

**WETLAND TOURISM MANAGEMENT AT DON HOI LOT
(RAMSAR SITE),
SAMUT SONGKHRAM PROVINCE**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE
(NATURAL RESOURCE MANAGEMENT)
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Thesis
Entitled
**WETLAND TOURISM MANAGEMENT AT DON HOI LOT
(RAMSAR SITE),
SAMUT SONGKHRAM PROVINCE**



P. Kopolratana

Miss Pisanee Kopolratana
Candidate

Piyakarn T.

Asst. Prof. Piyakarn Teartisup,
Ph.D. (Forestry – Watershed
Management)
Major-Advisor

Raywadee R.

Asst. Prof. Raywadee Roachanakanan,
Ph.D. (Ecology, Evolution and
Systematics)
Co-Advisor

B. Mahasavariya

Prof. Banchong Mahaisavariya,
M.D.
Dean
Faculty of Graduate Studies

Sansanee Choowaew

Assoc. Prof. Sansanee Choowaew,
Ph.D. (Environmental Planning)
Chair
Master of Science Program in
Natural Resource Management
Faculty of Environment and Resource
Studies

Thesis
Entitled
**WETLAND TOURISM MANAGEMENT AT DON HOI LOT
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was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Science (Natural Resource Management)

on

March 19, 2009

P. Kopolratana

Miss Pisanee Kopolratana
Candidate

Wanpen E.

Ms. Wanpen Charoentrakulpeeti,
Ph.D. (Urban Environmental Management)
Chair

W. Simachaya

Mr. Wijarn Simachaya,
Ph.D. (Environmental Engineering – Water
Quality)
Member

Raywadee R.

Asst. Prof. Raywadee Roachanakanan,
Ph.D. (Ecology, Evolution and
Systematics)
Member

Piyakarn T.

Asst. Prof. Piyakarn Teartisup,
Ph.D. (Forestry – Watershed Management)
Member

B. Mahaisavariya

Prof. Banchong Mahaisavariya,
M.D.
Dean
Faculty of Graduate Studies,
Mahidol University

S. Dilokwanich

Asst. Prof. Sittipong Dilokwanich,
Ph.D. (Human Geography)
Dean
Faculty of Environment and Resource
Studies
Mahidol University

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Pisane Kopolratana

**WETLAND TOURISM MANAGEMENT AT DON HOI LOT (RAMSAR SITE),
SAMUT SONGKHRAM PROVINCE**

PISANEE KOPOLRATANA 5037250 ENRM/M

M.Sc. (NATURAL RESOURCE MANAGEMENT)

**THESIS ADVISORY COMMITTEE: PIYAKARN TEARTISUP, Ph.D. (FORESTY-
WATERSHED MANAGEMENT), RAYWADEE ROACHANAKANAN, Ph.D.
(ECOLOGY, EVOLUTION AND SYSTEMATICS)**

ABSTRACT

Wetlands are vital ecosystems on the Earth because of their functions and their benefits. Don Hoi Lot, the third Ramsar site, is one of the most important wetlands in Thailand but at the present time is continuously declining. Therefore, the objectives of this study are (1) to investigate the situation and problems that have impacted on the wetland ecosystem and tourism; (2) to understand the management of Sub – district Administrative Organization; and (3) to explore the factors that influence tourism management at Don Hoi Lot (Ramsar site), Samut Songkhram province.

The participatory approach, particularly Rapid Rural Appraisal, was used for verification of the management practices of SAO. The structured questionnaire was also used as the instrument for quantitative research. The statistical tools employed for data analyzed were percentage, one sample T–test, T–test and chi–square. Also, checklist analysis and matrix ranking were applied for analyzing qualitative data after all PESTLE analysis was conducted at the last stage to identify the management factors.

The research found that the environment and tourism resources, economic especially the ecotourism market, politics and their management overall were important factors to consider for improving wetland tourism. However, the core of sustainable tourism management is the local participation in decision making, planning and management, which would result in wetland tourism management at Don Hoi Lot being sustainably and wisely used.

**KEY WORDS: SUSTAINABLE TOURISM/ WETLAND TOURISM/ TOURISM
MANAGEMENT**

108 pages

การจัดการการท่องเที่ยวพื้นที่ชุ่มน้ำ ภูมิศึกษา ดอนหอยหลอด จังหวัดสมุทรสงคราม
WETLAND TOURISM MANAGEMENT AT DON HOI LOT (RAMSAR SITE), SAMUT
SONGKHRAM PROVINCE

พิศณี โกพลรัตน์ 5037250 ENRM/M

วท.ม.(การจัดการทรัพยากรธรรมชาติ)

คณะกรรมการที่ปรึกษาวิทยานิพนธ์: ปิยะกาญจน์ เทียชิตทรัพย์, Ph.D. (Forestry–Watershed Management),
เรวดี โรจนกานันท์, Ph.D. (Ecology, Evolution and Systematics)

บทคัดย่อ

พื้นที่ชุ่มน้ำมีความสำคัญต่อระบบนิเวศ อันเนื่องจาก หน้าที่และประโยชน์ของพื้นที่ชุ่มน้ำ
เอง ดอนหอยหลอดได้จดทะเบียนอนุรักษ์แรมซาร์เป็นอันดับที่สามของไทย ดอนหอยหลอดเป็นหนึ่งใน
พื้นที่ชุ่มน้ำที่มีความสำคัญของไทย แต่ในปัจจุบัน ดอนหอยหลอดเสื่อมโทรมไปมาก ด้วยเหตุนี้ การ
วิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษา (1) สถานการณ์และปัญหาที่ส่งผลกระทบต่อระบบนิเวศของ
พื้นที่ชุ่มน้ำและการท่องเที่ยว (2) การบริหารจัดการขององค์การบริหารส่วนตำบล และ (3) ปัจจัยที่มี
อิทธิพลต่อการบริหารจัดการการท่องเที่ยวที่ดอนหอยหลอด จังหวัดสมุทรสงคราม

การวิจัยเชิงปฏิบัติแบบมีส่วนร่วม โดยเฉพาะการสัมภาษณ์แบบเชิงลึกเป็นเครื่องมือศึกษา
การบริหารจัดการขององค์การบริหารส่วนตำบล แบบสอบถามเป็นเครื่องมือรวบรวมข้อมูลเชิง
ปริมาณ สถิติที่ใช้ในการวิเคราะห์ ได้แก่ ร้อยละ ค่า one sample t-test, t-test และค่า chi-square
อีกทั้ง มีการใช้ checklist analysis และ matrix ranking เพื่อวิเคราะห์ข้อมูลเชิงคุณภาพ หลังจาก
นั้น มีการใช้ PESTLE analysis ในการวิเคราะห์ปัจจัยที่มีอิทธิพลต่อการบริหารจัดการ

ผลการวิจัยพบว่า ปัจจัยด้านสิ่งแวดล้อมและทรัพยากรการท่องเที่ยว ปัจจัยด้านเศรษฐกิจ
การตลาดของการท่องเที่ยวเชิงนิเวศ ด้านการปกครอง และด้านการจัดการ กล่าวโดยสรุปปัจจัยทุก
อย่างที่กล่าวมาล้วนเป็นปัจจัยหลักในการจัดการการท่องเที่ยวให้เป็นการท่องเที่ยวแบบยั่งยืน อย่างไรก็ตาม
ก็ตาม สิ่งสำคัญสำหรับการจัดการการท่องเที่ยวดอนหอยหลอด คือ การมีส่วนร่วมของชุมชนในการ
ตัดสินใจ วางแผนและการบริหารจัดการ ซึ่งปัจจัยสำคัญเหล่านี้ส่งผลให้การท่องเที่ยวดอนหอยไปสู่
ความยั่งยืน

คำสำคัญ: ท่องเที่ยวแบบยั่งยืน/ท่องเที่ยวบริเวณพื้นที่ชุ่มน้ำ/การจัดการการท่องเที่ยว

108หน้า

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The image features a large, semi-transparent watermark of the Mahidol University logo in the background. The logo is circular, with a gold border containing the Thai text 'มหาวิทยาลัยมหิดล' (Mahidol University) at the top and 'มหาวิทยาลัยมหิดล' at the bottom. The center of the logo is a blue circle containing a golden emblem of a traditional Thai stupa (chedi) with a flame-like base and a tiered top.

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LIST OF ABBREVIATIONS



CBT	Community-based Tourism
CTD	Community Tourism Development
DDMM	Dynamic Model of Destination Management
DMOs	Destination Management Organizations
EFQM	European Foundation for Quality Management
EIA	Environmental Impact Assessment
IISD	International Institute of Sustainable Development
QOL	Quality of Life
NRCS	National Resources Conservation Service
NWI	National Wetland Inventory
OTOP	One Tambon One Product
OWT	Omega World Travel
RRA	Rapid Rural Appraisal
SAO	Sub-district Administrative Organization
UNCSD	United Nations Commission of Sustainable Development
UNDP	United Nations Development Programme
WCED	World Commission on Environment and Development
WTO	World Tourism Organization

CHAPTER I

INTRODUCTION

1.1 Justification

Wetlands are the most essential ecosystem on the Earth because of their unique functions and values which do provide direct and indirect way for human, flora and fauna. They take over six percent of the world's land surface and they cover around 7.5 percent of the total land area in Thailand (Office of Environment Policy and Planning, n.d.). There are various types of wetlands that are found in Thailand such as marine, estuarine, palustrine, and artificial wetlands.

