tourism Office, Taunggyi District, 2023

In 2012, there were 12 tour guides. In the following years, the number of tour guides steadily increased. By 2022, there were 112 tour guides in Nyaung Shwe township. For regional guides, there were 118 regional guides in 2014. From 2016 to 2019, the number of regional guides fluctuated. Then from 2020 to 2022, the number of regional guides declined and dropped significantly to 72 in 2022. The number of regional tour guides fluctuations and decline because tour agencies adjust their staffing based on demand. During the COVID-19 pandemic, not only licensed tour guides but also regional guides are declining.

3.6.2 International Tourists Arrivals

International tourist arrivals to the Nyaung Shwe township are shown in Table (3.16).

Table (3.16) International Tourist Arrivals to Nyaung Shwe Township, 2001-2022

Year	Number of International Tourist Arrivals	Percentage change in the number of international Tourist Arrivals
2001	20,797	
2002	24,109	15.93%
2003	19,963	-17.20%
2004	22,834	14.38%
2005	32,726	43.32%
2006	44,729	36.68%
2007	34,845	-22.10%
2008	13,155	-62.25%
2009	18,488	40.54%
2010	22,506	21.73%
2011	29,872	32.73%
2012	60,017	101.22%
2013	97,496	62.45%
2014	123,045	26.21%
2015	137,861	12.04%
2016	178,787	29.69%
2017	225,224	25.97%
2018	166,251	-26.18%
2019	173,959	4.64%
2020	58676	-66.27%
2021	358	99.39%
2022	148	-58.66%

Source: Hotels and Tourism Office, Taunggyi District, 2023

The table represents the number of international tourist arrivals in Nyaung Shwe township over a series of years, along with the percentage change in the number of arrivals compared to the previous year.

Analysis of International tourist arrivals during the period of 2005 to 2022, there was a more dramatic upward trend since 2011. International tourism is growing in this area. Significant growth can be seen from 2009 at 18488 international arrivals to over 130,000 in 2015. It is important to recognize that the tourism dynamic fundamentally

changed in 2011 due to political change and new opportunities open up for tourism development. During the COVID-19 pandemic, tourist arrivals to Nyaung Shwe township dramatically declined by 358 in 2021 and 148 in 2022.

The table shows the fluctuation in the number of international tourist arrivals over the years, with periods of growth and decline. There are reasons for the decline in international tourists' arrival in those specific years such as Cyclone Nargis, Saffron Resolution, and Internal Conflict. The year 2020 was particularly impacted by the COVID-19 pandemic, resulting in a significant decrease in international tourism.

During that period of growth, Nyaung Shwe township experienced a significant increase in tourist arrival, and the government encourage the participation of foreign investment in the tourism sector, resulting in increased hotel development to accommodate the growing number of visitors.

3.6.3 International Tourist Arrivals by Region

Table (3.17) shows international tourist arrivals in Nyaung Shwe township based on data availability.

Table (3.17) International Tourist Arrivals to Nyaung Shwe Township by Region (March 2022)

Regions	Tourist Arrivals (%)
Asia	69.74
West Europe	20.07
America	4.46
Oceania	4.23
East Europe	1.27
Africa	0.23
Total	**100**

Source: Hotels and Tourism Office, Taunggyi District, 2023

This table highlights the dominance of Asia (69.74%) as the largest source of tourists, followed by West Europe (20.07%). It also demonstrates the presence of visitors from America (4.46%), Oceania (4.23%), East Europe (1.27%), and Africa (0.23%), albeit in smaller proportions. This information can be valuable for understanding the geographic sources of tourism and planning targeted marketing or strategies to attract visitors from specific regions.

3.6.4 Tourist Expenditure in Nyaung Shwe Township

Table (3.18) shows the tourist expenditure in US dollars for the years 2001 to 2022, along with the corresponding percentage change in expenditure in Nyaung Shwe township.

Table (3.18) Tourist Expenditure in Nyaung Shwe Township, 2001 - 2022

Year	Expenditure by International Tourists (US $)	Percentage Change in Expenditure by International Tourists
2001	192,749	
2002	223,445	15.93
2003	185,019	-17.20
2004	353,923	91.29
2005	481,521	36.05
2006	676,208	40.43
2007	639,754	-5.39
2008	233,144	-63.56
2009	273,276	17.21
2010	361,562	32.31
2011	593,941	64.27
2012	1,108,945	86.71
2013	1,814,983	63.67
2014	4,035,508	122.34
2015	5,315,171	31.71
2016	7,841,501	47.53
2017	8,596,950	9.63
2018	6,949,294	-19.17
2019	6,651,838	-4.28
2020	4,449,019	-33.12
2021	50,278	-98.87
2022	77,077	53.30

Source: Hotels and Tourism Office, Taunggyi District, 2023

The tourists' expenditure dropped in 2003 and from 2018 to 2021. There are potential reasons for the decline in international tourists' expenditure. The number of tourists arriving in those specific years declined because of the country experienced natural disasters, and Conflicts such as Cyclone Nargis, Saffron Resolution, and Internal Conflict. The year 2020 was particularly impacted by the COVID-19 pandemic, resulting in a significant decrease in international tourism.

Nyaung Shwe township experienced periods of growth in some years because of supportive government policies, incentives, or investment in tourism development. The table illustrates the fluctuating trends in expenditure by international tourists in the Nyaung Shwe township, with periods of growth, declines, and the significant impact of the COVID-19 pandemic on tourist spending.

3.6.5 Types of Tourists

The type of tourist arrivals in Nyaung Shwe township can be classified as shown in Table (3.19).

Table (3.19) Types of Tourists (March 2022)

Types of Tourists	Number of Tourists	Number of Tourists (%)
Package Tour Group	52	35
Independent Travelers	71	48
Business Travelers	13	9
Social Visitors/ Visit Friends and Relatives (VFR)	12	8
Total	**148**	**100**

Source: Hotels and Tourism Office, Taunggyi District, 2023

According to Table (3.19), the type of independent travelers has 48 %, and tourists with package tour groups 35% take second place. Type of business travelers has 9% and it takes the third place. Package tour groups and business travelers stay for a long time so their expenditure during their stay is usually high. The social visitors, visiting friends, and relative travelers have only 8%.

The table shows that the majority of tourists are independent travelers, followed by those in package tour groups. It is due to travelers having easy access to global distribution networks from, which they can obtain the necessary information and

reservation arrangement. Moreover, the presence of business travelers and social visitors/visiting friends and relatives highlights the diverse motivations for travel to the Nyaung Shwe township.

3.7 Hotel Zones in Nyaung Shwe Township

As tourism continued to grow in the Nyaung Shwe township and Inle Lake region, authorities at the state and Union levels recognized the need to address the challenges posed by the increasing demand for hotel accommodation and construction space. The rising number of tourists raised concerns about potential overcrowding and environmental impacts on Inle Lake and the town of Nyaung Shwe (MOHT, 2022).

To address these concerns and ensure sustainable tourism development, authorities considered the establishment of a designated hotel zone. The hotel zone was envisioned as a solution to regulate and manage new hotel construction in the region. By allocating a specific area for hotels, it aimed to balance the tourism infrastructure development with the preservation of the natural environment and cultural heritage (MOHT, 2022).

Furthermore, by implementing the hotel zone, authorities sought to strike a balance between promoting tourism growth and preserving the natural and cultural assets that make the Nyaung Shwe township and Inle Lake region such a sought-after destination (MOHT, 2022).

The Ministry of Environmental Conservation and Forestry (MOECAF) submitted on 12, February 2012 to the President's office for guidance concerning the applications for permission for the construction of hotels by companies and organizations in the Inle Lake area under a proposal from the Ministry of Hotels and Tourism (MOHT, 2022).

MOECAF identified 622 acres to the east of Inle Lake as a possible zone where hotel construction can be allowed with guidance from the President (MOHT, 2022). The zone was established in mid-2012 under the following criteria:

(a) The Ministry of Environmental Conservation and Forestry should lease Land to the Ministry of Hotels and Tourism.
(b) The initial lease per period should be 30 years, with the possibility of extension.
(c) The 622 acres hotel zone should be implemented as soon as possible.
(d) The Inle Lake Hotel Zone Establishment Committee should be set up to address disputes.
(e) The land lease rate should be coordinated and a reasonable rate determined.
(f) A fund should be set up for the sustainability and conservation of the watershed

areas of Inle Lake

(g) A separate fund should be set up for greening the hotel zone.

(h) A fund should be set up to handle Payment for Environmental Services (PES) and Ecosystem services in promoting business enterprises by the Environmental Conservation Law.

(i) Waste management systems should be established to minimize the impact on the environment.

Master Plan for Hotel Zone in Nyaung Shwe Township: The plan for the hotel zone construction in Nyaung Shwe township was developed with the following objectives:

(a) To propose a layout plan that will enable the implementation of modern advanced hotel buildings required for the promotion of tourism that will contribute to the national economic development

(b) To minimize the unavoidable environmental and sociocultural impacts of development work through the layout plan

(c) To ensure cost-effectiveness in the construction of physical infrastructure consisting of roads, bridges, etc.

(d) To ensure that the needs and wants of international tourists are catered to and the interests of the local population are served in the layout plan.

By implementing the hotel zone and following the master plan, authorities sought to foster sustainable tourism development, balancing economic growth with environmental conservation and well-being of both tourists and the local community (MOHT, 2022).

CHAPTER IV
EMPIRICAL ANALYSIS

4.1 Research Design

The sample survey is conducted in Nyaung Shwe township to require information.

(a) Target Population: For quantitative analysis, the target population of the survey is residents from the Nyaung Shwe township who are household members and 18 years of age and above. The survey collects from both residents who are employed in the torism industry and those who are not involved in tourism-related jobs.

(b) Sampling Design: A two-stage random sampling is used to conduct a survey. In Nyaung Shwe township, the most popular tourist places are 12 quarters and 7 village tracks. Among 12 quarters and 7 village tracks in Nyaung Shwe township, a sample of 2 quarters and 4 village tracks are selected by a simple random sampling method. Then, the sample households are proportionately chosen from the sample quarters and village tracts selected by simple random sampling.

(c) Sample Size Determination: According to Cochran (1977), the required minimum sample household is calculated using the following formula.

$$n = \frac{Z^2 p(1-p)}{e^2} = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2} = 384$$

where,

Z = 95% confidence level = 1.96

e = desired level of precision = 0.05

p = 0.5

The households in selected quarters and village tracks were 4,891 and the selected households were 384. Since the sample exceeds 5% of the population (4,891× 0.05=245), Cochran's correction formula was used to calculate the final sample.

Therefore, the final sample households become

$$n = \frac{n_o}{1 + \frac{n_0}{N}} = \frac{384}{1 + \frac{384}{4891}} = 356$$

Therefore, the required sample size is at least 356 households. However, according to the pilot survey, the response rate is 93%. The minimum sample size of (356÷0.93=383) is needed. Hence, a sample of 383 households is chosen, and sample households from each sample ward and village tract are allocated as follows.

Table (4.1) Sample Size Allocation

Sample number of quarters and village tracts	Total number of households	Number of sample households
Thasi Quarter	357	28
Nan Pan (3) Quarter	308	24
Maing Thauk Village Tract	1366	107
Nga Phe Chaung Village Tract	794	62
Ywama Village Tract	1100	86
Sakar Village Tract	966	76
Total	**4891**	**383**

Source: General Administrative Department, Nyaung Shwe township, 2022

(d) Data Collection: To obtain accurate results and be effective in undertaking surveys, the training for the interviewers was conducted in the first week of May 2022. In this training, the interviewers are explained the objectives of the survey, and the questionnaires in detail. Then, the survey was undertaken from May 2022 to September 2022. Only one respondent who is 18 years old and above is collected from each household; therefore, the number of respondents is 383 in this study.

(e) Questionnaire Design:

The questionnaire includes three main sections. The first section consists of the residential information of the respondent. The second section is concerned with residents' perception on the economic, sociocultural, and environmental impacts of tourism development. The third section includes questions concerned with the residents' attitudes towards further tourism development. In order to measure the perception of respondents,

a five-point Likert scale (from 1= “strongly disagree” to 5= “strongly agree”) has been used in this study.

4.2 Analytical Model

Firstly, the reliability of the multiple-item scale is measured. The Cronbach’s alpha coefficient is the index of reliability and is used for testing the internal consistency of the Likert scales in this questionnaire. The alpha coefficient ranges in value from 0 to 1; in general, an alpha of 0.6 - 0.7 indicates an acceptable level of reliability, and 0.8 or greater is a very good level (Hulin, Netemeyer, and Cudeck, 2001).

Secondly, Factor analysis is used to identify underlying factors that explain the relationships among a set of observed variables. It aims to simplify complex data by reducing the number of variables and finding patterns or commonalities among them. There are two types of factor analysis namely exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Confirmatory factor analysis (CFA) is used to test a specific hypothesis or theory about the factor structure of a set of observed variables. It involves specifying a priori hypotheses regarding the number and nature of the factors and evaluating how well the observed variables fit the proposed factor structure (Brown, 2015).

To determine the appropriateness of factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is used in the study. KMO compares the observed correlation coefficients to the partial correlation coefficients. KMO index ranges from 0 to 1. A KMO value of 0.9 is the best and a KMO value below 0.5 is unacceptable. KMO value of 0.6 suggests the minimum value for good factor analysis however the statistical significance for Bartlett’s test of sphericity is required (Brown, 2015).

The factor loadings are the correlations between the factors and their related variables. Eigenvalue represents the strength of a factor. The Eigenvalue of the first factor is the sum of the squared factor loadings. Eigenvalue is used as a cutoff because it is the sum of the squared factor loadings of all variables. The sum of the squared factor loadings divided by the number of variables in a factor equals the average percentage of variance explained by that factor. An eigenvalue 1 means that the variable explains at least an average amount of the variance. A factor with an eigenvalue of less than 1 means the variable is not contributing an average amount to explain the variance. In interpreting factors, variables with large factor loadings indicate representative of the factor while variables with small factor loadings suggest that they are not representative of the factor.

A rule of thumb suggests that factor loadings greater than 0.33 are considered to meet the minimal level of practical significance (Brown, 2015).

To meet the objectives of the study multiple regression analysis is employed. The general multiple regression model is:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + ... + \beta_k X_{ki} + \varepsilon_i$$

Where:

Y_i = i^{th} observation of the dependent variable Y, i = 1, 2…, n

X_j = independent variables, j = 1, 2…, k

X_{ji} = ith observation of the jth independent variable

β_j = slope coefficient for each of the independent variables

ε_i = i^{th} independent identically distributed normal error

n = number of observations

k = number of independent variables

The assumptions of multiple linear regressions are as follow:

1) The relationship between the independent variables and dependent variables must be linear.
2) The residuals of the model should be normal.
3) There is no multicollinearity in the independent variables.
4) The variance of the error term is homoscedasticity for all observations.

Multiple regression analyses are used to test the relationship among the variables. In order to meet the objectives of the study, seven models are used as follows:

Positive Economic Impact = $\beta_0 + \beta_1$Age + β_2 Gender + β_3 Education + β_4 Length of Residence + β_5 Income related to Tourism + β_6 Contact with Visitors + β_7 Living Area + ε_i ……..……..……..(1)

Negative Economic Impacts = $\beta_0 + \beta_1$Age + β_2 Gender + β_3 Education + β_4 Length of Residence + β_5 Income related to Tourism + β_6 Contact with Visitors + β_7 Living Area + ε_i ……..……..……..(2)

Positive Sociocultural Impacts = β_0 + β_1Age + β_2 Gender +

β_3 Education + β_4 Length of Residence + β_5 Income related to Tourism + β_6 Contact with Visitors + β_7 Living Area + ε_i

……..……..……..(3)

Negative Sociocultural Impacts = β_0 + β_1Age + β_2 Gender +

β_3 Education + β_4 Length of Residence + β_5 Income related to Tourism + β_6 Contact with Visitors + β_7 Living Area + ε_i

……..……..……..(4)

Positive Environmental Impacts = β_0 + β_1Age + β_2 Gender +

β_3 Education + β_4 Length of Residence + β_5 Income related to Tourism + β_6 Contact with Visitors + β_7 Living Area + ε_i

……..……..……..(5)

Negative Environmental Impacts = β_0 + β_1Age + β_2 Gender +

β_3 Education + β_4 Length of Residence + β_5 Income related to Tourism + β_6 Contact with Visitors + β_7 Living Area + ε_i

……..……..……..(6)

Residents' Attitudes towards

Further Tourism Development = β_0 + β_1Peco + β_2 Neco+ β_3 Psc + β_4Nsc + β_5Penv + β_6 Nenv + ε_i……..… (7)

Table (4.2) Variables Specification

Sr. No.	Variables Name	Measure	Symbol	Expected Sign	
1.	Age	Number	Age	(+ / -) positive impacts	(- / +) negative impacts
2.	Gender	Dummy, take the value 1 if male and otherwise 0	Gender	(+) positive impacts	(-) negative impacts
3.	Education	Dummy, take the value 1 if graduate, and otherwise 0	Education	(-) positive impacts	(+) negative impacts
4.	Length of Residence	Dummy, take the value 1 if the respondent has lived in the area for more than six years, and otherwise 0	Length of Residence	(+/-) positive impacts	(- /+) negative impacts
5.	Income-related to Tourism	Dummy, take value 1 if tourism income is included in the monthly income, and otherwise 0	Income-related with Tourism	(+) positive impacts	(-) negative impacts
6.	Contact with Visitors	Dummy, take the value 1 if there is frequent contact with the visitors on a daily basis, and otherwise 0	Contact with Visitors	(+/-) positive impacts	(- /+) negative impacts
7.	Living Area	Dummy, take the value 1 if the residents living near the hotel zone, hotel and tourist attraction areas, and otherwise 0	Living Area	(+ / -) positive impacts	(- / +) negative impacts

Source: Prepared based on literature

4.2.1 Variables of the Model

The variables are measured by the "five-point Likert scale" consisting of points 1= "strongly disagree", 2 = "disagree", 3 = "neutral", 4 = "agree", and 5= "strongly agree".

(a) Positive Economic Impacts

This study focuses on the residents' perception on positive economic impacts of tourism development in Nyaung Shwe township. Eleven items are applied to measure it.

(i) Tourism development promotes the local infrastructure (roads, bridges, schools, hospitals, electricity transmission, telecommunication, etc.) development. (Peco1)

(ii) Tourism development enhances employment opportunities. (Peco2)

(iii) Tourism development attracts more investments to your community. (Peco3)

(iv) As a result of tourism, we can buy a variety of things, run many restaurants and build more recreation areas. (Peco4)

(v) Incomes of the local residents significantly rise due to tourism development. (Peco5)

(vi) Tourism development increases the number of guest workers. (Peco6)

(vii) Tourism is a promising driving factor for other local industries. (Peco7)

(viii) Tourism increases local business revenues for the host community. (Peco 8)

(ix) Tourism increases the production of native handicrafts. (Peco 9)

(x) Tourism development increases income and standard of living. (Peco10)

(xi) Tourism fosters self-employment. (Peco11)

(b) Negative Economic Impacts

This study focuses on the residents' perception on negative economic impacts of tourism development in Nyaung Shwe township. Five items are applied to measure it.

(i) During a low season, some local residents tend to be out of a job. (Neco1)

(ii) Tourism leads to increase housing prices in the community. (Neco2)

(iii) Only a minority of local residents gain economic benefits from tourism development. (Neco3)

(iv) Tourism development results in an increase in the cost of living in relation to food and land prices. (Neco4)

(v) Tourism development replaces agricultural and manufacturing industries. (Neco5)

(c) Positive Sociocultural Impacts

This study focuses on the residents' perception on positive socio-cultural impacts of tourism development in Nyaung Shwe township. Eleven items are applied to measure it.

(i) Tourism helps to preserve the inheritance of the culture and gives you a better knowledge of your traditional culture. (Psco1)

(ii) Tourism development gives you opportunities to come into contact with foreign cultures and outsiders. (Psco2)

(iii) Tourism development results in the empowerment of local women. (Psco3)

(iv) The quality of public services in my community has improved due to tourism. (Psco4)

(v) Tourism development has resulted in greater demand for unemployed youths and women. (Psco5)

(vi) Tourism development mitigates the emigration of young people. (Psco6)

(vii) Tourism improves the image of Inle Lake. (Psco7)

(viii) Tourism provides a renaissance of traditional art and craft form. (Psco8)

(ix) Traditional ceremonies can enhance the sense of national pride due to tourism. (Psco9)

(x) Tourism development results in the protection of cultural heritage and historical relics. (Psco10)

(xi) Tourism development improves a community's appearance. (Psco11)

(d) Negative Sociocultural Impacts

This study focuses on the residents' perception on negative sociocultural impacts of tourism development in Nyaung Shwe township. Twelve items are applied to measure it.

(i) Community is becoming overcrowded due to the increasing number of tourists. (Nsco1)

(ii) Tourism interrupts the peace and tranquility of the town. (Nsco2)

(iii) Tourism development leads to the destruction of ancient buildings and historical sites (Such as overcrowding and graffiti on the historical sites). (Nsco3)

(iv) Tourism development brings about a rise in crime rates. (Nsco4)

(v) The increasing number of tourists leads to conflict between residents and visitors. (Nsco5)

(vi) Local traditions and culture are commercialized to the tastes of tourists. (Nsco6)

(vii) Tourism development leads to a decline in the quality and design of local handicrafts. (Nsco7)

(viii) Local people alter their behavior in an attempt to copy the styles of tourists. (Nsco8)

(ix) Interacting with tourists leads to the deterioration of local languages. (Nsco9)

(x) Tourism development increases traffic congestion problems. (Nsco10)

(xi) Tourism constrains the leisure activities of local residents. (Nsco11)

(xii) I would like to relocate from my community due to tourism development. (Nsco12)

(e) Positive Environmental Impacts

This study focuses on the residents' perception on positive environmental impacts of tourism development in Nyaung Shwe township. Seven items are applied to measure it.

(i) Tourism has improved environmental awareness among the local people. (Penv1)

(ii) Tourism development provides the incentives for protection and conservation of the natural environment. (Penv2)

(iii) Tourism development brings more participation of international organizations in the conservation of Inle Lake and wildlife species. (Penv3)

(iv) Tourism is beneficial to the improvement of the domestic waste disposal and sewage system. (Penv4)

(v) Tourism is beneficial to the improvement of the water supply system. (Penv5)

(vi) Tourism is beneficial to the electricity supply system. (Penv6)

(vii) Tourism brings about better health care, a clean environment, and a pollution control system. (Penv7)

(f) Negative Environmental Impacts

This study focuses on the residents' perception on negative environmental impacts of tourism development in Nyaung Shwe township. Nine items are applied to measure it.

(i) Tourism degrades the quality of air in Nyaung Shwe township. (Nenv1)

(ii) Tourism causes water pollution in Nyaung Shwe township. (Nenv2)

(iii) Tourism gives rise to noise pollution in Nyaung Shwe township. (Nenv3)

(iv) As a result of tourism development, the number of traditional occupations in fishing, floating island farming and other craft businesses in Nyaung Shwe township has decreased significantly. (Nenv4)

(v) Tourism development increased littering in the region. (Nenv5)

(vi) Tourism development causes the depletion of wildlife. (Nenv6)

(vii) Tourism causes degradation of the environment. (Nenv7)

(viii) Tourism causes degradation of the vegetation. (Nenv8)

(ix) The construction of hotels and other tourist facilities have destroyed the natural and cultural environment in the region. (Nenv9)

(g) Attitudes Towards Further Tourism Development

This study focuses on the residents' attitudes towards tourism development in Nyaung Shwe township. Sixteen items are applied to measure it.

(i) Tourism can be one of the most important industries for a community. (ATD1)

(ii) I believe new tourism facilities (e.g., hotels, parks, and recreation) should be built to attract more visitors. (ATD2)

(iii) The government organizations of the hotel and tourism sector are putting more effort in promoting our community to attract more visitors to Nyaung Shwe township. (ATD3)

(iv) Tourism organizations are promoting our community to attract more visitors to Nyaung Shwe township. (ATD4)

(v) Tourism development is closely related to the future of the community in Nyaung Shwe township. (ATD5)

(vi) Community involvement is important in the Regional Tourism Development of Nyaung Shwe township. (ATD6)

(vii) Transportation needs to be improved in Nyaung Shwe township for further development of tourism. (ATD7)

(viii) Energy and power supplies need to be improved in Nyaung Shwe township for further development of tourism. (ATD8)

(ix) Internet service access need to be improved in Nyaung Shwe township for future development. (ATD9)

(x) Healthcare services need to be improved for further development of tourism. (ATD10)

(xi) I believe the tourism industry should be actively encouraged in Nyaung Shwe township. (ATD11)

(xii) It is important to develop projects to manage the growth of tourism. (ATD12)

(xiii) There should be more tourist destinations in the community I live in. (ATD13)

(xiv) The tourism sector will continue to play a major role in the economy of the community in Nyaung Shwe township. (ATD14)

(xv) One of the most important benefits of tourism is how it can improve the living standard of the locals. (ATD15)

(xvi) To control the negative impacts of tourism on the environment, city administrators should make long-term planning. (ATD16)

4.3 Characteristics of the Respondents

This section provides a description of the characteristics of the respondents including gender, age, occupation, education level, sources of income, living area, length of residence, and contact with visitors.

Table (4.3) Characteristics of the Respondents

Variables	Number of Respondents	Percent (%)
Age (Years)		
18-27	152	39.69
28-37	124	32.38
38-47	73	19.06
48 and above	34	8.87
Gender		
Male	191	49.9
Female	192	50.1
Education Level		
Non-Graduate	257	67.10
Graduate	126	32.9
Length of Residence		
Below 6 years	45	11.7
6 years and above	338	88.3
Income		
Include tourism income in the monthly income	192	50.1
Not include tourism income in monthly income	191	49.9

Table (4.3) Characteristics of the Respondents (Continued)

Variables	Number of Respondents	Percent (%)
Occupation		
Hotel Staff	125	32.6
Agriculture	95	24.8
Self-employed	48	12.5
Government Staff	33	8.6
Private Organization Staff	24	6.3
Tour Company and Tour Guide	22	5.7
Weaving and Souvenir store	17	4.4
Fishing	12	3.1
Casual Work	7	1.8
Contact with Visitors		
Frequent contact with the visitors on a daily basis	183	47.8
Not frequent contact with the visitors on a daily basis	200	52.2
Living Area		
Living near the hotel zone, hotel, and tourist attraction areas	316	82.5
Living away from the hotel zone, hotel, and tourist attraction areas	67	17.5

Source: Survey Data, 2022

As shown in Table (4.3), respondents are categorized into four age groups: 18-27 years, 28-37 years, 38-47 years, and above 48 years. Most respondents are between 18 to 27 years (39.69%) who are followed by those between the 28 to 37 age group (32.38%). Then, male and female respondents participate in this survey show almost the same percentage. Most respondents are non-graduate (67.10 %) and among 383 respondents, 32.9 % of the respondents are graduates and postgraduates. The Majority of respondents live in the area for more than six years (88%) and those who live for less than six years are 12%.

Among the respondents, both the residents whose monthly income is related to tourism and whose monthly income is not related to tourism are almost the same. Moreover, most respondents worked in tourism, and tourism-related industries such as hotel staff, tour companies and tour guides weaving, and souvenir stores, and almost (42.82 %).

The respondents, 52.5%, do not have frequent contact with visitors and 47.8% have frequent contact with visitors. Interestingly, some respondents who are not employed in the tourism industry have regular contact with visitors, while some of who work in tourism-related jobs, such as kitchen helper, cook, sewing, etc., have limited contact with visitors. A majority of the respondents, comprising 82.5%, reside near the hotel zone, hotel, and tourist attraction areas because the survey data is collected from households located in quarters and village tracts, primarily situated in tourist-visited regions.

4.4 Analysis of Survey Data

This section represents the analysis of the survey data including reliability test, descriptive analysis of measurement scale, and multiple regression analysis. Appendix (C) describes the SPSS output.

4.4.1 Reliability and Factor Analysis

(a) Reliability Test

The dimension of internal consistency refers to the ability of a scale item to correlate with other items of the sample scale that are intended to measure the same construct. The adequacy of the individual items is assessed by measures of reliability and validity. The reliability of the measurement instrument is assessed by Cronbach's alpha. Cronbach's alpha and composite reliability estimate of 0.70 or higher indicates that the measurement scale of a construct is moderately reliable. If the composite reliability is not high enough to be accepted, the scales are revised by deleting items as a result of the reliability analysis (Hulin, Netemeyer, and Cudeck, 2001).