The functions of wetlands do provide as sources, sinks, and transformers of multitude of chemical, biological, and genetic materials. At the same time, their benefit is for aquatic animal and wildlife protection. Although, they are the source of protein which means that people who live nearby wetlands develop a shallow of ponds to produce fish and rice (Mitsch and Gosselink, 2000).

Wetlands, themselves have the aesthetics of landscape in which water and land often provide a remarkable panorama. Therefore, many wetlands are the outstanding tourism place that generates a huge income to local people. Tourism industry distributes vast revenue to many countries, both developed and developing countries which means that overall wetlands are important for tourism industry. However, the relationship between wetlands and tourism are complex and sometimes adversarial; for instance, tourism can impact on wetlands but at the same time tourism can innovate funding for conservation and poverty reduction (Van Der Dulm, and Henkens, 2007).

Despite their worth and value, many wetlands are continuously degrading because of economic development, increasing population and inefficient use of wetlands. Hence, this research mainly focuses on one of the most important wetlands

in Thailand that is Don Hoi Lot which is located at Bang Jakreng sub-district, Samut Songkhram province which is the third Ramsar site in Thailand.

Don Hoi Lot is one of economic valuable wetlands in Thailand, which is declining and has been changed from the previous time as a result of tourism activities, garbage, and discharged wastewater into Don Hoi Lot. Furthermore, due to the lack of integration among organizations namely the local government, private sector and local community, lack of integration cause a negative effect on the ecosystem of Don Hoi Lot, as well as impact on tourism activities which is the main income of local people.

For that reason, this research particularly concentrates on the tourism management of coastal wetland at Don Hoi Lot, Samut Songkhram province which is recorded on the Ramsar Convention. This study is aimed at the study on the attitude and opinion of tourists and traders around Don Hoi Lot towards tourism management at Don Hoi Lot, to explore management practices of the sub-district administrative organization at Don Hoi Lot and to apply PESTLE analysis for determining the sustainable tourism indicator.

1.2 Conceptual framework

To achieve the sustainable wetland tourism, this study has to understand the existing condition as the study area is the Ramsar site and the problem of Don Hoi Lot together with the management. This research categorized the management into two groups: (1) Sub-district Administrative Organization (SAO) and (2) local people participation in tourism management. Moreover, this study used the sustainable tourism indicators as a guideline. These indicators cover overall four dimensions: environmental, socio-cultural, political and economic. This research conducted both qualitative and quantitative research. After gathering and analyzing all data, this study provided the recommendation as in Figure 1.1.

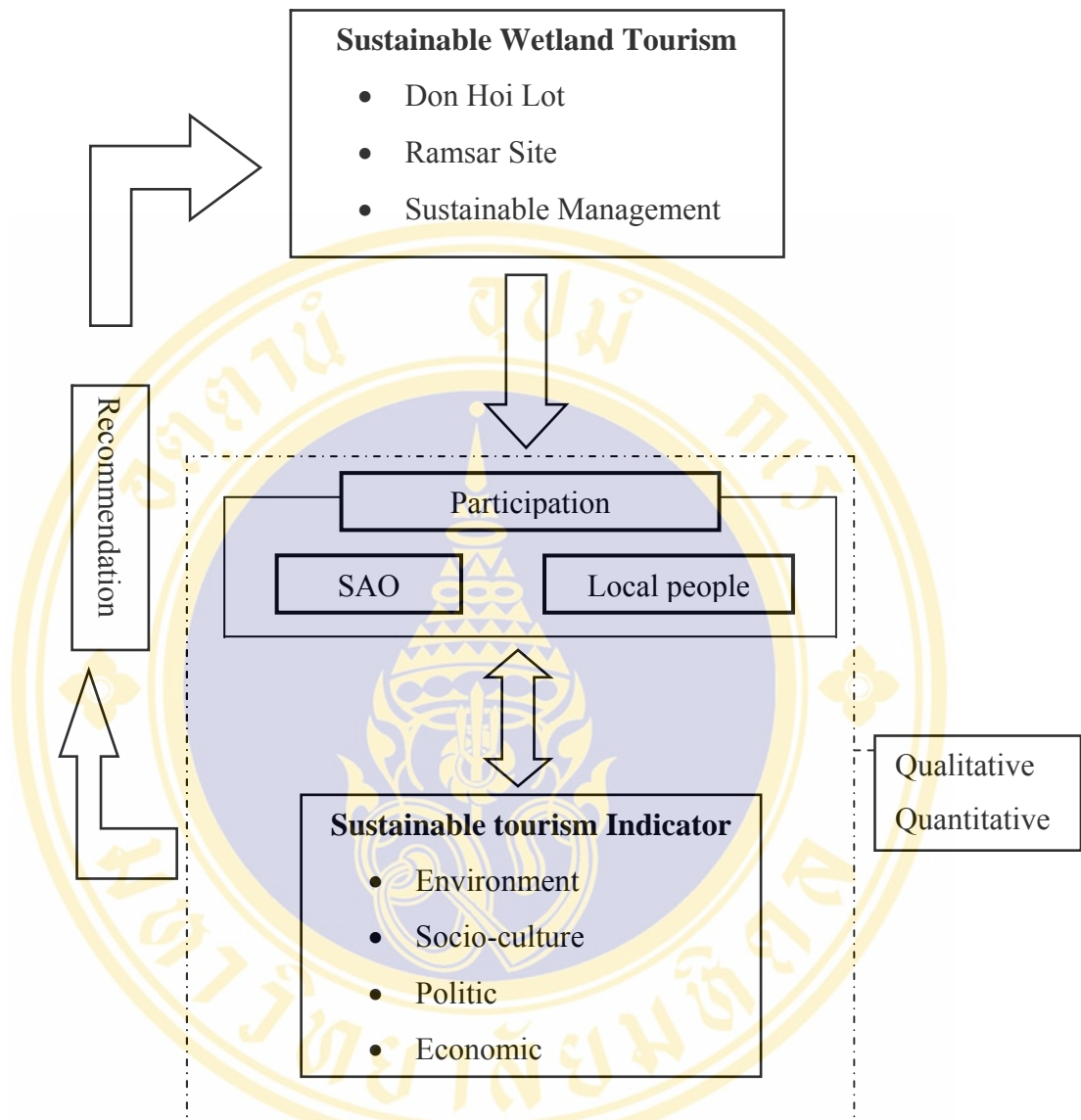


Figure 1.1: Conceptual framework of the study

1.3 Objectives

- 1.3.1 To study the attitudes of tourists and traders towards tourism management at Don Hoi Lot (Ramsar site)
- 1.3.2 To understand the management practices at Don Hoi Lot (Ramsar site) by sub-district Administrative Organization (SAO)
- 1.3.3 To explore the sustainable factors that influence on the tourism management at Don Hoi Lot (Ramsar site)

1.4 Study area

The study area is Don Hoi Lot (Ramsar site) in Bang Jakreng, Lam Yai, Klong Kon and Bang Kaeo sub-districts, Samut Songkhram province (OEPP, 2002). It covers an area about 140 km². (546,875 rai) and located between latitude 13° 17' N to 13° 25' N and longitude 99° 55' E to 100° 00' E. Don Hoi Lot is Mae Klong river mouth and also the coastal wetlands particularly sand bar, mudflat and mangrove forest area (OEPP, 2002a).

This study figured out the sustainable factors that manipulate tourism in terms of sustainable wetland tourism management. Generally speaking, this area is one of the Ramsar site in Thailand and is the remarkable nature-based tourism which is nearby Bangkok.

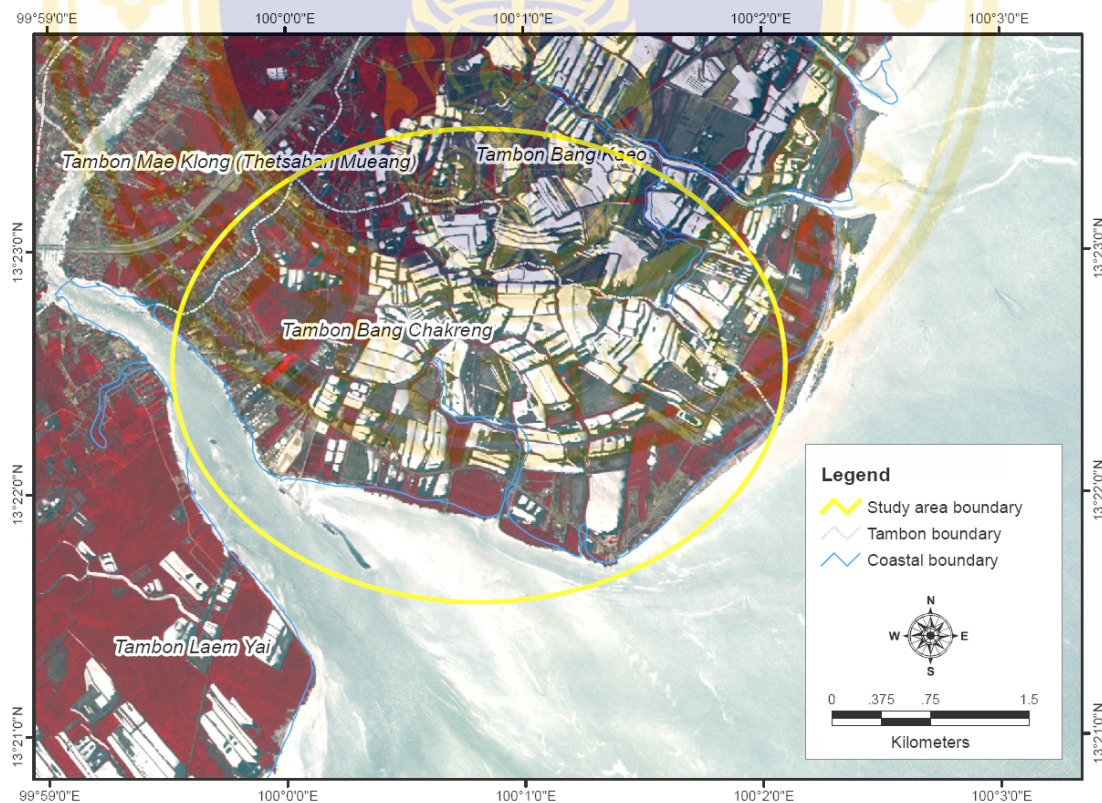


Figure 1.2 Don Hoi Lot, Samut Songkhram province: study area

(Source: SPOT-5 satellite imagery, Composite 321: RGB, recorded in March 30, 2007)

1.5 Outcomes

The researcher comprehended the sustainable wetland tourism management as well as the function and authority of SAO and other stakeholders on tourism management. This research, moreover, will be the source of information on tourism management.



CHAPTER II

LITERATURE REVIEW

2.1 Wetlands and wetland tourism

2.1.1 Importance of wetlands

Wetlands have been called with various names. Sometimes, they are described as the kidneys of the landscape or biological supermarkets (Mitsch and Gosselink, 2000). Moreover, there are many definitions of wetlands which have been proposed by scientists, scholars, and organizations together with many states hence local governments have adopted their own wetland definitions, although there is no absolute correct answer, as, it is base on the considerable details and on purposes, both scientific and management.

The definition of wetlands, therefore, is distinguished by two interest groups as (1) wetland scientists who are interested in classification, inventory and research, and (2) wetland managers who are concerned with laws and regulations (Mitsch and Gosselink, 2000).

One of the earliest definitions was presented by U.S Fish and Wildlife Service, in 1956, referring to Circular 39, which was used by both wetland scientists and managers, defined wetlands as lowlands covered with shallow and sometimes temporary or intermittent waters. They are referred to by such names as marshes, swamps, bogs, wet meadows, potholes, sloughs, and river-overflow lands.

Shallow lakes and ponds, usually with emergent vegetation as a conspicuous feature, are included in the definition, but the permanent waters of streams, reservoirs, and deep lakes are not included. Neither are water areas that are so temporary as to have little or no effect on the development of moist-soil vegetation (Mitsch and Gosselink, 2000).

The definition was adopted by wetlands scientists in the U.S, Fish and Wildlife Service, in 1979 after several years, by Lewis Cowardin *et al* and this definition was applied in National Resources Inventory and National Food Security Act Manual in administering the Swampbuster program in 1987 by the USDA Natural Resources Conservation Service (NRCS), that is, “lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water for purpose of this classification wetlands must have one or more of the following three attributes: to begin with, at least periodically, the land supports predominantly hydrophytes; secondly, the substrate is predominantly undrained hydric soil, and finally, the substrate is non soil and is saturated with water or covered by shallow water at some time during the growing season of the year (Cowardin *et al*,1979).

Zoltic (1988) has defined wetlands as land with water table at, near, or above the land surface or which has saturated for a long enough period to promote wetland or aquatic processes as indicated by hydric soils, hydrophytic vegetation, and various kinds of biological activity which were adapted to the wet environment, at the Canadian National Wetlands Working Group in order to deal with the vast areas of inland peatland.

There were, additionally, renewed definition of wetlands in the early of 1990s and ended up with “Wetlands: Characteristics and Boundaries” (NRC, 1995) referred wetland as an ecosystem that depends on constant or recurrent, shallow inundation or saturation at or near the surface of the saturate. The minimum essential characteristics of wetlands were recurrent, sustained inundation or saturation at or near the surface and the presence of physical, chemical and biological features reflective of recurrent, sustained inundation or saturation. Common diagnostic features of wetlands are hydric soils and hydrophytic vegetation. These features will be prevented except where specific physiochemical, biotic, or antropogenic factors been removed or prevented their development.

USFWS’s definition includes swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools, periodically inundated saltflats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds,

rivers and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric in nature (California Resources Agency, 1998).

There is the most common international wetland definition which was given by Ramsar Convention of Wetland is the most acceptable and it has been cited in many articles, books and journals. According to the Ramsar Convention defined wetland as areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters. Wetlands may incorporate riparian and coastal zone adjacent to the wetlands, and island or bodies of marine water deeper than six meters at low tide lying within the wetlands (Ramsar Convention, 2007).

On the other hand, when the protection wetlands began in the mid-1970, there were two definitions developed by the U.S Army Corps of Engineers (CORPS) in 1997 for the Section 404 permit program. This organization defined wetland to determine the boundaries for regulatory purposes and for field development as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (Kusler, n.d.).

The Coastal Commission under the California Code of Regulations determined wetlands as land where the water table is at near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentration of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some during each year and their location within, or adjacent to vegetated wetland or deepwater habitats (California Resources Agency, 1998).

The Natural Resources Conservation service (NRCS), in addition, defined wetlands as a land that has a predominance of hydric soils; is inundated or saturated

by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil condition; and under normal circumstances does support a prevalence of such vegetation (NRCS, 1998).

In the mean time, wetlands may be defined through their classification in somehow as in California; wetlands are commonly classified according to the length of time that an area is inundated or saturated by water or the types of plants and animals an area supports as well as Cowardin (1979) similar with the National Wetland Inventory (NWI) has recognized wetlands in five major wetland classifications: (i) Marine and (ii) estuarine wetlands are associated with the ocean and include coastal wetlands, such as tidal marshes. (iii) Lacustrine wetlands are associated with lakes, while (iv) riverine wetlands are found along rivers and streams. (v) Palustrine wetlands may be isolated or connected wet areas and include marshes, swamps, and bogs (California Resources Agency, 1998). Notwithstanding, the definition of wetland is defined in order to classify, to manage and to identify the problem along wetland areas.

Wetlands are valuable ecosystems that take over 6 percent of the world's land surface. They are found where low-lying lands meet waters or where rivers meet oceans (Terry, 1997); in addition, the special characteristic of wetlands is to comprise both land ecosystems that are steadily influenced by water, and aquatic ecosystems (Schuyt and Brander, 2004).

They have enormous variety of functions and values. In terms of wetland functions commencing from regulations functions, wetlands regulate ecological processes that contribute to a healthy environment, for instance; they recycle nutrients, human waste, and watershed protection. The second function is generally called carrier function, which means that they provide space for activities such as human settlement, cultivation, transportation and habitat for animal. At the same time, wetlands are the production through providing resources for people such as food, water, raw material for building and clothing. The last function of wetland is the information functions, that is, wetlands provide scientific information, education, aesthetic and spiritual information (Schuyt and Brander, 2004).

The diversification in functions that wetland fulfill makes them phenomenal valuable ecosystems. They have a very high ecological value, providing the water and primary productivity as well as support intensified concentrations of birds, mammals, reptiles, amphibians, fish, and invertebrate species; additionally, they have an important socio-cultural value for example, in Australia many wetlands have a cultural value to their Aboriginal owners such as conducting ceremonies and semi-traditional hunting and gathering. In other parts of the world, in Hong Kong the Mai Poi Marshes are only places where residents can watch traditional methods of shrimp cultivation.

They do provide numerous of goods and services for populations who live in its boundary and nearby wetland areas; for instance, the staple diet of 3 billion people is rice which are grown in wetlands in many parts of the world. Important wetland services include the provision of recreational opportunities and amenities (Schuyt and Brander, 2004).

Therefore, a large number of people rely on wetlands for their livelihood and food security. Likewise, the development of tourism has increasingly been considered as a solution to the poverty reduction in wetland areas. In fact, tourism needs wetlands because tourists like to swim, canoe, dive, watch birds and other wildlife, learn about the nature or enjoy the landscape (Van Der Dulm *et al*, 2007). Hence, many wetlands become the primary locations for tourism such as Mediterranean coast, The Florida Key wetland area in the United States and Great Barrier Reef Marine Park in Australia (Van Der Dulm *et al*, 2007).