Table (4.4) Results from the Reliability Test

Factors	Reliability Cronbach's Alpha	Number of Item
Positive Economic Impacts	0.915	11
Negative Economic Impacts	0.730	5
Positive Sociocultural Impacts	0.900	11
Negative Sociocultural Impacts	0.919	12
Positive Environmental Impacts	0.826	7
Negative Environmental Impacts	0.921	9
Attitudes Towards further tourism development	0.920	16

Source: Survey Data, 2022

Table (4.4) presents the results of the reliability test for the items related to positive economic impacts, negative economic impacts, positive sociocultural impacts, negative sociocultural impacts, positive environmental impacts, negative environmental impacts, and attitudes towards further tourism development. The Cronbach's alpha values for all these factors are greater than the recommended threshold of 0.7, indicating that internal consistencies of these factors are reliable.

(b) Factor analysis

Factor analysis is a method employed to uncover the underlying factors that account for the interrelationships among a group of observed variables. Confirmatory Factor Analysis (CFA) is to determine whether the observed variables accurately reflect the factors intended to measure. It involves specifying a priori hypotheses regarding the number and nature of the factors and evaluating how well the observed variables fit the proposed factor structure (Brown, 2015).

The results of factor analysis for tourism impacts, which include positive economic impacts, negative economic impacts, positive sociocultural impacts, negative sociocultural impacts, positive environmental impacts, and negative environmental impacts are presented as follows.

The result of the factor analysis for positive economic impacts is shown in Table (4.5).

Table (4.5) Factor Analysis Result for Positive Economic Impacts

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Positive Economic Impacts		6.058	55.07%	0
Peco1	0.591			
Peco2	0.765			
Peco3	0.800			
Peco4	0.762			
Peco5	0.788			
Peco6	0.594			
Peco7	0.723			
Peco8	0.805			
Peco9	0.744			
Peco10	0.808			
Peco11	0.743			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.941			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception on positive economic impacts is assessed using 11 variables. The results of the KMO measure of sampling adequacy (0.941) and Bartlett's test of sphericity (p-value=0.000 < 0.001) indicate that the data are suitable for factor analysis, as presented in Table (4.5). In the principal component factor analysis, all factor loadings exceed 0.33, and they load on only one component. This factor accounts for 55.07% of the total explained variance of the scale. Consequently, it can be concluded that the positive economic impacts can be reliably measured by eleven variables, and all of these variables are valid indicators.

The result of the factor analysis for negative economic impacts is shown in Table (4.6).

Table (4.6) Factor Analysis Result for Negative Economic Impacts

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Negative Economic Impacts		2.437	48.730	0
Neco1	0.510			
Neco2	0.609			
Neco3	0.788			
Neco4	0.735			
Neco5	0.801			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.718			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception on negative economic impacts is assessed using 5 variables. The results of the KMO measure of sampling adequacy (0.718) and Bartlett's test of sphericity (p-value = 0.000 < 0.001) indicate that the data are suitable for factor analysis, as shown in Table (4.6). In the principal component factor analysis, all factor loadings exceed 0.33, and they load on only one component. This factor accounts for 48.730% of the total explained variance of the scale. Consequently, it can be concluded that the negative economic impacts can be reliably measured by the five variables, and all these variables are valid indicators.

The result of the factor analysis for positive sociocultural impacts is shown in Table (4.7).

Table (4.7) Factor Analysis Result for Positive Sociocultural Impacts

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Positive Sociocultural Impacts		5.631	51.193%	0
Psco1	0.694			
Psco2	0.749			
Psco3	0.685			
Psco4	0.743			
Psco5	0.654			
Psco6	0.563			
Psco7	0.667			
Psco8	0.800			
Psco9	0.755			
Psco10	0.801			
Psco11	0.726			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.922			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception on positive sociocultural impacts is assessed using 11 variables. The results of the KMO measure of sampling adequacy (0.922) and Bartlett's test of sphericity (p-value = 0.000 < 0.001) indicate that the data are suitable for factor analysis, as shown in Table (4.7). In the principal component factor analysis, all factor loadings exceed 0.33, and they load on only one component. This factor accounts for 51.19% of the total explained variance of the scale. Consequently, it can be concluded that the positive sociocultural impacts can be reliably measured by eleven variables, and all these variables are valid indicators.

The result of the factor analysis for negative sociocultural impacts is shown in Table (4.8).

Table (4.8) Factor Analysis Result for Negative Sociocultural Impacts

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Negative Sociocultural Impacts		5.892	58.922%	2
Nsco2	0.684			
Nsco4	0.794			
Nsco5	0.778			
Nsco6	0.687			
Nsco7	0.810			
Nsco8	0.738			
Nsco9	0.838			
Nsco10	0.812			
Nsco11	0.826			
Nsco12	0.686			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.915			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception on negative sociocultural impacts is assessed using 12 variables. The results of the KMO measure of sampling adequacy (0.915) and Bartlett's test of sphericity (p-value=0.000 < 0.001) indicate that the data are acceptable for factor analysis, as presented in Table (4.8). In the principal component factor analysis, factor loadings for ten variables are above 0.33 but for two variables (Nsco1 and Nsco3), the loadings are less than 0.33. Consequently, these two variables are excluded, leaving ten variables for the factor analysis. The factor extracted represents 58.92% of the total explained variance of the scale. In conclusion, it can be established that the negative sociocultural impacts can be reliably measured by the ten variables, and all of these variables are valid indicators.

The result of the factor analysis for positive environmental impacts is shown in Table (4.9).

Table (4.9) Factor Analysis Results for Positive Environmental Impacts

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Positive Environmental Impacts		2.780	55.605	2
Penv3	0.609			
Penv4	0.797			
Penv5	0.800			
Penv6	0.789			
Penv7	0.716			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.810			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception on positive environmental impacts is assessed using 7 variables. The results of the KMO measure of sampling adequacy (0.810) and Bartlett's test of sphericity (p-value=0.000 < 0.001) indicate that data are suitable for factor analysis, as shown in Table (4.9). In the principal component factor analysis, factor loadings for five variables are above 0.33 but those of 2 variables such as Penv1 and Penv2 are less than 0.33. Therefore, these two variables are excluded and only five variables are used in the factor analysis. The factor represents 55.61% of the explained variance of the scale. In conclusion, it can be established that the positive environmental impacts can be reliably measured by the five remaining variables, and all of these variables are valid indicators.

The result of the factor analysis for negative environmental impacts is shown in Table (4.10).

Table (4.10) Factor Analysis Result for Negative Environmental Impacts

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Negative Environmental Impacts		5.536	61.516	0
Nenv1	0.732			
Nenv2	0.850			
Nenv3	0.804			
Nenv4	0.746			
Nenv5	0.756			
Nenv6	0.740			
Nenv7	0.859			
Nenv8	0.778			
Nenv9	0.782			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.921			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception on negative environmental impacts is assessed using nine variables. The results of the KMO measure of sampling adequacy (0.946) and Bartlett's test of sphericity (p-value=0.000 < 0.001) indicate that data are suitable for factor analysis, as presented in Table (4.10). In a principal component factor analysis, all factor loadings exceed 0.33, and they load on only one component. The factor accounts for 61.52% of the total explained variance of the scale. Consequently, it can be concluded that the negative economic impacts can be reliably measured by the nine variables, and all of these variables are valid indicators.

The result of the factor analysis for attitudes towards further tourism development is shown in Table (4.11).

Table (4.11) Factor Analysis Result for Attitudes Towards Further Tourism Development

Measured Variables	Factor Loading	Eigenvalue	Variance Explained	Number of Deleted Items
Attitudes Towards Further Tourism Development		7.261	66.005 %	5
ATD6	0.784			
ATD7	0.822			
ATD8	0.832			
ATD9	0.824			
ATD10	0.828			
ATD11	0.817			
ATD12	0.793			
ATD13	0.840			
ATD14	0.836			
ATD15	0.772			
ATD16	0.785			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.945			
Bartlett's test of sphericity	0.000			

Source: Survey Data, 2022

The perception concerning attitudes towards further tourism development is assessed using 16 variables. The results of the KMO measure of sampling adequacy (0.945) and Bartlett's test of sphericity (p-value = 0.000 < 0.001) indicate that the data are suitable for factor analysis, as presented in Table (4.11). In a principal component factor analysis, factor loadings for ten variables are above 0.7, but for 5 variables (ATD1, ATD2, ATD3, ATD4, and ATD5), the loadings are less than 0.33. Consequently, these 5 variables are excluded and leaving only 11 variables for the factor analysis. The factor extracted represents 66.01% of the total explained variance of the scale. In conclusion, it can be established that attitudes towards further tourism development can be reliably measured by eleven variables, and all of these variables are valid indicators.

4.4.2 Identifying Outliers

Before conducting statistical analyses, exploratory data analysis was performed to detect outliers. are detected by using exploratory data analysis. Outliers can significantly impact regression solutions, and it is important to either delete or modify them to mitigate their influence. The interquartile range (IQR) method was used to identify outliers by setting up a 'fence' outside the first quartile (Q1) and the third quartile (Q3). Any values that fall outside of this fence are considered outliers (Vinutha & Sagar, 2018).

To construct the fence, the IQR was calculated as 1.5 times the difference between Q3 and Q1. This value was then subtracted from Q1 to establish the lower limit and added to Q3 to determine the upper limit. Observations that lie more than 1.5 IQR below Q1 or more than 1.5 IQR above Q3 are classified as outliers (Vinutha & Sagar, 2018).

Applying the IQR method, ten outliers were identified among the independent variables, with their values falling below or equal to 3 and above or equal to 5. After removing these outliers from the dataset, the sample size was reduced to 373 observations.

4.4.3 Descriptive Analysis of Measurement Scale

The descriptive results consist of the mean values of the observed variables, which pertain to respondents' perceptions of the impacts of tourism development and the residents' attitudes towards tourism development.

(1) Positive Economic Impacts

The positive economic impacts of tourism development are measured by 11 items, and the following table presents the perceptions of respondents regarding these impacts.

Table (4.12) Perceptions of Respondents on Positive Economic Impacts

Sr. No.	Particular	Mean	Standard Deviation
1.	Tourism development promotes the local infrastructure (roads, bridges, schools, hospitals, electricity transmission, telecommunication, etc.) development. (Peco1)	4.02	0.676
2.	Tourism development enhances employment opportunities. (Peco2)	4.13	0.623
3.	Tourism development attracts more investments to your community. (Peco3)	4.04	0.634
4.	As a result of tourism, we can buy a variety of things, run many restaurants and build more recreation areas. (peco4)	4.07	0.672
5.	The incomes of the local residents significantly rise due to tourism development. (Peco5)	4.08	0.655
6.	Tourism development increases the number of guest workers. (Peco6)	3.95	0.776
7.	Tourism is the promising driving factor for other local industries. (Peco7)	3.97	0.665
8.	Tourism increases local business revenues for the host community. (Peco8)	4.04	0.646
9.	Tourism increases the production of native handicrafts. (Peco9)	4.13	0.646
10.	Tourism development increases income and the standard of living. (Peco10)	4.07	0.652
11.	Tourism fosters self-employment. (Peco11)	4.01	0.711
	Overall Mean	**4.05**	

Source: Survey Data, 2022

The mean value of the positive economic impacts can be recognized as an agreed level since the overall mean value is 4.05. The respondents perceive and believe tourism development has a positive impact on local infrastructure, has a significant impact on

employment opportunities, attracts more investments to their community, enables the availability of various goods, restaurants, and recreational facilities, has a positive impact on local residents' incomes, has impact on increasing the number of guest workers, is a promising driving factor for local industries, have a positive impact on local business revenues, increase in the production of native handicrafts, have a positive impact on income and the standard of living and have a positive impact on fostering self-employment. It can be concluded that residents generally hold positive perceptions about the economic impacts of tourism development.

(2) Negative Economic Impacts

The negative economic impacts of tourism development are measured by 5 items, and the following table presents the perceptions of respondents regarding these impacts.

Table (4.13) Perceptions of Respondents on Negative Economic Impacts

Sr. No.	Particular	Mean	Standard Deviation
1.	During a low season, some local residents tend to be out of a job. (Neco1)	2.31	1.069
2.	Tourism leads to increase housing prices in the community. (Neco2)	2.35	0.923
3.	Only a minority of local residents gain economic benefits from tourism development. (Neco3)	2.90	1.067
4.	Tourism development results in an increase in the cost of living in relation to food and land prices. (Neco4)	2.65	1.041
5.	Tourism development replaces agricultural and manufacturing industries. (Neco5)	2.97	1.107
	Overall Mean	**2.64**	

Source: Survey Data, 2022

The mean value of the negative economic impacts can be recognized as a disagreed level since the overall mean value is 2.64. The respondents do not perceive tourism development has significant effects on employment during periods of low tourism activity, contributes to higher housing prices in the community, benefits only a small portion of the local residents from tourism development, lead to a higher cost of living, and impacts on

agricultural and manufacturing industries, potentially leading to their replacement. It can be concluded that tourism development has not had a considerable negative consequence on residents in the economic aspects.

(3) Positive Sociocultural Impacts

The positive sociocultural impacts of tourism development are measured by 11 items, and the following table presents the perceptions of respondents regarding these impacts.

Table (4.14) Perceptions of Respondents on Positive Sociocultural Impacts

Sr. No.	Particular	Mean	Standard Deviation
1.	Tourism helps to preserve the inheritance of the culture and gives you a better knowledge of your traditional culture. (Psco1)	4.05	0.672
2.	Tourism development gives you opportunities to come into contact with foreign cultures and outsiders. (Psco2)	4.02	0.643
3.	Tourism development results in the empowerment of local women. (Psco3)	3.91	0.725
4.	The quality of public services in my community has improved due to tourism. (Psco4)	3.92	0.626
5.	Tourism development has resulted in greater demand for unemployed youths and women. (Psco5)	3.98	0.712
6.	Tourism development mitigates the emigration of young people. (Psco6)	3.84	0.738
7.	Tourism improves the image of Inle Lake. (Psco7)	4.06	0.758
8.	Tourism provides a renaissance of traditional art and craft form. (Psco8)	4.08	0.636
9.	Traditional ceremonies can enhance the sense of national pride due to tourism. (Psco9)	4.13	0.655
10.	Tourism development results in the protection of cultural heritage and historical relics. (Psco10)	4.02	0.626
11.	Tourism development improves a community's appearance. (Psco11)	3.91	0.637
	Overall Mean	**3.99**	

Source: Survey Data, 2022

Based on the perceptions of the respondents, tourism is generally perceived to have positive sociocultural impacts, with an overall mean value is 3.99 indicating stronger agreement with the statements. The residents agree that tourism contributes to the preservation of cultural heritage and provides a better understanding of traditional culture, offers chances to engage with foreign cultures and interact with people from outside their community, has a positive impact on the empowerment of local women, led to improvements in the quality of public services, generate employment opportunities for unemployed youths and women, help to reduce the emigration of young people, has a positive impact on the overall image and reputation of Inle Lake, plays a role in revitalizing and preserving traditional art and craft forms, enhance the sense of national pride through the celebration of traditional ceremonies, contributes to the protection and preservation of cultural heritage and historical relics, and has a positive impact on the physical appearance of their community. It can be concluded that most of the residents generally recognize tourism's positive sociocultural impacts.