All mankind have known the word “travel” for more than one hundred years ago but the travel, at the early age, was related to survival through fishing, hunting, finding safety and security as well as learning about other cultures and enjoys new scenic (Edgell, 2006).

Later, it was traditionally related with leisure and vacation, and looks for rejuvenation and relaxation in a holiday (Tse, 2006); together with providing cultural knowledge, making friendship with local people and widen an experience in different geography as well as tourism industry creates new jobs, distributes currency at tourist areas which promotes and strengthens economic and social (Anonymous, n.d.).

Edgell *et al.* (2008) mentioned that tourism is the practice of travelling and also the business of providing associated products, services and facilities. Moreover, it is strongly related to cultural and social attempt, policy initiatives, economic development, environmental goals and sustainable services and products.

It is difficult to define the word “tourism” because it is highly complicated combination of various parts and these parts are miscellaneous range of factors, including human feelings, emotions and desires; attractions built upon natural and developed resources; suppliers of transport, accommodation, and other services; and government policy and regulatory frameworks (Holden, 2000).

However, there are many definition of tourism from various scholars and organizations. The first use of ‘tourist’ and ‘tourism’ expression was by Adam Smith from his writing in 1770 (Leiper, 2004). The earliest definition of tourism, additionally, was given by the Australia economist in 1910, “Bob total of operators, mainly of an economic nature, which directly relate to the entry, stay and movement of foreigners inside and outside a certain country, city or a region” as well as Tourism Society of England, in 1976, defined tourism as the short term movement of people to destination outside the places where they generally live and work and their activities during the stay at each destination (Anonymous, 2008).

Similarly, tourism was defined as the activity of person who temporary travels outside their normal environment and places and the activities undertakes during their staying in their destination. It may relate to leisure, business and other purposes. Furthermore, tourists do not lead to permanent residence and are not connected with any earning activities. Nonetheless, the essential requirements for tourism are time, money, mobility and motivation (Northern Arizona University, 2002).

Anyhow, the new idea of tourism is wider and scoped, defining it as the set of activities performed by people who travel and stay in places outside their usual environment for not more than one consecutive year, for leisure, business and other purposes (The European Commission 2002). A convenient definition was proposed by the World Tourism Organization (1991) which was afterward approved by the United Nations Statistical Commission in 1993: ‘Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not

more than one consecutive year for leisure, business and other purposes (UNEP, 2002).

David and Laura (2002) defined tourism to be more specific as the sum of phenomena and relationships arising from the interaction among tourists, the tourism industry, host governments, host communities, origin governments, universities, community colleges and non - governmental organizations, in the process of attracting, transporting, hosting and managing these tourists and other visitors (Weaver and Lawton, 2002).

The previous definition challenges the commonly detained opinion that tourism is purely concerned with recreation and having fun, including leisure or recreation (travel for holidays, sports, cultural events, and visiting friends and relatives), business, study or education, religious and health purpose (Holden, 2000).

After all, it can be said that tourism is an activity for vacation, business purposes and others as pilgrimage but it should not stay longer than one year. It provides a benefit; such as revenue and job creation, to host destinations as well.

2.2 Sustainable tourism

2.2.1 Importance and component of Sustainable tourism

Due to the fact that tourism industry is the major factor of economic development, many countries in worldwide especially in developing countries such as Thailand consider tourism as a driving force for economic growth. Therefore, tourism industry receives the privilege position in Economic Development Plan; however, even the state fully supports this industry, lacking of good management and control are able to effect on both natural resources and environment and culture.

Nonetheless, the economic growth can be harmony with the sustainable development which means tourism development must be clearly participatory, involving local people and business sectors in decision that affect their lives because the key success of sustainable tourism is local participatory and/ or control (Edgell, 2006).

At present time, new forms of tourism emerges after people have considered the importance of environment as well as when decision-makers become more and more aware of disadvantages of mass tourism, therefore they look for alternative tourism planning, management and development option. Consequently, the concept of sustainable development appears as an alternative (Choi and Sirakaya, 2006).

The term of sustainability first appeared in The World Commission on Environment and Development (WCED), reported entitled “Our Common Future” and since then, the word sustainable tourism was adapted and defined by WTO-OWT as, “*Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintain cultural integrity, essential ecological processes biological diversity and life support systems*” (Cernat and Gourdon, 2007).

Edgell (2006) defined sustainable tourism as achieving in a manner that does not diminish the natural resources and built environment and preserves the culture, history, heritage and arts of the local community; therefore, managing sustainable tourism can successfully enhance and enrich the environment.

The goal of sustainable tourism management is to improve the residents’ quality of life by optimizing local economic benefits, protecting the natural and built environmental and provide a high quality experience for visitors (UNCED, 1992) as well as to balance the number of visitors with the capacities of environment in a manner of an interaction that has least disruption and destruction (Montavalli, 2002). At the same time, to achieve sustainable tourism, every sectors, particularly the tourism industry, governments in all level, key associations and interested group/ nonprofit organizations, have to fully support one another with the long term policies that balance environmental, social, and economic issues must be the cutting-edge (Edgell, 2006).

The United Nations gave an outline for nature tourism into five elements as following (Montavalli, 2002);

- The main motivation of sustainable tourism is to observe and to appreciate nature as well as traditional cultures.

- It has to contain educational and interpretation features.
- It is organized for small group and business has to be owned by local.
- It minimizes the negative impact.
- It truly supports the protection of natural areas by generating income for host communities, providing alternative employment and income opportunities, and increasing awareness for conservation of natural and cultural assets.

The principle of sustainable tourism management is comprised of three main important components as following:

Tourism management emphasizes on the quality including the tourists' experiences, living standard of local community and the quality of environment.

It insists on the continuity of natural and cultural.

Managing tourism highlights a balance which is divided into two categories: first is the balance of needs among the government, private sector, non government organization (NGOs) and local residents. Another is the balance of corporation between people who is gain and loss in tourism sector (Chettamak, 2006).

Griffin and Boele (1993) additionally outlined the five main key elements for tourism sustainability that are preserving the current resources base for future generation, maintaining the productivity and biodiversity and avoiding permanent environmental changes, ensuring equity between generations and maintaining and protecting the heritage area.

Having known the principle of sustainable tourism management, which is not only managing tourism but the system of tourism need to be studies as well which is consisted of four facets (Chettamak, 2006a).

To begin with tourism destination and services, this aspect is an important component because of sustainable tourism development foundation. Therefore, to develop and manage tourism activities, the managers should consider these five things: evaluation all tourism activities in the tourism place, zoning the tourism sites for developing and conserving as well as seeking the natural resources and tourism services constraint, determining the carrying capacity, maintaining the resources by applying a measurement and rehabilitation, and controlling an effect of tourism activities.

Tourism facility and services are necessary for tourism but it depends on the type of tourism activities and tourism products. Tourism facilities, at the present time, are concerned pretty much that design is captured the environmentally friendly concept as well as tourism products or tourism activities should let tourists be closed with the nature and provide knowledge and understanding of the importance of tourism places. Essentially, the tourism services and facility must be safe for tourists and their assets.

Tourism markets, nowadays, are greatly complicated to guess despite the fact that tourist's behaviors and patterns have been changed by the world of technology; consequently, there are various types of tourism activities in order to meet the needs of tourists.

Management is an important mechanism for achieving the sustainable tourism because there are many factors for managing tourism, including vision and organization's policies, and personnel, participation of all involving stakeholders, fair benefit distribution following up and evaluation a results.

Therefore, the strategy for developing and managing tourism should be regard as a holistic way for example, the manager should know the tourism component such as tourism places, infrastructure, accommodation and tour agency. Understanding the tourism products include ecotourism, agro-tourism, cultural tourism, exhibition, and souvenirs. The whole tourism system likes the starting point, the destination, the agencies and the tourism promotion factors (Chuaibumrud, n.d.).

Undoubtedly, the decision-making and development process necessitate multi-stakeholder involvement, such as governments, tourists, hosts, tour operators, and other tourist-related businesses, in planning and policy maker to determine the amount and kind of tourism that community wants (Choi and Sirakaya, 2006).

From the review of tourism management literature, Hales (2006) stated that there is the new approach of tourism management which should be considered these three important ways, which are, switching from centralization to decentralization, shifting away from fragmented system to be more holistic and integrated form of working; lastly, changing the role of manger from 'command and control' to coordination.

Indeed, World Tourism Organization (1997) established the sustainable tourism management practices into seven aspects as follows:

- The development and management of tourism should consider the carrying capacity of physical, biological, social and cultural.
- The managers should regard the local needs and give a chance to the local people in participation as well as fairly distribute the benefit to tourism sites.
- The quality experience, which means that, all activities involve tourism or recreations, should provide the valuable experience to visitors.
- Travelers learn and are more understanding about the environment and the way of livings of local people.
- All facilities should be consistent with the nature and local architecture; including, materials that could be found on the sites.
- It is essential that integrated sustainable tourism with the local, region and national development plan.
- The data-based should be developed in order to verify a result and assist in decision making.