(4) Negative Sociocultural Impacts

The negative sociocultural impacts of tourism development are measured by 10 items, and the following table presents the perceptions of respondents regarding these impacts.

Table (4.15) Perceptions of Respondents on Negative Sociocultural Impacts

Sr. No.	Particular	Mean	Standard Deviation
1.	Tourism interrupts the peace and tranquility of the town. (Nsco2)	2.69	1.002
2.	Tourism development brings about a rise in crime rates. (Nsco4)	2.54	0.951
3.	The increasing number of tourists leads to conflict between residents and visitors. (Nsco5)	2.55	0.984
4.	Local traditions and culture are commercialized to the tastes of tourists. (Nsco6)	2.85	1.070
5.	Tourism development leads to a decline in the quality and design of local handicrafts. (Nsco7)	2.50	1.027

Sr. No.	Particular	Mean	Standard Deviation
6.	Local people alter their behavior in an attempt to copy the styles of tourists. (Nsco8)	2.61	1.026
7.	Interacting with tourists leads to the deterioration of local languages. (Nsco9)	2.42	0.976
8.	Tourism development increases traffic congestion problems. (Nsco10)	2.59	0.965
9.	Tourism constrains the leisure activities of local residents. (Nsco11)	2.45	0.956
10.	I would like to relocate from my community due to the tourism development. (Nsco12)	2.27	1.051
	Overall Mean	**2.55**	

Source: Survey Data, 2022

The mean value of the negative sociocultural impacts of tourism development can be recognized as a disagreed level since the overall mean value is 2.55. The respondents do not perceive tourism development has significant effects on commercialized local traditions and culture to cater to the preferences of tourists, leads to an increase in crime rates, creates friction between residents and visitors, commercialized local traditions and culture, decreases in the quality and design of local handicraft, change the residents' behavior to imitate the styles of tourists, deterioration of local languages, exacerbates traffic congestion problems, restricts the leisure activities, and consider relocating from the community. It can be concluded that tourism development has not had a considerable negative consequence on residents in the sociocultural aspects.

(5) Positive Environmental Impacts

The positive environmental impacts of tourism development are measured by 5 items, and the following table presents the perceptions of respondents regarding these impacts.

Table (4.16) Perceptions of Respondents on Positive Environmental Impacts

Sr. No.	Particular	Mean	Standard Deviation
1.	Tourism development brings more participation of international organizations in the conservation of Inle Lake and wildlife species. (Penv3)	3.91	0.658
2.	Tourism is beneficial to the improvement of the water supply system. (Penv4)	3.61	0.893
3.	Tourism is beneficial to the improvement of the domestic waste disposal and sewage system. (Penv5)	3.72	0.824
4.	Tourism is beneficial to the electricity supply system. (Penv6)	3.70	0.833
5.	Tourism brings about better health care, a clean environment, and a pollution control system. (Penv7)	3.76	0.809
	Overall mean	**3.74**	

Source: Survey Data, 2022

Based on the perceptions of the respondents, tourism is generally perceived to have positive environmental impacts, with an overall mean value is 3.74 indicating agreement across all the statements. The respondents perceive tourism development leads to increasing participation of international organizations in the conservation of Inle Lake and wildlife species, positive impact on the improvement of the water supply system, domestic waste disposal and sewage system, the electricity supply system, and leads improvements in healthcare, a clean environment, and a pollution control system. It can be concluded that most of the residents generally recognize tourism's positive environmental impacts.

(6) Negative Environmental Impacts

The negative environmental impacts of tourism development are measured by 9 items, and the following table presents the perceptions of respondents regarding these impacts.

Table (4.17) Perceptions of Respondents on Negative Environmental Impacts

Sr. No.	Particular	Mean	Standard Deviation
1.	Tourism degrades the quality of air in Nyaung Shwe township. (Nenv1)	2.78	1.074
2.	Tourism causes water pollution in Nyaung Shwe township. (Nenv2)	2.96	1.111
3.	Tourism gives rise to noise pollution in Nyaung Shwe township. (Nenv3)	2.73	1.001
4.	As a result of tourism development, the number of traditional occupations in fishing, floating island farming, and other craft businesses in Nyaung Shwe township have decreased significantly. (Nenv4)	2.60	1.034
5.	Tourism development increased littering in the region. (Nenv5)	3.14	1.087
6.	Tourism development causes the depletion of wildlife. (Nenv6)	2.85	1.039
7.	Tourism causes the degradation of the environment. (Nenv7)	2.69	0.960
8.	Tourism causes degradation of the vegetation. (Nenv8)	2.59	0.965
9.	The construction of hotels and other tourist facilities has destroyed the natural and cultural environment in the region. (Nenv9)	2.85	1.075
	Overall Mean	**2.80**	

Source: Survey Data, 2022

The mean value of the negative environmental impacts can be recognized as a disagreed level since the overall mean value is 2.80.

The respondents do not perceive tourism development has significant effects on air quality, leads to water pollution, contributes to noise pollution, significant decline in traditional occupations related to fishing, floating farming, and other craft businesses, led to an increase in littering, depletion of wildlife, degradation of the environment, degradation of vegetation, and led to the destruction of natural and cultural environment.

It can be concluded that tourism development has not had a considerable negative consequence on residents in the environmental aspects.

Table (4.18) provides the mean values for different categories of impacts associated with tourism: positive economic impacts, negative economic impacts, positive sociocultural impacts, negative sociocultural impacts, positive environmental impacts, and negative environmental impacts.

Table (4.18) Perceptions of Respondents on Impacts of Tourism Development

Impacts of Tourism	Positive	Negative
Economic Impacts	4.05	2.64
Sociocultural Impacts	3.99	2.55
Environmental Impacts	3.74	2.80

Source: Survey Data, 2022

On average, the respondents showed a strong consensus regarding the positive impacts of tourism in various domains, including economic, sociocultural, and environmental aspects. This implies that they are well aware of the beneficial effects that tourism brings to their region.

Conversely, the respondents, on average, expressed disagreement concerning the negative impacts of tourism in the economic, sociocultural, and environmental realms. This suggests that they do not fully recognize the adverse effects of tourism on their region.

(7) Attitudes Towards Further Tourism Development

Attitudes towards further tourism development are measured by 11 items, and the following table presents the perceptions of respondents regarding aspects of tourism development in Nyaung Shwe township.

Table (4.19) Perceptions of Respondents on Attitudes Towards Further Tourism Development

Sr. No.	Particular	Mean	Standard Deviation
1.	Community involvement is important in the Regional Tourism Development of Nyaung Shwe township. (ATD6)	3.95	0.616
2.	Transportation needs to be improved in Nyaung Shwe township for future development. (ATD7)	4.07	0.541
3.	Energy and power supplies need to be improved in Nyaung Shwe township for further development of tourism. (ATD8)	4.13	0.584
4.	Internet service access needs to be improved in Nyaung Shwe township for further development of tourism. (ATD9)	4.16	0.575
5.	Healthcare services need to be improved for the further development of tourism. (ATD10)	4.15	0.613
6.	I believe the tourism industry should be actively encouraged in Nyaung Shwe township. (ATD11)	4.08	0.530
7.	It is important to develop projects to manage the growth of tourism. (ATD12)	3.98	0.630
8.	There should be more tourist destinations in the community I live in. (ATD13)	4.09	0.571
9.	The tourism sector will continue to play a major role in the economy of the community in Nyaung Shwe township. (ATD14)	3.98	0.624
10.	One of the most important benefits of tourism is how it can improve the living standard of the locals. (ATD15)	4.00	0.707
11.	To control the negative impacts of tourism on the environment, city administrators should make long-term planning. (ATD16)	4.18	0.584
	Overall mean	**4.07**	

Source: Survey Data, 2022

The mean value of the attitudes towards further tourism development can be recognized as an agreed level since the overall mean value is 4.07. This suggests that the respondents expressed relatively high levels of agreement with the importance of

community involvement, improvements in transportation, energy and power supplies, internet service access, healthcare services, encouragement of the tourism industry, project development, the role of tourism in the local economy, improving the living standards of locals, and long-term planning for environmental impacts. It can be concluded that most of the residents favored the further tourism development of Nyaung Shwe township.

4.4.4 Multiple Regression Analysis

The study explores the relationship between the impacts of tourism development, including positive economic impact, negative economic impact, positive sociocultural impact, negative sociocultural impact, positive environmental impact, and negative environmental impact, and various demographic and contextual factors such as age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.20) presents the relationship between residents' perception on positive economic impacts and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.20) Result of Regression Analysis for Model 1

Dependent Variable: Positive Economic Impacts	**Coefficient**	**t - Value**	**P - value**	**VIF**
Constant	3.630***	21.272	0.000	
Age	0.051**	2.010	0.045	1.051
Gender	0.025	0.502	0.616	1.080
Education	0.144**	2.641	0.009	1.115
Length of Residence	-0.032	-0.405	0.686	1.113
Income-related to Tourism	0.117	1.347	0.179	3.224
Contact with Visitors	0.000	-0.003	0.998	3.178
Living Area	0.296***	4.530	0.000	1.047
n = 373, R^2 = 0.114, F = 6.725, p = 0.000				
***, **, *, Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.19), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between positive economic impacts and age is positive and significant at the 5% level and this result shows that the older they get, the more they perceived positive economic impact than the younger people. Most of the older respondents work in tourism and tourism-related jobs and they have experienced personal economic benefits, such as job security, promotions, or increased income, and their experience and exposure to the industry over time have shaped their perception on the positive economic impacts associated with tourism. This result supports the previous findings by Tomljenovic & Falkner (2000).

Then the relationship between positive economic impacts and education is positive and significant at a 5% level. It shows residents who graduate also perceive that there are positive economic impacts from tourism development. The graduates often possess higher levels of education, the skills, and knowledge required for managerial positions, so they have the opportunity to take on leadership roles within tourism-related businesses. Most of the graduate respondents work in tourism and tourism-related businesses which leads to a positive perception on the economic impacts of tourism. These results are not supporting the previous findings.

The relationship between positive economic impacts and living area is positive and significant at a 1% level. This means that the residents who are living near the hotel zone, hotel, and tourist attraction areas perceive positive economic impacts from tourism development than the residents who are living far from the hotel zone, hotel, and tourist attraction areas. The residents living near hotel zones, hotels, and tourist attraction areas have easier access to job opportunities, and favorable conditions to establish and operate businesses such as souvenir shops, local crafts markets, food stalls, or transportation services. This result supports the previous findings by Yan (2013).

Table (4.21) presents the relationship between residents' perception on negative economic impacts and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.21) Result of Regression Analysis for Model 2

Dependent Variable: Negative Economic Impacts	**Coefficient**	**t - Value**	**P - Value**	**VIF**
Constant	3.080***	11.589	0.000	
Age	0.041	1.036	0.301	1.051
Gender	0.018	0.233	0.816	1.080
Education	0.023	0.272	0.785	1.115
Length of Residence	0.114	0.937	0.349	1.113
Income-related to Tourism	-0.290**	-2.153	0.032	3.224
Contact with Visitors	0.314**	2.339	0.020	3.178
Living Area	-0.051	-0.504	0.614	1.047
n=373, R^2 =0.023, F=2.060, p = 0.047				
*****, **, *,** Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.21), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between positive economic impacts and income related to tourism is negative and significant at the 5% level. This means that the residents whose income is related to tourism have a lesser negative feeling about the economic impacts of tourism development. The residents whose income is directly or indirectly derived from the tourism sector have a greater stake in its success. These results are also supporting the previous findings by Thomason et al., (1979).

The relationship between negative economic impacts and contact with visitors is positive and significant at a 5 % level. This means that the residents who have frequent contact with the visitors on a daily basis have a more negative feeling about the economic impact of tourism development than those who do not have frequent contact with the visitors on a daily basis. Frequent contact with visitors does not necessarily guarantee direct economic benefits for residents. In some cases, the presence of tourism can lead to an increase in the cost of living in a destination such as increased prices of goods and services, and tourism-related employment opportunities do not align with their skills. This causes can contribute to a negative feeling about the economic impact of tourism development. This result supports the previous findings by Harrill (2004).

Table (4.22) presents the relationship between residents' perception on positive sociocultural impacts and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.22) Result of Regression Analysis for Model 3

Dependent Variable: Positive Sociocultural Impacts	**Coefficient**	**t - Value**	**P - value**	**VIF**
Constant	3.746***	22.276	0.000	
Age	0.046*	1.822	0.069	1.051
Gender	-0.056	-1.141	0.255	1.080
Education	0.063	1.166	0.245	1.115
Length of Residence	-0.050	-0.650	0.516	1.113
Income-related to Tourism	0.022	0.259	0.796	3.224
Contact with Visitors	0.055	0.644	0.520	3.178
Living Area	0.250***	3.876	0.000	1.047
n=373, R^2=0.079, F= 4.460, p =0.000				
***, **, *, Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.22), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between positive sociocultural impacts and age is positive and significant at a 1 % level. This result shows that the older they get, the more they perceived a positive sociocultural impact than the younger people. Older individuals have a stronger connection to traditional values, customs, and cultural heritage. They perceive tourism development as an opportunity to preserve and showcase their traditions and cultural practices. And they have experienced the positive sociocultural changes brought about by tourism development over the years. This result supports the previous findings by Tomljenovic & Falkner (2000).

The relationship between positive sociocultural impacts and living areas is positive and significant at a 1% level. This means that the residents who are living near the hotel zone, hotel, and tourist attraction areas feel more positive sociocultural impacts from

tourism development than the residents who are living far from the hotel zone, hotel, and tourist attraction areas. Tourism development often promotes the preservation and promotion of local culture and traditions and enhances community pride and identity. Residents living near tourist attractions and hotels witness and benefit from initiatives aimed at preserving and revitalizing local traditions and they also identify strongly with the unique characteristics and cultural heritage of their community. These causes lead to perceive positive sociocultural impacts. This result supports the previous findings by Yan (2013).

Table (4.23) presents the relationship between residents' perception on negative sociocultural impacts and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.23) Result of Regression Analysis for Model 4

Dependent Variable: Negative Sociocultural Impacts	**Coefficient**	**t - Value**	**P - value**	**VIF**
Constant	2.606***	9.430	0.000	
Age	-0.105**	-2.552	0.011	1.051
Gender	-0.051	-0.626	0.531	1.080
Education	-0.134	-1.524	0.128	1.115
Length of Residence	0.194	1.538	0.125	1.113
Income-related to Tourism	-0.251*	-1.792	0.074	3.224
Contact with Visitors	0.248*	1.779	0.076	3.178
Living Area	-0.138	-1.305	0.193	1.047
n=373, R^2= 0.049, F= 2.709, p= 0.009				
*****, **, *,** Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.23), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between negative sociocultural impacts and age is negative and significant at a 5 % level. This result shows that the older they get, the less they perceived negative sociocultural impact than the younger people. Younger generations have a greater

focus on issues such as authenticity, cultural appropriation, or disruption of local traditions. Older individuals, on the other hand, have different priorities and be more inclined to view tourism development through the lens of community well-being, economic stability, and cultural preservation. Moreover, older generations often have a stronger connection to their cultural heritage and traditional values. They prioritize the preservation and promotion of their cultural identity, which can be positively influenced by tourism development and reduced focus on negative sociocultural impacts. This result supports the previous findings by Tomljenovic & Falkner (2000).

The relationship between negative sociocultural impact on income related to tourism is also negative and significant at a 10% level. This means that residents whose income is related to tourism tend to note the lower negative aspects on the sociocultural impacts of tourism development. The residents who work in tourism-related roles have a heightened appreciation for their own cultural heritage. They actively participate in preserving and showcasing local traditions and customs to visitors. This commitment to cultural preservation can foster a more positive perception on the sociocultural impacts of tourism. These results are also supporting the previous findings by Thomason et al., (1979).

The relationship between negative sociocultural impacts and contact with visitors is positive and significant at a 10 % level. This means that the residents who have frequent contact with the visitors on a daily basis have a more negative feeling about the sociocultural impact of tourism development than those who do have not frequent contact with the visitors on a daily basis. The residents who have frequent contact with visitors on a daily basis observe sociocultural issues. This direct exposure can lead to a perception on the sociocultural impacts, resulting in a more negative feeling. This result supports the previous findings by Harrill (2004).

Table (4.24) presents the relationship between residents' perception on negative sociocultural impacts and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.24) Result of Regression Analysis for Model 5

Dependent Variable: Positive Environmental Impacts	**Coefficient**	**t - Value**	**P - value**	**VIF**
Constant	3.339***	15.111	0.000	
Age	0.109**	3.313	0.001	1.051
Gender	-0.001	-0.017	0.987	1.080
Education	-0.013	-0.180	0.858	1.115
Length of Residence	0.082	0.812	0.417	1.113
Income-related to Tourism	0.074	0.663	0.508	3.224
Contact with Visitors	-0.131	-1.178	0.240	3.178
Living Area	0.040	0.475	0.635	1.047
n=373, R^2= 0.038, F= 2.039, p= 0.049				
*****, **, *,** Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.24), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between positive environmental impacts and age is positive and significant at a 5 % level. This result shows that the older they get, the more they perceived positive environmental impact than the younger generations. Older individuals have a greater sense of responsibility towards environmental stewardship and passing on a sustainable environment to future generations. They view tourism development as an opportunity to promote responsible practices, raise awareness about environmental issues, and implement measures to minimize negative impacts. Their desire for environmental stewardship can contribute to a more positive perception on the environmental impacts of tourism. This result supports the previous findings by Tomljenovic & Falkner (2000).

Table (4.25) presents the relationship between residents' perception on negative sociocultural impacts and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area.

Table (4.25) Result of Regression Analysis for Model 6

Dependent Variable: Negative Environmental Impacts	Coefficient	t - Value	P - value	VIF
Constant	2.771***	9.438	0.000	
Age	-0.092**	-2.106	0.036	1.051
Gender	-0.148*	-1.715	0.087	1.080
Education	-0.136	-1.455	0.147	1.115
Length of Residence	0.278**	2.069	0.039	1.113
Income-related to Tourism	-0.275*	-1.845	0.066	3.224
Contact with Visitors	0.296**	2.002	0.046	3.178
Living Area	-0.211*	-1.874	0.062	1.047
n=373, R^2= 0.055, F= 3.058, p=0.004				
*****, **, *,** Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.25), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between negative environmental impacts and age is negative and significant at a 5 % level. This result shows that the older they get, the less they perceived negative environmental impact than the younger people. Older individuals have already experienced and adapted to various changes in their environment throughout their lives. They are more accepting of the changes associated with tourism development and perceive them as inevitable aspects of progress. This adaptability and acceptance can lead to a more positive perception on the environmental impacts, as they focus on the potential benefits and the mitigation measures in place. This result supports the previous findings by Tomljenovic & Falkner (2000).

The relationship between negative environmental impacts and gender is negative and significant. This result shows that the feelings of males are less about negative environmental impacts from tourism development than that of females. Arnocky & Stroink, (2010) said that women display higher levels of empathy and emotional concern for others, including nature and the environment. This emotional connection could lead to a greater sensitivity towards environmental problems.

The relationship between negative environmental impacts and living areas is negative and significant at a 10% level. This means that the residents who are living near the hotel zone, hotel, and tourist attraction areas feel less about negative environmental impacts from tourism development than the residents who are living far from the hotel zone, hotel, and tourist attraction areas. The residents living near tourism hubs have a more positive perception on the overall benefits of tourism to their community They witness increased economic prosperity, job creation, and improved local amenities resulting from tourism development. This positive perception on the benefits can overshadow concerns about negative environmental impacts, leading to a lesser focus on these issues. This result supports the previous findings by Yan (2013).

The relationship between negative environmental impacts and income related to tourism is negative and significant. This shows that residents whose income is related to tourism feel less about the negative environmental impacts of tourism development. The residents whose income is tied to tourism have a vested interest in minimizing the negative environmental impacts to protect their income and job security. This economic dependence can lead to a lesser perceived sensitivity to negative environmental impacts. These results are also supporting the previous findings by Thomason et al., (1979).

The relationship between negative environmental impacts and contact with visitors is positive and significant at a 5 % level. This means that the residents who have frequent contact with the visitors on a daily basis have a more negative feeling about the environmental impact of tourism development than those who do have not frequent contact with the visitors on a daily basis. The residents who have frequent contact with visitors on a daily basis observe issues such as increased waste generation, pollution, habitat degradation, or resource depletion. This direct exposure can lead to a perception on the environmental impacts, resulting in a more negative feeling. This result supports the previous findings by Harrill (2004).

And the relationship between negative environmental impacts and length of residence is also positive and significant at a 5% level. This means that long-term residents regard tourism as having an additional negative environmental impact than short-term residents. Long-term residents often develop a strong attachment to their community and environment. They have deep-rooted connections to the natural surroundings, cultural heritage, or a sense of place. As a result, they are more sensitive to any changes or disturbances brought about by tourism development. These results are also supporting the previous findings by McCool & Martin (1994).

Table (4.26) shows the relationship between attitudes towards further tourism development and tourism impacts, including residents' perception on positive economic impacts, negative economic impacts, positive sociocultural impacts, negative sociocultural impacts, positive environmental impacts, and negative environmental impacts.

Table (4.26) Result of Regression Analysis for Attitudes Towards Further Tourism Development

Dependent Variable: Attitudes Towards Further Tourism Development	**Coefficient**	**t - Value**	**P - value**	**VIF**
Constant	1.768***	8.278	0.000	
Positive Economic Impacts	0.339***	6.865	0.000	1.863
Negative Economic Impacts	-0.016	-0.572	0.568	1.308
Positive Sociocultural Impacts	0.170**	3.273	0.001	1.933
Negative Sociocultural Impacts	0.052	1.649	0.100	1.831
Positive Environmental Impacts	0.117***	3.615	0.000	1.242
Negative Environmental Impacts	-0.104**	-3.504	0.001	1.871
n=373, R^2=0.413, F=42.846, p=0.000				
***, **, *, Statistically significant at 1%, 5%, 10% level respectively				

Source: Survey Data, 2022

As shown in Table (4.26), there is no variable exceeding the "rule of thumb" of 10 for the variance inflation factor (VIF), which implies that there is no multicollinearity among independent variables.

The relationship between attitudes towards further tourism development and positive economic impacts is positive and significant at a 1% level. Then, the relationship between attitudes towards further tourism development and positive sociocultural impacts is positive and significant at a 5% level. Moreover, the relationship between attitudes towards further tourism development and positive environmental impacts is positive and significant at a 1% level. These results show that there is a significant relationship between the perceived positive impacts of tourism: economic, sociocultural, and environmental and residents' attitudes towards tourism development. This means that residents who perceive

the exchange with tourism as beneficial, have a good attitude toward additional tourism development in the community.

While the relationship between attitudes towards further tourism development and negative environmental impacts is negative and significant at a 5 % level. The result shows that there is a significant relationship between residents' perceptions of negative environmental impact and residents' attitudes towards tourism development in the community. This means that the residents who perceive the exchange as costly with negative impacts, discourage further tourism development in the community.

The findings of this study are consistent with social exchange theory in that perceived positive impacts on tourism play a crucial role in shaping attitudes towards further tourism development. Social exchange theory suggests that in the context of tourism, individuals weigh the perceived benefits they receive from tourism against the negative impacts they experience. When they perceived positive impacts of tourism outweigh the negative impacts, individuals are more likely to have positive attitudes and support further tourism development in their community.

CHAPTER V
CONCLUSION

5.1 Findings

This study examines attitudes towards further tourism development, with an emphasis on the impacts of tourism development in Nyaung Shwe township. Thus, it explores how the local people perceive the impacts of tourism development in Nyaung Shwe township and examines how these impacts affect local residents' attitudes towards further tourism development.

Regarding the tourism sector in Myanmar, there has been a consistent increase in the rate of these accommodations and they have been fluctuated and that generally showed and upward trend. This indicates the expansion of the tourism sector in Myanmar. Additionally, there has been an overall increase in the number of international tourist arrivals and the total expenses associated with tourism. This, further, indicates the growth and economic significance of the tourism industry in Myanmar.

As regards the tourism sector in Nyaung Shwe township specifically, a similar upward trend can be observed in the number of hotels, motels, and guest houses, as well as the availability of rooms, over the years. This suggests a rising demand for accommodation in Nyaung Shwe township, that is likely driven by the increasing number of tourists visiting the area.

In order to empirically analyze this study, a sample of 383 residents was used in Nyaung Shwe township. According to the study, male and female respondents participate in this survey express almost the same percentage. Most respondents are in the 18-27 age group, 32.6% of the respondents work in the hotel industry, and 82.5 % of respondents live near the hotel zone, hotel, and tourist attraction areas. Most of the respondents, 88.3 %, have lived in the study area for six years or more. In addition, 32.9% of respondents are graduates, 47.8% of respondents have contact with visitors frequently, and 50.1% of respondents earn tourism-related income. In the sample survey, most of the respondents live near tourist attractions.

Regarding the positive impacts of tourism development, such as positive economic

impacts, positive sociocultural impacts, and positive environmental impacts, most of the residents have had positive feelings about the impact of tourism development in Nyaung Shwe township. Conversely, regarding the negative impacts of tourism development, such as negative economic impacts, negative sociocultural impacts, and negative environmental impacts, residents perceive tourism development does not have considerable negative consequences on residents in the economic, sociocultural, and environmental impacts.

Concerning the residents' perception on the impacts of tourism development, this study finds that most of the residents favored further tourism development in Nyaung Shwe township. Study results indicated that respondents in Nyaung Shwe township were generally favorable toward additional tourism development in their community, mainly because they perceived the positive benefits of tourism outweighing the negative impacts.

The multiple linear regression analysis is employed to investigate the relationship between perceived positive and negative impacts of tourism development and various demographic and contextual factors, including age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area. The findings indicate that as residents grow older, they tend to perceive more positive impacts of tourism development. Additionally, males express less concern about negative environmental impacts compared to females. Moreover, graduate residents report experiencing more positive economic impacts than non-graduates. Long-term residents, on the other hand, tend to view tourism as having a more negative environmental impact than short-term residents. Furthermore, residents whose income is related to tourism feel less negatively about the impacts of tourism development. Interestingly, residents who have frequent contact with visitors on a daily basis have a more negative perception on tourism development. Conversely, residents living near the hotel zone, hotels, and tourist attraction areas perceive more positive impacts of tourism development, particularly concerning economic and sociocultural aspects.

In this study, a positive and significant relationship is observed between attitudes towards further tourism development and residents' perceptions of tourism impacts; positive impacts, including positive economic impacts, positive sociocultural impacts, and positive environmental impacts. Consequently, residents who perceive the positive impacts of tourism development in Nyaung Shwe township tend to hold favorable attitudes towards further tourism development.

Additionally, the relationship between attitudes towards further tourism development and residents' perceptions of negative environmental impacts is negative and

significant. This suggests that residents who perceive negative environmental impacts are less likely to favor further tourism development in the study area. Therefore, the positive impacts of tourism development, including positive economic impacts, positive sociocultural impacts, and positive environmental impacts, emerge as the main driving factors encouraging residents' attitudes towards further tourism development. On the other hand, negative environmental impacts serve as the primary reasons leading to opposition against further tourism development.

5.2 Suggestions

Based on the findings of the study, some relevant suggestions and recommendations for relevant authorities' concerns, policymakers, and academic scholars are provided to enhance tourism development and stimulate motivation for further tourism development in Myanmar.