2.2.2 Tourism management

The community-based tourism (CBT) is a form of ecotourism which stresses the involvement of the local residents in planning and managing as well as the income is fairly divided. Generally, CBT emphasizes that the tourism enterprises are owned and managed by the community (RRCT, 2005).

Jain and Triraganon (2003) have proposed that the important objectives of CBT focus on the natural resources linking with the economic development but it is important to note that not only the environmental conservation and economic development but also cultural conservation, community and gender empowerment, poverty alleviation, income generation all should be also considered (The Mountain Institute, 2000).

There are two main role of CBT is participation in national and international events and policies. To begin with, the participation is the main purpose of CBT in

conservation and management. In terms of participation, it should allow the local people to identify both opportunities and problems. The ability of local people to actively participate in tourism development depends on various factors such as economic, social and ecology.

The second role of CBT is the national and international events and policies which mean that the CBT normally is located in remote areas; thus, the government should assess and consider the potential effect of the tourism in the tourist destinations. There may be the regulations to control the number of travelers. The international policies and actions have complex linkages with the visitor and local entrepreneur and the political instability is able to effect on the number of tourist (The Mountain Institute, 2000).

Moreover, making tourism more sustainable management, Page and Dowling (2002) should focus on the carrying capacity which means that the maximum number of people who can use an area without an unacceptable alteration in the physical environment and without an unacceptable decline in the quality of the experience gained by visitor for example, the Deer Valley Ski Resort in Utah, Deer Valley set as a target that the maximum of the visitors; 3,000 people who allow on the mountain at one time (Nickerson, 1996).

There are six elements of carrying capacity: physical, economic, social, environmental, perceptual and infrastructural carrying capacity.

Firstly, the physical capacity is the number of visitor can be afforded at a maximum level (Page and Dowling, 2002). Secondly, the economic carrying capacity is the number of traveler can be greeting before the local communities become bear the economic problem (Swarbrooke, 2005).

Third, the social carrying capacity is the number of the visitors without social disruption and cultural damage (Swarbrooke, 2005 and Page and Dowling, 2002). Then, the environment carrying capacity is the number of people that can welcome without causing an environmental degradation (Swarbrooke, 2005).

Next, perceptual capacity is the number of tourists that place can receive before the tourist experience begins to be affected (Swarbrooke, 2005). Lastly, the

infrastructure capacity is the destination infrastructure can comfort a number of tourists (Swarbrooke, 2005).

There are four types of CBT that should be considered (The Mountain Institute, 2000);

1. The participation in the sharing of economic benefits amongst the decision-makers of economic activity that generates the benefits such as beneficiary of portion of entrance fees and employment
2. The participation in planning participant role plays an important in providing the information.
3. The participation in implementation and operations that participants also play an essential role in implementing activities and setting up the institutional arrangement
4. The participation in decision-making and arrangement which is participants play a key role in the choice, design and management of CBT such as conservation activities.

2.2.3 Indicator of sustainable tourism

Traditionally, tourism development comprises of three dimensions: economic, social or socio-cultural, and environment but Choi and Sirakaya (2006) pointed out that there should add political and technological dimensions at the international, national, regional, and local community levels because these two dimensions are also the driving force of tourism growth; for example, technological advances in transportation, information and communication systems have closely influenced the growth of modern tourism. At the same time, this advance information technology, such as the World Wide Web, e-mail, and e-commerce, offers communication networks that let stakeholders to exchange information (Marien and Pizam, 1997), allowing for the creation of visitor-education networks and giving access to a wider market through the Internet (Milne and Mason, 2000).

Actually, the social indicator started in the mid-1960s when the researcher and politicians became unhappy with the quantity and quality of presented social information. Nowadays, there are many national and international organizations,

including the UN, IISD, UNCSD, Sustainable Seattle, UNDP, and the World Bank has developed sustainable indicators.

Therefore, the objective of tourism indicator as the WTO remarked is to “identify a small set of indicators which is likely to be useful in almost any situation; to supplement these with additional indicators known to be useful in particular ecosystem or types of destinations; and to additionally require a scanning process for risks not covered by the aforementioned indicator sets, which produces further indicators critical to the management of the particular site or destination” (Manning 1999).

In order to clarify the goals of sustainable tourism and its indicators, there is the guideline which is based on the works from many scholars (Choi and Sirakaya, 2006), as followed:

- Sustainable tourism strategies must create effective policies and proper decision-making processes at all levels of government.
- Sustainable-tourism policies should present workable definitions, principle, implementation strategies, action plans and a monitoring system with consideration of the entire scale.
- The milieu of sustainable tourism involves many stakeholders so political supports in the form of binding promises at the national and regional level is an obtaining information, funding, education, and expertise.
- The transparent process of using and evaluating sustainability indicator enable full community participation.
- Sustainable indicator requires an organizational body to guarantee the long-term sustainability.
- Sustainable indicator serves as warning system, not only to prevent the negative impact of tourism development but also to promote sustainable growth.

According to Choi and Sirakaya (2006), they pointed out the indicators that should be considered for each dimensions: economic, social, cultural, ecological, political, and technological dimension. Started from economic dimension, there are six key subjects that should be well thought-out, that is, employment (e.g.

employment growth in tourism, and unemployment rate), income distribution (leakage and linkage) (e.g. percent of income leakage from the community, import contents, and tourism as percentage of local economy) capital formation in the community or investment (e.g. available of local credit to local business, percent of profit or revenue reinvestment in community development, and entrepreneurial opportunities for local population), nature of demand (e.g. tourist visitation, and percent of repeat visitors), economic well-being (e.g. local community economic stability) , labor or company and job condition (e.g. equal opportunity employment and promotion to women and local population, and existence of an adequate fee structure), and local government income (e.g. hotel tax).

The second dimension is social which has seven main key theme indicators: host community and stakeholders (e.g. host community satisfaction and attitude toward tourism development, and resident involvement in tourism industry), social cohesion (e.g. change in community structure evident of a community breakdown and alienation), sex tourism (e.g. present employed in sex tourism, community attitude towards sex tourism, and prostitution number and rate in local sex tourism industry), tourist satisfaction community resources (e.g. tourist satisfaction towards tourism development, and degradation or erosion of natural and cultural development), distribution of resources (e.g. shift in social structure), community health and safety (e.g. pollution like air, water, crime rate, overcrowded, and loss of traditional lifestyle and knowledge via modernization), and quality of life in general (e.g. level of satisfaction with community life in general).

There are four indicators for cultural dimensions which are considered: firstly, the architecture in the tourism destination like the type of building of material; secondly, cultural site management indicates the cultural sites maintenance level, number of officially designated sites and its management, and the availability of cultural site maintenance fund and resource commodification; then, socio-cultural fabric is mark on loss of authenticity and becoming impersonal as well as retention of local customs and language; finally, the cultural education means that the type and amount of training give to guide, and type of information given to visitors.

The measure for the ecological dimension is loss of renewable resources as amount of erosion on the natural sites, number of good air quality days and number of

contaminated sites; rate of ecosystem destruction is an expression on the level of protection, and energy consumption data; assessment of environmental impacts of tourism activity, the indicator is number of endangered species; reuse and recycling rates measure from the timber growth and removal, availability, size, and condition of urban forest; health of residents and visitors; loss of non-renewable resources like level of losing vegetation, stress level and site attractively.

Despite the politics arising in the achieving the sustainable tourism; there are four major indicators that should be concerned: (1) the local oriented control policy is that the presence tourism authority or planner in the community and the availability of development control policy; (2) political participation; for example, the local population participate in planning process as well as public-private sector partnership; (3) local planning policy is related to the tourism master plan; (4) political supports in all level of governments; for instance, the two way communication between local people and local government.

The last dimension is the technological dimension which plays an important role for the tourism development growth by considerable accurate data collection and tourism information change.

As Choi and Sirakaya (2006) have proposed the sustainable indicators based on the dimension, Hughes (2002) recommended that the indicators reflect the different policies needed by categories into three aspects: corporate indices, national level indicators and site or destination specific indicators. This three-category division forms the top level of the hierarchy of indicators.

For the corporate indices, the indicators respond in all respects to the need to measure the state of environment, tourism-environment linkages, and the effects of tourism actions. This indicators monitor both biological and physical, and measure of the levels of different types of tourist use which can be sustainably supported by different ecosystems as well as identify the limits of carrying capacity for representative ecosystem types, the sensitivity of certain parts of the natural and cultural environment and the level of pollutant generation by the industry. For measuring the specific issue like ecological stress, Hughes (2002) proposed to

monitor species loss, biodiversity, ecosystem resilience change to critical habitats, and specific measures of chemical and physical change.

Essentially, the most important practical indicator subjects is candidate or medium term indicator because at a national or regional level that tourism decision-makers need to know to build forwards a more sustainable form of tourism development. There are the short lists of candidate indicators for national level, that is, (1) the percentage of area protected (2) measure the endangered species for alert policy makers (3) use intensity for alert policy makers to the distribution of sites currently and potentially under stress (4) the key resource consumption such as water, energy, and fuel (5) the environmental standards means the percentage of homes and hotel connect to water and sewerage systems (6) environmental planning is what strategies and code of practice exist for tourist operators and tourists, and (7) environmental review process is to evaluate effectiveness of EIA process, development application process.