The results of this study reveal fluctuating trends in the number of tourists and expenditure by international tourists in the Nyaung Shwe township. These trends include periods of growth, declines, with a significant impact of the COVID-19 pandemic on tourist spending. Thus, the result suggests that the local authority should consider special requirements such as supporting the improvement of the quality of handicrafts and traditional arts, developing planning and management for natural attraction resources, promoting destination image, and engaging in developing projects to encourage the growth of tourism and evolve more tourist destinations.

In this study, age, education, and living area were identified as factors influencing perceived positive economic impacts of tourism development. Specifically, older respondents tend to perceive more positive impacts of tourism development compared to younger respondents. Additionally, graduate residents perceive more positive economic impacts from tourism development compared to non-graduates. As specified by the findings, it is recommended that the local authorities should focus on providing more job opportunities for younger and non-graduate residents in tourism and tourism-related sectors. This can be achieved through the implementation of vocational training programs in tourism and hospitality targeted towards youth and non-graduates.

This study reveals that all of the variables, except education, namely age, gender, education, length of residence, income-related to tourism, contact with visitors, and living area, significantly influence negative environmental impacts associated with tourism development. Based on these findings, it is highly recommended that decision-makers and

planners should prioritize cooperation with local residents while formulating both short-term and long-term plans for environmental conservation, including the preservation of Inle Lake. Involving the local community in conservation efforts can lead to more effective and sustainable solutions to address the negative environmental impacts of tourism development in the region.

Furthermore, the study's results revealed significant influences on attitudes towards tourism development in Nyaung Shwe township. Positive impacts of tourism development were found to have a positive influence, while negative environmental impacts of tourism development were found to have a negative influence on residents' attitudes. Based on these findings, it is crucial for tourism developers, local authorities, and policymakers to conduct further research and implement measures aimed at mitigating the negative environmental impacts of tourism development. This includes the formulation of long-term plans and strategies to ensure the sustainable development of tourism in Nyaung Shwe township.

To strengthen the positive impacts of tourism and minimize negative environmental impacts, active collaboration between residents and local authorities is essential. When residents are actively involved in tourism activities, it can lead to a more balanced approach that benefits the local community while preserving the environment.

Overall, adopting these suggested measures will contribute to the promotion of sustainable tourism development in the region, fostering positive attitudes towards tourism among residents while protecting the valuable natural resources of Nyaung Shwe township.

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APPENDIX (A)

QUESTIONNAIRE

Dear Respondent,

The below-mentioned questionnaire is for research purposes related to studying **Residents' Attitudes Towards Tourism Development in Nyaung Shwe Township**. Please tick your response for the following questions. Your time & effort to complete this survey will be appreciated. The information you provide will be kept confidential & will only be used for research purposes.

Part 1: Residential Information

1. Name of Quarter/Village: _____
2. Gender ☐ Male ☐ Female
3. Age : _____
4. Highest Education Attainment
   ☐Middle School ☐ High School
   ☐Bachelor ☐Master
   ☐Other _____
5. Place of living
   ☐ Living near the hotel zone, hotel, and tourist attraction areas
   ☐ Living away from the hotel zone, hotel, and tourist attraction areas
6. Were you born in Nyaung Shwe township?
   ☐ Yes ☐ No
7. How long have you been living in Nyaung Shwe township?
   _____
8. What is your current occupation?
   _____
9. What was your occupation for the past three years?
   _____
10. I earn from tourism on a monthly basis?
    ☐ Yes ☐ No

11. I have frequent contact with visitors on a daily basis.

☐ Yes ☐No

12. My family members work in a tourism-related business.

☐ Yes ☐No

13. If the answer is “Yes”, please specify the occupation.

_____

Please answer the following questions according to your opinion; and choose one option to represent your thought. Thanks a lot!

Part 2: Tourism Impacts

2.1 Positive Economic Impacts (Tick only one)

1= Strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
14. Tourism development promotes the local infrastructure (roads, bridges, schools, hospitals, electricity transmission, telecommunication, etc.) development.	☐	☐	☐	☐	☐
15. Tourism development enhances employment opportunities.	☐	☐	☐	☐	☐
16. Tourism development attracts more investments to your community.	☐	☐	☐	☐	☐
17. As a result of tourism, we can buy a variety of things, run many restaurants and build more recreation areas.	☐	☐	☐	☐	☐
18. Incomes of the local residents significantly rise due to tourism development.	☐	☐	☐	☐	☐
19. Tourism development increases the number of guest workers.	☐	☐	☐	☐	☐
20. Tourism is the promising driving factor for other local industries.	☐	☐	☐	☐	☐
21. Tourism increases local business revenues for the host community.	☐	☐	☐	☐	☐
22. Tourism increases the production of native handicrafts.	☐	☐	☐	☐	☐
23. Tourism development increases income and standard of living.	☐	☐	☐	☐	☐
24. Tourism fosters self-employment.	☐	☐	☐	☐	☐

2.2 Negative Economic Impacts (Tick only one)

1= Strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
25. During a low season, some local residents tend to be out of a job.	☐	☐	☐	☐	☐
26. Tourism leads to increase housing prices in the community.	☐	☐	☐	☐	☐
27. Only a minority of local residents gain economic benefits from tourism development.	☐	☐	☐	☐	☐
28. Tourism development results in an increase in the cost of living in relation to food and land prices.	☐	☐	☐	☐	☐
29. Tourism development replaces agricultural and manufacturing industries.	☐	☐	☐	☐	☐

2.3 Positive Sociocultural Impacts (Tick only one)

1= Strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
30. Tourism helps to preserve the inheritance of the culture and gives you a better knowledge of your traditional culture.	☐	☐	☐	☐	☐
31. Tourism development gives you opportunities to come into contact with foreign cultures and outsiders.	☐	☐	☐	☐	☐
32. Tourism development results in the empowerment of local women.	☐	☐	☐	☐	☐
33. The quality of public services in my community has improved due to tourism.	☐	☐	☐	☐	☐
34. Tourism development has resulted in greater demand for unemployed youths and women.	☐	☐	☐	☐	☐
35. Tourism development mitigates the emigration of young people.	☐	☐	☐	☐	☐
36. Tourism improves the image of Inle Lake.	☐	☐	☐	☐	☐
37. Tourism provides a renaissance of traditional art and craft form.	☐	☐	☐	☐	☐
38. Traditional ceremonies can enhance the sense of national pride due to tourism.	☐	☐	☐	☐	☐
39. Tourism development results in the protection of cultural heritage and historical relics.	☐	☐	☐	☐	☐
40. Tourism development improves a community's appearance.	☐	☐	☐	☐	☐

2.4 Negative Sociocultural Impacts (Tick only one)

1= strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
41. Community is becoming overcrowded due to the increasing number of tourists.	☐	☐	☐	☐	☐
42. Tourism interrupts the peace and tranquility of the town.	☐	☐	☐	☐	☐
43. Tourism development leads to the destruction of ancient buildings and historical sites (Such as overcrowding and graffiti on the historical sites)	☐	☐	☐	☐	☐
44. Tourism development brings about a rise in crime rates.	☐	☐	☐	☐	☐
45. The increasing number of tourists leads to conflict between residents and visitors.	☐	☐	☐	☐	☐
46. Local traditions and culture are commercialized to the tastes of tourists.	☐	☐	☐	☐	☐
47. Tourism development leads to a decline in the quality and design of local handicrafts.	☐	☐	☐	☐	☐
48. Local people alter their behavior in an attempt to copy the styles of tourists.	☐	☐	☐	☐	☐
49. Interacting with tourists leads to the deterioration of local languages.	☐	☐	☐	☐	☐
50. Tourism development increases traffic congestion problems.	☐	☐	☐	☐	☐
51. Tourism constrains the leisure activities of local residents.	☐	☐	☐	☐	☐
52. I would like to relocate from my community due to tourism development.	☐	☐	☐	☐	☐

2.5 Positive Environmental Impacts (Tick only one)

1= strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
53. Tourism has improved environmental awareness among the local people.	☐	☐	☐	☐	☐
54. Tourism development provides the incentives for protection and conservation of the natural environment.	☐	☐	☐	☐	☐
55. Tourism development brings more participation of international organizations in the conservation of Inle Lake and wildlife species.	☐	☐	☐	☐	☐
56. Tourism is beneficial to the improvement of the water supply system.	☐	☐	☐	☐	☐
57. Tourism is beneficial to the improvement of the domestic waste disposal and sewage system.	☐	☐	☐	☐	☐
58. Tourism is beneficial to the electricity supply system.	☐	☐	☐	☐	☐
59. Tourism brings about better health care, a clean environment, and a pollution control system.	☐	☐	☐	☐	☐

2.6 Negative Environmental Impacts (Tick only one)

1= strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
60. Tourism degrades the quality of air in Nyaung Shwe township.	☐	☐	☐	☐	☐
61. Tourism causes water pollution in Nyaung Shwe township.	☐	☐	☐	☐	☐
62. Tourism gives rise to noise pollution in Nyaung Shwe township.	☐	☐	☐	☐	☐
63. As a result of tourism development, the number of traditional occupations in fishing, floating island farming, and other craft businesses in Nyaung Shwe township has decreased significantly.	☐	☐	☐	☐	☐
64. Tourism development increased littering in the region.	☐	☐	☐	☐	☐
65. Tourism development causes the depletion of wildlife.	☐	☐	☐	☐	☐
66. Tourism causes the degradation of the environment.	☐	☐	☐	☐	☐
67. Tourism causes degradation of the vegetation.	☐	☐	☐	☐	☐
68. The construction of hotels and other tourist facilities has destroyed the natural and cultural environment in the region.	☐	☐	☐	☐	☐

Part 3: Attitudes Towards Further Tourism Development

1 = Strongly Disagree 2= Disagree 3= Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
69. Tourism can be one of the most important industries for a community.	☐	☐	☐	☐	☐
70. I believe new tourism facilities (e.g., hotels, parks, and recreation) should be built to attract more visitors.	☐	☐	☐	☐	☐
71. The government organizations of the hotel and tourism sector are putting more effort in promoting our community to attract more visitors to Nyaung Shwe township.	☐	☐	☐	☐	☐
72. Tourism organizations are promoting our community to attract more visitors to Nyaung Shwe township.	☐	☐	☐	☐	☐
73. Tourism development is closely related to the future of the community in Nyaung Shwe township.	☐	☐	☐	☐	☐
74. Community involvement is important in Regional Tourism Development of Nyaung Shwe township.	☐	☐	☐	☐	☐
75. Transportation needs to be improved in Nyaung Shwe township for future development.	☐	☐	☐	☐	☐
76. Energy and power supplies need to be improved in Nyaung Shwe township for future development.	☐	☐	☐	☐	☐
77. Internet service access needs to be improved in Nyaung Shwe township for future development.	☐	☐	☐	☐	☐
78. Health care services need to be improved for further development of tourism.	☐	☐	☐	☐	☐
79. I believe the tourism industry should be actively encouraged in Nyaung Shwe township.	☐	☐	☐	☐	☐
80. It is important to develop projects to manage the growth of tourism.	☐	☐	☐	☐	☐
81. There should be more tourist destinations in the community I live in.	☐	☐	☐	☐	☐
82. The tourism sector will continue to play a major role in the economy of the community in Nyaung Shwe township.	☐	☐	☐	☐	☐
83. One of the most important benefits of tourism is how it can improve the living standard of the locals.	☐	☐	☐	☐	☐
84. To control the negative impacts of tourism on the environment, city administrators should make a long-term planning.	☐	☐	☐	☐	☐

85. If you have any suggestions and comments, please mention them below.

_____

_____

_____

I really appreciate your valuable time.

APPENDIX (B - 1)

Implementation of Tourism Development in Myanmar

Key Objectives Activities	Time Frame
1. Strengthen the Institutional Environment	
Establish a Tourism Executive Coordination Board (TECB) to oversee tourism development	2013-2014
Develop a planning framework to support the TECB	2013-2015
Strengthen data systems and metrics to measure industry performance	2013-2020
Develop systems to promote visitor safety and consumer protection	2014-2020
Improve legal environment	2014-2020
2. Build Human Resource Capacity and Promote Service Quality	
Design and deliver a comprehensive HR development and capacity-building strategy	2013-2020
Expedite the implementation of the HR development strategy	2013-2015
Develop multi-stakeholder partnerships to improve tourism products and service quality	2014-2020
Key Objectives Activities	**Time Frame**
3. Strengthen Safeguards and Procedures for Destination Planning and Management	
Design and implement innovative, integrated, and participatory approaches to destination planning	2013-2020
Strengthen tourism-related social safeguards	2013-2020
Improving zoning practices in Tourism Destinations	2014-2017
Promote Innovative and Green Technologies	2014-2020
Strengthen community involvement in Tourism	2013-2020
4. Develop Quality Products and Services	
Design and implement tourism product development strategies	2013-2016
Develop an ecotourism management strategy for protected areas	2014-2015
Strengthen tourism-related supply chain linkages	2014-2018

5. Improve Connectivity and Tourism-related Infrastructure	
Promote complementary expansion of the Aviation and Tourism Industries	2013-2020
Ensure the integration of tourism considerations into national and local transportation planning	2014-2020
Invest in tourism-related infrastructure and environmental services	2014-2020
Ease barriers to visitor entry	2014-2015
6. Build the Image, Position, and Brand of Tourism Myanmar	
Determine the supply, demand and gap characteristics of the tourism system	2013-2020
Create a strategic marketing map that includes a range of niche market actions	2014-2020
Raise national awareness about the nature and significance or responsible tourism	2013-2020
Effectively manage the position of Myanmar in the international marketplace	2013-2020

Source: Myanmar Tourism Master Plan Report (2013-2020)

APPENDIX (B - 2)

Licensed Tour Guides in Myanmar, 2001-2021

Types of Tour Guides	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
English	3742	3933	4282	4111	2733	2852	3152	3093	2920	2598	1931	2058	2187	2296	2349	2586	2815	2780	3020	3148	3144
Spanish	-	-	-	-	-	-	-	101	101	101	106	110	111	110	106	335	108	94	97	101	101
Japanese	694	730	764	795	558	567	594	598	548	484	343	350	403	384	352	272	342	344	368	379	378
French	248	254	263	282	220	235	281	283	293	280	231	246	277	282	278	261	295	322	346	348	348
Chinese	298	305	330	341	208	211	211	217	241	171	125	139	132	131	123	163	146	153	225	242	242
Thai	125	136	146	150	110	113	120	214	203	108	106	108	132	138	150	124	206	220	262	272	272
German	132	146	169	188	181	194	216	122	114	235	219	230	264	268	261	106	271	289	302	304	303
Russian	26	24	24	27	22	23	26	38	48	36	35	40	68	69	66	70	77	77	87	90	90
Italian	23	29	36	40	35	35	38	26	37	44	43	48	64	68	64	63	65	80	84	86	85
Korean	8	11	14	16	12	14	20	20	22	20	21	24	29	30	26	30	46	48	64	72	72
Total	5296	5568	6028	6250	4079	4245	4658	4712	4527	4077	3160	3353	3667	3776	3775	4010	4371	4407	4855	5042	5035