The International Federation of Tour Operators designed the indicator for minimal of base level that classified indicators into five topics: population, the indicator for population is the dynamics of population like the continuous and major migration of working population. The second indicator for this level is tourism which means that the maintenance of quality and monitoring ecology: for instance, persistent criticism of accommodation, overcrowding, ecological conditions, and aesthetics. For ecology indicator, the International Federation of Tour Operators purposed to study the guests aware of environmental problem (environmental consciousness) and lastly, politics indicator is the existence of ecologically-oriented quality standard (Hughes, 2002)

On the other hand, Fennell (2008) identified the indicator into two categories: 1) supplement ecosystem-specific indicators and 2) site-specific indicators which are developed for a particular site. The site specific indicators are quite similar with the indicators were illustrated by Consulting and Audit Canada's (1995) guide to the development of core and site-specific sustainable tourism indicators (Fennell, 2008).

2.3 Study area: Don Hoi Lot

Geographical Description of Bang Jakreng

Bang Jakreng district is one of the administration of Amphoe Muang district, Samut Songkhram province, far from Amphoe Muang district approximately 4 kilometers, and with boundaries with Ban Kaew sub-district on the north, and on the south, connects with Laem Yai sub-district, Amphoe Muang, Samut Songkhram province. The eastern part is bounded by the Gulf of Thailand and Samut Songkhram municipality encloses on the west.

The total area of Don Hoi Lot which is under the Bang Jakreng sub-district administrative organization is 24.09 km² or 15,056.25 rai. This area is the coastal zone; thus, the climate is quite warm. The soil at the mangrove areas is saline because of sea water; the shore line is a mud soil (OEPP, 2002a).

Demographic Characteristics

Most people in Bang Jakreng sub-district descend from Myanmar people. In the very beginning, there were only 10 households and were very poor but nowadays, there are five villages under Bang Jakreng sub-district administration: Baan Raman Tawan Tok, Baan Bang Jakreng, Baan Klong Klang, Baan Shushee and Baan Raman Tawan-Ok. The total population of all five villages is 4,566 people: male are 2,244 people and female are 2,322 people and 1395 households so the population density is 686.61 people/ km². The highest population is in Bang Jakreng village with 1916 people and 600 households; on the other hand, the village which has the lowest population is Baan Klong Klang, 190 people and 88 households. Every village, except the Baan Raman Tawan Tok, has a number of female higher than male.

Economic condition

The remarkable occupation is fisherman. They generally culture shrimp, crab and sea mussel farms which include collecting Razor clam, agriculture, labor and business. It can be noticeable that along the mouth of the Mae Klong River, there are two big petrol stations and a big port as well as the number of factory is raised and expanded due to the economic growth.

Social condition

In Bang Jakreng village, there are 3 primary schools and one secondary school but there is no library. Additionally, there are two temples around this village and H.R.H. Admiral Prince Abhakara Kiartiwongse Prince of Jumborn Royal Court. There are two health centers available for local communities. This village has no post office and telecommunication but all households can access the electricity and road. The water resource has both natural and manmade (Anonymous, n.d.a).

Natural Resources

This area is abundant of mangrove forests, both natural and replanting forests, which are the shelter and a source of food for aquatic animals and migration birds. However, Razor clams used to plentiful at Don Hoi Lot.

Characteristic feature of Bang Jakreng sub-district

Most people in Bang Jakreng sub-district is fishermen and growing aquatic animal in blackish water such as shrimp farming and crab farming. Moreover, they are established the related tourism business, that is, selling seafood, and restaurant including small industry. The important tourism places in this sub-district are Don Hoi Lot, H.R.H. Admiral Prince Abhakara Kiartiwongse Prince of Jumborn Royal Court, and Wat Sattratham.

Ramsar site

Don Hoi Lord is the third Ramsar site in Thailand and number 1099 in the list of international important of wetland (SAO Bang Jakreng, n.d.). It is located at Bang Jakreng sub-district, Muang district, Samut Songkram province. The total area is 24.09 Km² or 15,056.25 rai. The geographical coordinate is 13° 17' - 25' N 99° 55' to 100° 00' E. The type of wetland in Don Hoi Lot is mudflat and mangrove forest (Office of Environment Policy and Planning, 2002).

Physical status

Don Hoi Lot is the coastal wetland which occurred by forming of sediments from the sea around the estuary of Mae Klong River, the length from coastal land into the sea is about 8 km. (Office of Environment Policy and Planning, 2002). Don Hoi Lot has seven bars and each bar is separated by a watercourse. However, there are only five bars which are abundant of Hoi Lot (*Solen regularis Drunker*) (SAO Bang Jakreng, n.d.).

Biological status

This area is the mudflat area where Razor clam (*Solen regularis Drunker*) resides. At least 18 species have been found in Don Hoi Lot and adjoining mangrove forests, including both endanger species (e.g. grey heron), and near-threatened species (e.g. brahminy kite, and little tern); in addition, at least 42 invertebrate species have been recorded including jellyfish, poison-jelly-fish, ribbon-worm, and king ragworm. Among these species, there are approximately 10 species are mollusk such as San snail (*Natica maculosa*), and horse mussel (*Modiola senhauseni*). The mangrove forests are dominated by small-leaved mangrove (*Rhizophora apiculata*), and large-leaved mangrove (*R. mucronata*), Red algae (*Rhodophta*) (Office of Environment Policy and Planning, 2002).

Values and benefits

Don Hoi Lot is a source of various fishery products, especially Razor clam which is a prominent economic species, generates significant income for local communities. In case of conducting ecological studies, Don Hoi Lot is an example site where has been used by many institutions for research and sample collection for studies such as taxonomy, ecology, and evolutionary sciences (Office of Environment Policy and Planning, 2002).

Don Hoi Lot has outstanding characteristic and beautiful scenery; thus, it is one of the important tourism sites and it can be said that *Solen regularis* in this area is the most plentiful in Thailand (SAO Bang Jakreng, n.d.).

Nevertheless, because of tourism industry, community expansion, and agricultural activities and management problem, all these cause water pollution, as solid waste, destroy and invade the mangrove area for developing infrastructure and aquatic farming as shrimp farming (SAO Bang Jakreng, n.d.).

Scenic place

The tourism activities in Bang Jakreng sub-district are various including natural attraction, manufactured attraction, cultural and traditional activities. For the natural attraction which is an important place in terms of biological diversity, and socio-cultural value,

The cultural tourism place in Bang Jakreng sub-district is “Wat Sathratham” or the local people call “Wat Mon” which is constructed in 1798 by Mon people around 12 households who escaped from the civil war in Myanmar (SAO Bang Jakreng, n.d.).

The archaeological tourism place is H.R.H. Admiral Prince Abhakara Kiartiwongse Prince of Jumborn Royal Court which is situated nearby Don Hoi Lot (Thaitambon, 2000).

2.4 PESTLE analysis

In fact, the movement of the society creates an uncertain environment and is able to impact on the function of the whole organizations (Tsiakkiros, 2002). A vast number of checklists, thus, have been developed as a way of possible issues that could prevent an effect on industries due to the fact that it is important to identify the factors that might affect or likely influence the organizations while analyzing the macro-environment (Rotter and Schlesinger, 1991; and Johnson and Scholes, 1993).

The PESTLE analysis is one of the checklists that examine the impact factors, which has been used more than ten years. The tool and technique were used for scanning the business circumstance. In the 1980s, many authors classified various acronym orders for PESTLE Analysis such as PEST, STEEPLE. In addition, PESTLE is acronym for P: political, E: economic, S: social, T: technological, L: legal and E: environmental (Morrison, 2008).

This instrument helps organizations to prevent, to minimize, and to systematically investigate the external environment in a big picture (Anon, 2008a; Morrison, 2008; and Renewal Associates, 2003). Its importance is to ensure and to avoid the failure from the outset and beyond the control. Moreover, this method helps the organizations to break free of unconscious assumptions and to quickly adapt to the realities environment (Anon, 2008a); at the same time, its result can be used to take an advantage of opportunities and make a strategic plans or plans for threats (Byars, 1991; and Cooper, 2000). Yet, Kotler and Schlesinger (1991) have claimed that this method is a useful strategic tool for understanding the market growth or decline and the direction of operations.

2.4.1 PESTLE method

To apply this application, there are three simple step processes. Starting with brainstorming, the relevant factor has been applied. Then, identify the information; this point is important because this stage just describes the factor without thinking

through their meaning. Finally, the organizations have to draw the conclusion from this information and to use the result as a starting point to test (Anon, 2008a).

The PESTLE analysis has three main elements. Firstly, a descriptive list of factors influences or pressures the identified implication and impacts now or future for the organizations, for example the PESTLE components: political and economic aspects concern the global, national, regional, and community trends, changes and events. Social issue regards the developments in society-culture, behavior, expectations, and composition and environmental part considers the global, national and local issues, pressures and movements.