Source: Ministry of Hotel and Tourism, 2023

APPENDIX (B - 3)

Licensed Tourist Transportation in Myanmar, 2001-2021

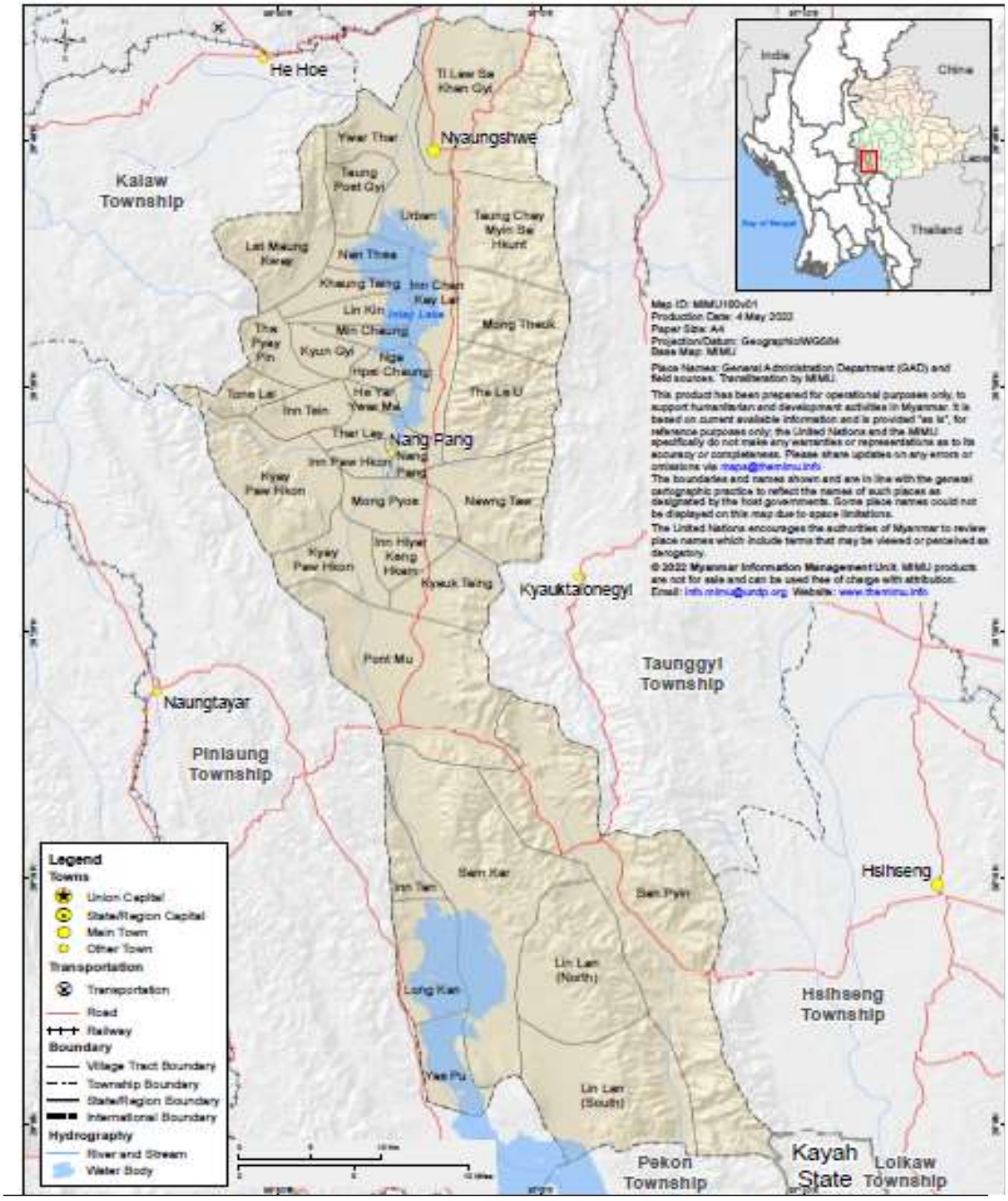
Types of Transportation	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Coach (26–50-seater)	72	91	96	98	105	111	102	88	76	73	63	61	62	129	208	264	360
Mini Bus (21–25-seater)	17	21	23	21	19	29	30	27	29	38	27	27	24	30	60	104	139
Van (7-to-20-seater)	50	46	41	40	45	41	27	16	15	3	13	16	17	31	69	322	454
Saloon (3-to-5-seater)	24	22	21	20	38	39	26	21	21	18	19	23	17	18	39	163	243
Motor Boat	196	217	173	181	242	236	128	52	29	34	12	22	46	55	58	1194	1277
Boat	2	3	3	4	7	9	12	12	16	16	17	17	19	24	30	33	44
Yacht	33	37	43	47	51	53	32	30	30	34	26	31	15	21	21	16	14
Hot Air Balloon	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3
Total	395	438	401	412	508	519	358	247	217	217	178	198	201	310	488	2099	2534

Source: Ministry of Hotel and Tourism, 2023

*Tourist transport business license law was repealed in 2018.

APPENDIX (C)

Nyaung Shwe Township Map



Source: Myanmar Information Management Unit (MIMU), 2022

APPENDIX (D)

I. Reliability Test: Reliability

Positive Economic Impacts

Reliability Statistics

Cronbach's Alpha	N of Items
.915	11

Negative Economic Impacts

Reliability Statistics

Cronbach's Alpha	N of Items
.730	5

Positive Sociocultural Impacts

Reliability Statistics

Cronbach's Alpha	N of Items
.900	11

Negative Sociocultural Impacts

Reliability Statistics

Cronbach's Alpha	N of Items
.919	12

Positive Environmental Impacts

Reliability Statistics

Cronbach's Alpha	N of Items
.826	7

Negative Environmental Impacts

Reliability Statistics

Cronbach's Alpha	N of Items
.921	9

Attitudes toward Further Tourism Development

Reliability Statistics

Cronbach's Alpha	N of Items
.920	16

II. Factor Analysis

Positive Economic Impacts

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.941
Bartlett's Test of Sphericity	Approx. Chi-Square	2222.757
	df	55
	Sig.	.000

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.058	55.070	55.070	6.058	55.070	55.070
2	.937	8.520	63.590			
3	.621	5.645	69.235			
4	.611	5.558	74.794			
5	.523	4.758	79.552			
6	.475	4.314	83.866			
7	.450	4.088	87.954			
8	.396	3.601	91.555			
9	.360	3.269	94.824			
10	.299	2.715	97.539			
11	.271	2.461	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
PECO1	.591
PECO2	.765
PECO3	.800
PECO4	.762
PECO5	.788
PECO6	.594
PECO7	.723
PECO8	.805
PECO9	.744
PECO10	.808
PECO11	.743

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Negative Economic Impacts

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.718
Bartlett's Test of Sphericity	Approx. Chi-Square	433.682
	df	10
	Sig.	.000

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.437	48.730	48.730	2.437	48.730	48.730
2	.985	19.709	68.439			
3	.689	13.780	82.219			
4	.514	10.277	92.497			
5	.375	7.503	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
NECO1	.510
NECO2	.609
NECO3	.788
NECO4	.735
NECO5	.801

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Positive Sociocultural Impacts

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.922
Bartlett's Test of Sphericity	Approx. Chi-Square	1930.998
	df	55
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.631	51.193	51.193	5.631	51.193	51.193
2	.866	7.875	59.068			
3	.794	7.219	66.287			
4	.659	5.991	72.278			
5	.582	5.291	77.569			
6	.573	5.210	82.779			
7	.487	4.428	87.207			
8	.418	3.796	91.003			
9	.392	3.566	94.570			
10	.327	2.976	97.545			
11	.270	2.455	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
PSCO1	.694
PSCO2	.749
PSCO3	.685
PSCO4	.743
PSCO5	.654
PSCO6	.563
PSCO7	.667
PSCO8	.800
PSCO9	.755
PSCO10	.801
PSCO11	.726

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Negative Sociocultural Impacts

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.915
Bartlett's Test of Sphericity	Approx. Chi-Square	2390.286
	df	45
	Sig.	.000

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.892	58.922	58.922	5.892	58.922	58.922
2	.972	9.722	68.643			
3	.659	6.586	75.229			
4	.547	5.468	80.697			
5	.451	4.514	85.211			
6	.393	3.929	89.139			
7	.362	3.620	92.759			
8	.299	2.989	95.748			
9	.214	2.136	97.884			
10	.212	2.116	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
NSCO2	.684
NSCO4	.794
NSCO5	.778
NSCO6	.687
NSCO7	.810
NSCO8	.738
NSCO9	.838
NSCO10	.812
NSCO11	.826
NSCO12	.686

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Positive Environmental Impacts

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.810
Bartlett's Test of Sphericity	Approx. Chi-Square	565.594
	df	10
	Sig.	.000

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.780	55.605	55.605	2.780	55.605	55.605
2	.817	16.330	71.935			
3	.558	11.167	83.103			
4	.449	8.983	92.086			
5	.396	7.914	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
PENV3	.609
PENV4	.797
PENV5	.800
PENV6	.789
PENV7	.716

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Negative Environmental Impacts

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.921
Bartlett's Test of Sphericity	Approx. Chi-Square	2165.178
	df	36
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.536	61.516	61.516	5.536	61.516	61.516
2	.768	8.533	70.048			
3	.691	7.678	77.726			
4	.479	5.325	83.051			
5	.389	4.319	87.370			
6	.370	4.108	91.478			
7	.311	3.452	94.930			
8	.241	2.679	97.609			
9	.215	2.391	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
NENV1	.732
NENV2	.850
NENV3	.804
NENV4	.746
NENV5	.756
NENV6	.740
NENV7	.859
NENV8	.778
NENV9	.782

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Attitudes toward Further Tourism Development

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.945
Bartlett's Test of Sphericity	Approx. Chi-Square	3324.793
	df	55
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.261	66.005	66.005	7.261	66.005	66.005
2	.797	7.249	73.254			
3	.506	4.599	77.853			
4	.481	4.375	82.228			
5	.375	3.411	85.638			
6	.354	3.217	88.855			
7	.322	2.924	91.779			
8	.270	2.451	94.230			
9	.245	2.223	96.453			
10	.214	1.943	98.396			
11	.176	1.604	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
ATD6	.784
ATD7	.822
ATD8	.832
ATD9	.824
ATD10	.828
ATD11	.817
ATD12	.793
ATD13	.840
ATD14	.836
ATD15	.772
ATD16	.785

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

III. Descriptive Statistics

Positive Economic Impacts

	N	Mean	Std. Deviation
PECO1	373	4.02	.676
PECO2	373	4.13	.623
PECO3	373	4.04	.634
PECO4	373	4.07	.672
PECO5	373	4.08	.655
PECO6	373	3.95	.776
PECO7	373	3.97	.665
PECO8	373	4.04	.646
PECO9	373	4.13	.646
PECO10	373	4.07	.652
PECO11	373	4.01	.711
Valid N (listwise)	373		

Negative Economic Impacts

Descriptive Statistics

	N	Mean	Std. Deviation
NECO1	373	2.31	1.068
NECO2	373	2.35	.923
NECO3	373	2.90	1.067
NECO4	373	2.65	1.041
NECO5	373	2.97	1.107
Valid N (listwise)	373		

Positive Sociocultural Impacts

Descriptive Statistics

	N	Mean	Std. Deviation
PSCO1	373	4.05	.672
PSCO2	373	4.02	.643
PSCO3	373	3.91	.725
PSCO4	373	3.92	.626
PSCO5	373	3.98	.712
PSCO6	373	3.84	.738
PSCO7	373	4.06	.758
PSCO8	373	4.08	.636
PSCO9	373	4.13	.655
PSCO10	373	4.02	.626
PSCO11	373	3.91	.637
Valid N (listwise)	373		

Negative Sociocultural Impacts

Descriptive Statistics

	N	Mean	Std. Deviation
NSCO2	373	2.69	1.002
NSCO4	373	2.54	.951
NSCO5	373	2.55	.984
NSCO6	373	2.85	1.070
NSCO7	373	2.50	1.026
NSCO8	373	2.61	1.023
NSCO9	373	2.42	.976
NSCO10	373	2.59	.965
NSCO11	373	2.45	.956
NSCO12	373	2.27	1.051
Valid N (listwise)	373		

Positive Environmental Impacts

Descriptive Statistics

	N	Mean	Std. Deviation
PENV3	373	3.91	.658
PENV4	373	3.61	.893
PENV5	373	3.72	.824
PENV6	373	3.70	.833
PENV7	373	3.76	.809
Valid N (listwise)	373		

Negative Environmental Impacts

Descriptive Statistics

	N	Mean	Std. Deviation
NENV1	373	2.78	1.074
NENV2	373	2.96	1.111
NENV3	373	2.73	1.001
NENV4	373	2.60	1.034
NENV5	373	3.14	1.087
NENV6	373	2.85	1.039
NENV7	373	2.69	.960
NENV8	373	2.59	.965
NENV9	373	2.85	1.075
Valid N (listwise)	373		

Attitudes toward Further Tourism Development

Descriptive Statistics

	N	Mean	Std. Deviation
ATD6	373	3.95	.616
ATD7	373	4.07	.541
ATD8	373	4.13	.584
ATD9	373	4.16	.575
ATD10	373	4.15	.613
ATD11	373	4.08	.530
ATD12	373	3.98	.630
ATD13	373	4.09	.571
ATD14	373	3.98	.624
ATD15	373	4.00	.707
ATD16	373	4.18	.584
Valid N (listwise)	373		