The second element is to identify the implications and external factors and to record for all or some components of an organization; for instance, this method is implication for stakeholders, clients or associated organization.

Lastly, assessing the implication factions with the impact in time, by type (positive or negative impact) and by dynamic (the impact increasing, unchanged and reducing) will help to locate their importance on relative scale. There is also the relative importance of implication for external factors: critical, very important, important, significant and unimportant.

2.4.2 Application of PESTLE

Several companies, organizations and researches, in many field such as human resource development and environmental field, apply this method to identify the impact and the advantageous.

Some of the companies used this tool with SWOT analysis as in case of in Giant Hypermarket is a major market and retailer in chain in Malaysia. This supermarket applied both PESTLE and SWOT analysis to identify both external and internal environments of the company. The PESTLE analysis helped this supermarket to understand the external circumstance in which this organization operated. After applying these methods, the result came up with better to improve their supermarket (Anon, 2009).

Oldsberg and Svensson (2008) applied PESTLE analysis in their research on the internationalization of a sustainable water managing company in order to get

accurate information from their three cases studies areas: Brazil, China and Spain. Consequently, their finding was aligned with the reality as well as matched the company's objective and orientation.

Another application of PESTLE analysis was in the big fashion company namely ZARA. As a matter of fact that fashion market has a high competitive, ZARA, a Spain fashion retailer, utilized this analysis to emphasize on the micro and macro environments that would affect this venture because this tool covers all concerned aspects (Anon, 2008b).

2.5 Relevant Research

Johnston and Tyrrell (2008) have presented that the sustainable tourism concept is still ambiguous due to the fact that the confusion is particular with specific tradeoffs, policies, actions or indicator that are consistent with notions of sustainable tourism. Moreover, the detail of sustainable tourism requires what elements are to be sustained, the level at which these elements should be sustained and the stakeholder groups whose benefits should be considered. Therefore, Johnston and Tyrrell have shown the characterizes fundamental notions of sustainable tourism from the perspectives both of a profit-maximizing tourist industry and of permanent residents of a tourist community in his research and the key finding form their work is sustainable outcomes, and characterizes the potential conflicts, hazard and tradeoffs implicit in the choice among different sustainable futures.

This research studies to develop indicators to measure community tourism development (CTD) and to apply both at the local and at regional level. Choi and Sirakaya (2006) utilized a modified Delphi technique. As a result, the researchers found a set of indicators for CTD: political, social, ecological, economic, technological, and cultural dimensions (Choi and Sirakaya, 2006).

Cooper (2005) mentioned that the study and practice of knowledge management has been grown promptly, which is driven by social, economic, and technological trends. Anyway, tourism has been slow in approving as a result of a

lack of gearing between researchers and tourism and a hostile knowledge adoption management. Therefore, his work provides a model for tourism.

Sainaghi (2005) stated that the growing tourism competition is more and more apparent both national and international. In fact, every destination has to position its product that gives them character and personality. His research, in addition, proposed a dynamic model of destination management (DDMM) which identifies typical metamanagement processes destination management organizations (DMOs). This model emphasizes the two different types of metamanagement processes: first, a series of operative actives, is a primary processes, which is able to shape the resources of the district and serve to create, supply, and communicate local product systems and secondly, a series of support processes provides the “glue” between various players such as public and private, profit and non-profit, entrepreneurs and community.

As Europe is the leading destination in the world tourism, maintaining and improving high quality supply is essential. Go and Govers (2000) have mentioned in their research that integrated quality management in tourist destination is significantly underdeveloped. Generally speaking, destinations lean to be strong in one element of the European Foundation for Quality Management (EFQM) such as policy and strategy or human resources management.

Dredge (2004) mentioned that crossing network public and private sectors nowadays are increasingly important in terms of tourism planning and development. The formal and informal relationships between local government and private sectors have an effect on the capacity of the destination. The finding from this research showed that the appropriate management tools between state and private sections required.

Briassoulis (2002) stated that sustainable development wisely calls as management of natural, built, and socio-cultural resources in destination areas as well as resources created mainly for tourism and are used by local people but when resources are overused and degraded, sustainable development is severely threatened economic well being declines, environmental conditions worsen, social injustice grow, and tourist satisfaction drops. Thus, this research examines the central role played by sustainable tourism development, outline policy design principle for their management.

CHAPTER III

METHODOLOGY

3.1 Research Design

This research conducted both the qualitative and quantitative research. Stakeholder analysis was applied to identify the key stakeholder on tourism management at Bang Jakreng sub-district. The qualitative research was used to determine the attitudes of both tourists and traders towards the tourism impact and the sustainable tourism indicators within four dimensions: economic, environmental, socio-cultural and political issues together with the satisfaction of tourism at Don Hoi Lot.

For the qualitative research, the in-depth interviews were applied in order to know the general information of the study area such as the problems and the existing condition. In-depth interviews were used with the sub-district officers. These interviews focused on the management practices of SAO.

The statistical analysis, moreover, was used for analyzing the structured questionnaire and matrix ranking, mapping and checklist were used to analyze the qualitative research. Finally, the PESTLE analysis was employed to see the macro environment of SAO's management.

3.2 Research process

This research processes are divided into 4 steps as follows:

Step 1: Reviewing the literature

The researcher reviewed the literature in order to state the objective of this study. The previous researches were reviewed such as the policy, roles and

responsibilities of SAO and tourism strategies that are vital step in the research process. The outcomes of this step were comprised relatively new areas of academic enquiry which were wide-ranging and multi-disciplinary in nature.

The data was collected through such method as review the researches, books, journals, and articles. The information revised the definition of wetlands, their importance, and the definition of tourism to figure out what is wetland tourism as well as the information of the study area: Don Hoi Lot which is one of valuable economic wetlands in Thailand, its importance and its characteristic: has been studied. On the other hand, some information that was related to other stakeholders (local residents, local tour agencies, and private sectors) was collected from the sub-district office

Step 2 Stakeholder analysis

From the reviewing the literature, the researcher found that there were various types of stakeholders. Therefore, this study was applied stakeholder analysis to identify key stakeholder (Schmeer, n.d) that has the processes: listing the list of stakeholders from reviewing, key performances (SAO members) and observation; applying Matrix ranking (Appendix E): the questions which were used to determine stakeholder were internal or external, knowledge level, position, interests, alliances, and resource, and grouping the stakeholder, respectively. Therefore, this research classified the stakeholder into 2 groups.

Step 3 Questionnaire design

General survey was commonly used technique in this study.

Step 4 Questionnaire survey

A sample was selected from the population. The use of the term population made obvious sense when dealing with stakeholder group. A sample which was not representative of the population was described as biased. The whole process of sample relation must be aimed at minimizing bias in the sample. The researcher seeks to achieve representativeness and to minimize bias by adopting the principles of random samplings. In random samplings, all members of the population had an equal chance of inclusion in the sample (Veal, 2006).

Data collection was conducted within two days period in Don Hoi Lot, Bang Jakreng sub-district, Samut Songkhram province. The respondents were used simple random sample technique. Twenty tourists were interviewed on August 8, 2008 with 58 questions; in addition, 10 traders were interviewed on September 22, 2008 with 56 questions to collect information. Time for interviewing one respondent is approximately 30 minutes. The framework of questions is based on some principle for interviews in order to mitigate bias, confusion and ethic issues (Neuman 2004, Paul 2004).

The structured questionnaire contains for sections:

- To identify the basic characteristic and information perception before travelling at Don Hoi Lot, the first nine questions aim to determine their individuality and their information perception.
- To explore the opinions and attitudes of tourism at Don Hoi Lot focusing on the tourism resource information.
- To determine respondent's attitudes and satisfaction of tourism impacts and tourism management at Don Hoi Lot.
- To evaluate the tourism indicators which were divided into three issues: (1) socio-culture around Don Hoi Lot; (2) environment, and (3) economic. This section aims to identify the tourism practices at Don Hoi Lot (Appendix C, D).

On the other hand, the structured questionnaire for traders consists of three sections. The attitudes of tourism at Don Hoi Lot were eliminated; conversely, the political aspects were added into the tourism indicators in order to evaluate the knowledge and the participation of respondents in management and planning.

Step 5 Rapid Rural Appraisals (RRA)

Qualitative methods used for this step. RRA imposed the researcher's view on a situation; the researcher designed which were the important issues and which questions were to be asked and determined the whole framework.

RRA was generally based on the believe that people personally involved in a particular situation were best placed to describe and explain their experience or

feelings in their own words that they should be allowed to speak without being overlay constrained by the framework imposed by the researcher.

The technique for accessing SAO management practice that had been developed was Rapid Rural Appraisal (RRA). The data collection was also conducted within one day period in Bang Jakreng sub-district, Samut Songkhram province. 15 sub-district officers, including SAO council member, village chief, village headman and volunteers, were invited to do the in-depth interviews on November 12, 2008 from 9.00 am-12.00 pm. To do so, the main focused of these discussions was tourism strategies for management which was divided into three sessions.