IV. Multiple Linear Regression

1. Socio demographics factors on Positive Economic Impacts

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.338[a]	.114	.097	.46556

a. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.203	7	1.458	6.725	.000[b]
	Residual	79.112	365	.217		
	Total	89.315	372			

a. Dependent Variable: PECO

b. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.630	.171		21.272	.000		
	AGER	.051	.025	.102	2.010	.045	.952	1.051
	gender	.025	.050	.026	.502	.616	.926	1.080
	livingarea	.296	.065	.228	4.530	.000	.955	1.047
	degree	.144	.054	.137	2.641	.009	.897	1.115
	tourincome	.117	.087	.119	1.347	.179	.310	3.224
	contactvisitor	.000	.086	.000	-.003	.998	.315	3.178
	LENGTH	-.032	.078	-.021	-.405	.686	.899	1.113

a. Dependent Variable: PECO

2. Socio demographics factors on Negative Economic Impacts

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.150[a]	.023	.004	.72506

a. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.419	7	.631	2.060	.0.047[b]
	Residual	191.885	365	.526		
	Total	196.304	372			

a. Dependent Variable: NECO

b. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.080	.266		11.589	.000		
	AGE	.041	.040	.055	1.036	.301	.952	1.051
	gender	.018	.078	.013	.233	.816	.926	1.080
	livingarea	-.051	.102	-.027	-.504	.614	.955	1.047
	degree	.023	.085	.015	.272	.785	.897	1.115
	tourincome	-.290	.135	-.200	-2.153	.032	.310	3.224
	contactvisitor	.314	.134	.216	2.339	.020	.315	3.178
	LENGTH	.114	.122	.051	.937	.349	.899	1.113

a. Dependent Variable: NECO

3. Socio demographics factors on Positive Sociocultural Impacts

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.281[a]	.079	.061	.45878

a. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.571	7	.939	4.460	.000[b]
	Residual	76.825	365	.210		
	Total	83.396	372			

a. Dependent Variable: PSCO

b. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.746	.168		22.276	.000		
	AGE	.046	.025	.094	1.822	.069	.952	1.051
	gender	-.056	.049	-.060	-1.141	.255	.926	1.080
	livingarea	.250	.064	.199	3.876	.000	.955	1.047
	degree	.063	.054	.062	1.166	.245	.897	1.115
	tourincome	.022	.085	.023	.259	.796	.310	3.224
	contactvisitor	.055	.085	.058	.644	.520	.315	3.178
	LENGTH	-.050	.077	-.034	-.650	.516	.899	1.113

a. Dependent Variable: PSCO

4. Socio demographics factors on Negative Sociocultural Impacts

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.222[a]	.049	.031	.75396

a. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.780	7	1.540	2.709	.009[b]
	Residual	207.485	365	.568		
	Total	218.264	372			

a. Dependent Variable: NSCO

b. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.606	.276		9.430	.000		
	AGE	-.105	.041	-.133	-2.552	.011	.952	1.051
	gender	-.051	.081	-.033	-.626	.531	.926	1.080
	livingarea	-.138	.106	-.068	-1.305	.193	.955	1.047
	degree	-.134	.088	-.082	-1.524	.128	.897	1.115
	tourincome	-.251	.140	-.164	-1.792	.074	.310	3.224
	contactvisitor	.248	.139	.162	1.779	.076	.315	3.178
	LENGTH	.194	.126	.083	1.538	.125	.899	1.113

a. Dependent Variable: NSCO

5. Socio demographics factors on Positive Environmental Impacts

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.194[a]	.038	.019	.60295

a. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.189	7	.741	2.039	.049[b]
	Residual	132.696	365	.364		
	Total	137.886	372			

a. Dependent Variable: PENV

b. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.339	.221		15.111	.000		
	AGE	.109	.033	.174	3.313	.001	.952	1.051
	gender	-.001	.065	-.001	-.017	.987	.926	1.080
	livingarea	.040	.085	.025	.475	.635	.955	1.047
	degree	-.013	.071	-.010	-.180	.858	.897	1.115
	tourincome	.074	.112	.061	.663	.508	.310	3.224
	contactvisitor	-.131	.111	-.108	-1.178	.240	.315	3.178
	LENGTH	.082	.101	.044	.812	.417	.899	1.113

a. Dependent Variable: PENV

6. Socio demographics factors on Negative Environmental Impacts

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.235[a]	.055	.037	.80104

a. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.736	7	1.962	3.058	.004[b]
	Residual	234.208	365	.642		
	Total	247.944	372			

a. Dependent Variable: NENV

b. Predictors: (Constant), LENGTH, AGE, livingarea, gender, contactvisitor, degree, tourincome

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.771	.294		9.438	.000		
	AGE	-.092	.044	-.110	-2.106	.036	.952	1.051
	gender	-.148	.086	-.091	-1.715	.087	.926	1.080
	livingarea	-.211	.113	-.098	-1.874	.062	.955	1.047
	degree	-.136	.094	-.078	-1.455	.147	.897	1.115
	tourincome	-.275	.149	-.169	-1.845	.066	.310	3.224
	contactvisitor	.296	.148	.182	2.002	.046	.315	3.178
	LENGTH	.278	.134	.111	2.069	.039	.899	1.113

a. Dependent Variable: NENV

7. Perceived Impacts of Tourism on Attitudes toward Further Tourism Development

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642[a]	.413	.403	.34205

a. Predictors: (Constant), NENV, PENV, PECO, NECO, NSCO, PSCO

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.077	6	5.013	42.846	.000[b]
	Residual	42.821	366	.117		
	Total	72.898	372			

a. Dependent Variable: ATD

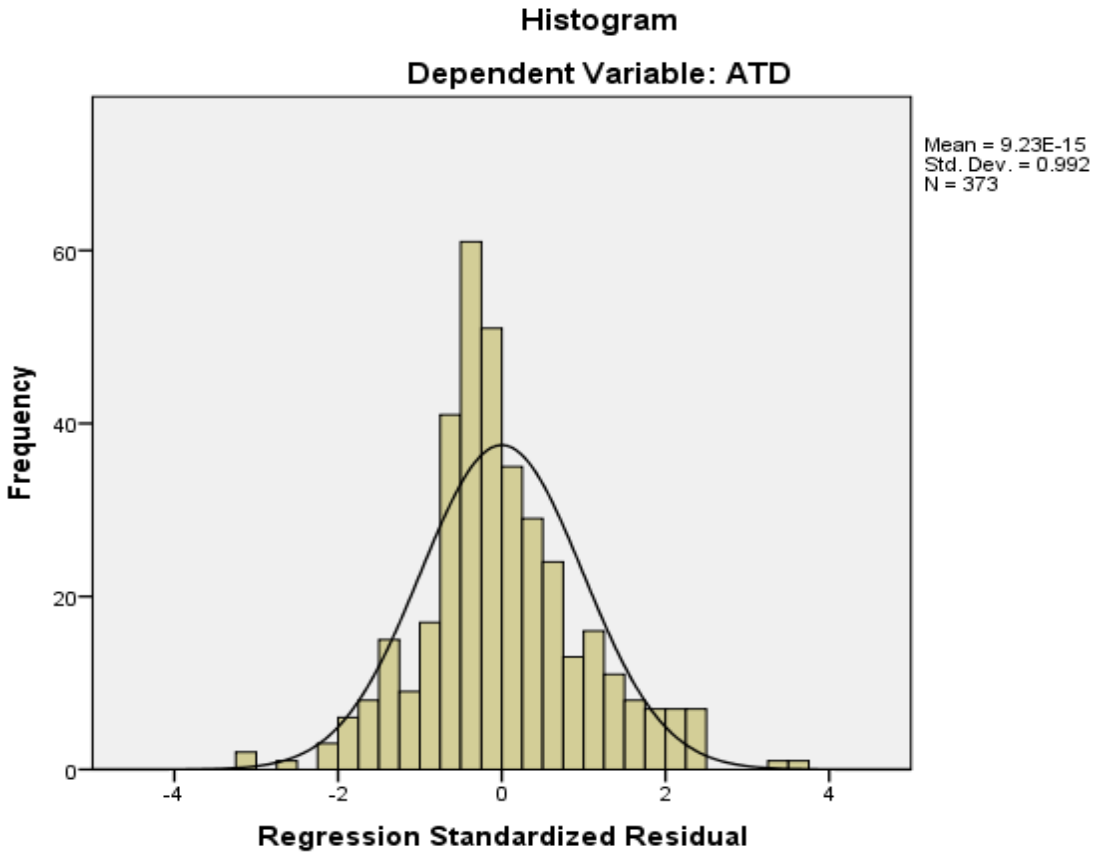
b. Predictors: (Constant), NENV, PENV, PECO, NECO, NSCO, PSCO

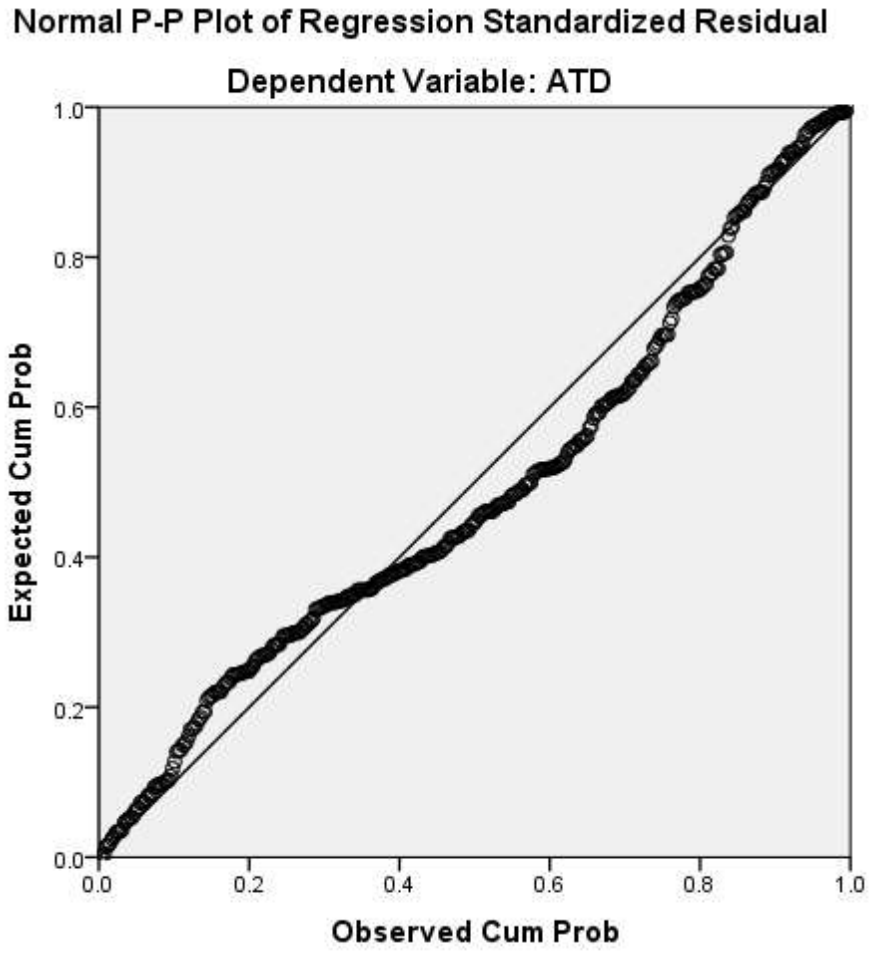
Coefficients[a]

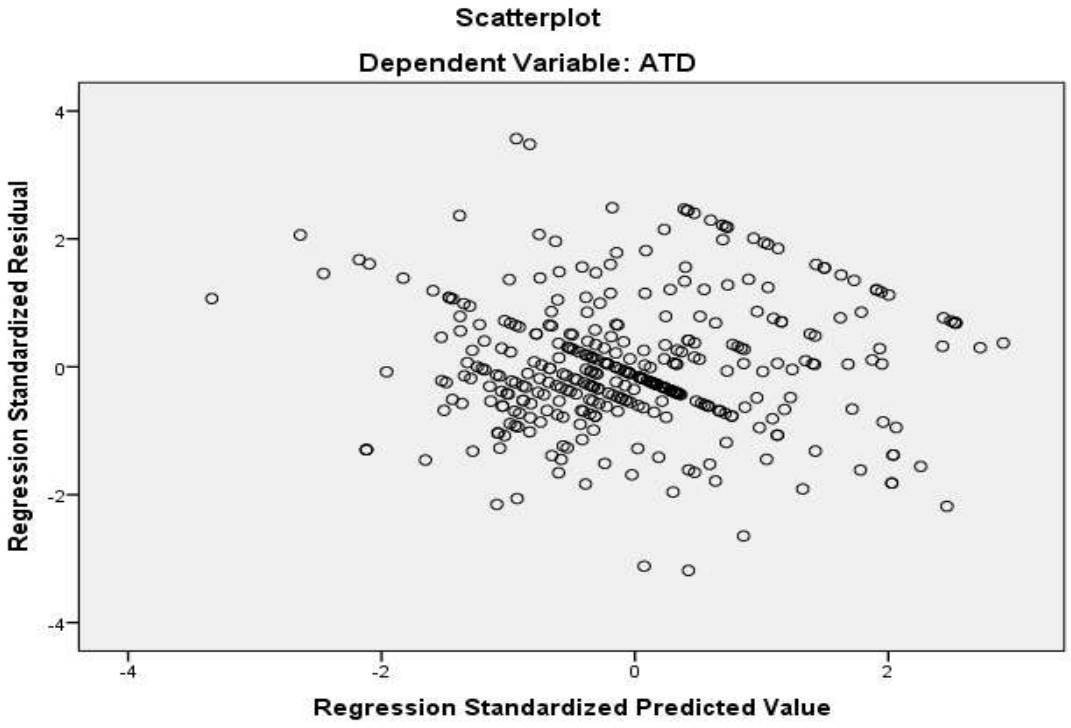
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.768	.214		8.278	.000		
	PECO	.339	.049	.375	6.865	.000	.537	1.863
	NECO	-.016	.028	-.026	-.572	.568	.764	1.308
	PSCO	.170	.052	.182	3.273	.001	.517	1.933
	NSCO	.052	.031	.089	1.649	.100	.546	1.831
	PENV	.117	.032	.161	3.615	.000	.805	1.242
	NENV	-.104	.030	-.192	-3.504	.001	.534	1.871

a. Dependent Variable: ATD

(V) Charts




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ATD
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: ATD
Regression Standardized Residual
Regression Standardized Predicted Value
4
2
0
-2
-4