The researcher explained the objectives of this research to the SAO officers and the activities. The investigator focused on the existing condition and the problem which caused impact on Don Hoi Lot. The method in gathering information was the mapping in order to present and analyze information. The last but not least, sub-district officers had to figure out the SAO management practice; besides, comparing the management practice in the past with the present time. The summary of this discussion was the final session.

Prior to the interview session, each group was requested to choose their leader with the prime role and responsible to control the interview. The discussion session was divided into three sessions. The researcher only observed the interaction of all stakeholders and took note.

Through the in-depth interview, the obstacles in satisfying the concerns of different interests were identified, solutions were explored and some conflicts were resolved. The researcher let the respondents discuss their concerns and their interest based on management practices, particular tourism management as well as the existing information on the study areas. During RRA, a note of the action of the participants involved was crucial for example, those who were not talking or taking a nap or not participating. Each period, additionally, has different activities for example the first part; the participants have to do mapping and checklist to identify SAO management in four pillars together with comparing the previous time and the present time.

The researcher noticed the characteristic of participants; for example, how the participants answer the question and the participants let the researcher frequently explain the question or expand the questions.

Step 6 Data analysis

Data analysis for the objective 1

For qualitative research, the general characteristics of tourists and traders, the attitudes and the satisfaction of both tourists and traders on tourism impact and tourism management, the data overall were analyzed through some descriptive statistic method like percentage.

SPSS (Statistical Package for Social Science) software version 15, data was used for questionnaire analysis,

- The attitudes of tourists on tourism impact and tourists' satisfaction on tourism management
- The attitudes of traders on tourism impact and traders' satisfaction on tourism management
- Comparing the general characteristics between tourists and traders
- Comparing the tourism impact between tourists and traders
- Comparing the satisfaction on tourism management between tourists and traders
- Comparing the tourism indicators between tourists and traders

The chi-square testing was used to determine the differences of general characteristics of both groups. The one sample t-test, moreover, was applied to find out the attitudes and satisfaction of both groups on tourism impact and tourism management, respectively. It was remarkable that the test value of tourism impact was set up at 17.5 which is the half range of the total scores and the test value of satisfaction on tourism management was fixed at 25 which is the half range of the total scores as well as the political indicator test value was specified value at 22.5 because of the half of the total scores as well. T-test, furthermore, was used to determine whether the tourists and the traders has a different attitudes or not with the tourism impact, satisfaction on tourism management and tourism indicators, except political indicator at the 0.05 significance level.

The matrix ranking was employed to compare the attitudes of tourism impact and the satisfaction on tourism management at Don Hoi Lot of tourists with traders.

Data analysis for objective 2

The management practices of SAO was identified by checklist analysis and the SAO structure was reported by descriptive

Data analysis for objective 3

The PESTLE analysis was used to evaluate the factors that influenced on SAO management practices at Don Hoi Lot. This study used only PESE analysis. The reasons that this research did not use legal and technology was Bang Jakreng sub-district, in fact, do not invest much in technology and the responsibilities of SAO do not involve in enacting law. Therefore, this research paid attention to the politic, economic, socio-culture and environment.

The main purpose of this method is to understand the big picture of the management of SAO. The PESE analysis was conducted after the researcher had analyzed all data because the researcher had to compare the secondary data with the primary data during analyzing process.

Step 7 Research output

This research provided the appropriate management indicator and the lesson learn which gained from this research together with the recommendation for future research.

Table 3-1 Research process

Research steps	Processes		
<p>Step 1 Literature review</p>	<p>Statement of the study and objectives</p>		
<p>Step 2 Data collective</p>	<p>The primary data are collected by using</p> <ul style="list-style-type: none"> • Identify the stakeholders • Questionnaire • In-depth interview: Rapid Rural Appraisal (RRA) and Checklist <p>The secondary data are collected from sub - district office and traders</p>		
<p>Step 3 Data analysis</p>	<table border="0"> <tr> <td data-bbox="667 732 927 891"> <p>Quantitative Descriptive analysis T-test One Sample- T-test Chi-square</p> </td> <td data-bbox="1050 732 1289 920"> <p>Qualitative RRA Checklist PESTLE Analysis</p> </td> </tr> </table>	<p>Quantitative Descriptive analysis T-test One Sample- T-test Chi-square</p>	<p>Qualitative RRA Checklist PESTLE Analysis</p>
<p>Quantitative Descriptive analysis T-test One Sample- T-test Chi-square</p>	<p>Qualitative RRA Checklist PESTLE Analysis</p>		
<p>Step 4 Research output</p>	<p>The appropriated management indicator Lesson learn Recommendation</p>		

CHAPTER IV

RESULTS AND DISCUSSION

The results are divided into three specific parts in relation to the objectives: the attitudes of tourists and traders towards tourism management at Don Hoi Lot (Ramsar site), understand the management practices at Don Hoi Lot (Ramsar site) by sub-district Administrative Organization (SAO) and explore the sustainable factors that influence on the tourism management at Don Hoi Lot (Ramsar site).

4.1 Stakeholder groups at Don Hoi Lot

It was found that the stakeholder groups at Don Hoi Lot were mainly divided into two groups: tourists and traders which were highly influenced on tourism activities.

4.2 Tourists

4.2.1 The general information

The general personal characteristics of tourists include gender, age, education, occupation and monthly income in which all of the 20 persons who are target groups have any of the characters as follows;

Gender: the study found that the most tourists are male which is accounted for 55% and female have 45%.

Age: the ages of tourists were from 31 to 45 years old which is accounted for 35% and tourists with more than 45 years of age is accounted for 35% as well.

Level of Education: half of the tourists had education level in secondary school. Though tourists graduated equal or higher than high school, is accounted for

25%. But tourist whose level education was either illiterate or primary school is accounted for 25%.

Occupation: none of this group is farmer and laborer. The major occupation was related to service section and business which is accounted for 40% as well as other fields as engineering, housewife and employees accounted for 40%.

Monthly income: majority of the tourists had monthly income higher than 10,000 Baht but not over 30,000 Baht which accounted for 75%. Despite the fact that there were two of them had income more than 30,000 Baht.

It can be said that the travelers are mostly male who visit Don Hoi Lot with the main purpose of having lunch and then visiting other places such as Amphawa or Cha-Am. The age range is between 31 and over 45 years old despite the fact that traveling at Don Hoi Lot is one day trip and spends less money, as well as the visitors are able to buy both fresh and dry seafood back home for cooking.

Table 4-1 The general characteristic of tourists

General Characteristics	n=20	Unit %
Gender		
Male	55.0	
Female	45.0	
Age (years old)		
≤30	30.0	
31- 45	35.0	
>45	35.0	
Education		
None - primary school	25.0	
Secondary school	50.0	
≥high school	25.0	
Occupation		
Farmer and labor		
Service and business	40.0	
Officer	20.0	
Others	40.0	
Income (in BHT)		
≤10,000	15.0	
10,001 - 30,000	75.0	
>30,000	10.0	

Transportation and activities

In table 4-2; the result showed that there are a huge number of tourists (85%) had ever come to Don Hoi Lot because the distance is not far from Bangkok. It can be said that the first time tourists was 14.99%, second times was 39.99%, and more than three times was 14.99%.

Tourists mostly did not find any information before visiting; contrary, tourists who looked up the information from friends (15%), from relation or cousin (10%), travel journal (10%) and from internet (5%).

The main transportation that group took to visit Don Hoi Lot was private car (70%) but only few tourists chose to use public transportation (10%).

In summary, most tourists visited Don Hoi Lot more than one time (85%) without searching the information because the information is easy to get and available in many sources. Moreover, Don Hoi Lot is not far Bangkok, approximately 70 km.

Table 4-2 Transportation and activities

Characteristics of Tourism Activities	n=20	Unit %
Time visiting		
First time	15	
≥1 time	85	
1 time*	14.99%	
2 times*	39.99%	
3 times*	5.00%	
4 times*	14.99%	
5 times*	25.00%	
Information perception (before visiting)		
No	60	
Information source	40	
Friend**	15%	
Relative/ cousin**	10%	
Travel journal**	10%	
Internet**	5%	
Transportation		
Private car	70	
Public Transportation (Bus)	10	
Van rental	20	

Remark: * = from ≥ 1, ** = Information source

4.2.2 The impact of tourism activities at Don Hoi Lot

Opinions and attitudes of tourism affected at Don Hoi Lot which is reflected are the results: the average score of tourists' attitude towards tourism impact on site are 20.3500 (table 4-3). Moreover, tourism activities do not have any impact at Don Hoi Lot because t value is equal 3.133 which is lower than test value (17.5). With significant confidence level of 99.5%, results from one sample t-test ($t = 3.133, p = 0.005$), it is found that tourism activities are significantly different in relation to tourism impact (table 4-4).

Table 4-3 Attitude of tourists on tourism impact

	Mean	SD
tourism impact on tourist site	20.3500	4.06882

n=20

Table 4-4 One sample t-test (the attitude of tourists)

Test Value = 17.5					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
tourism impact on tourist site	3.133	19	0.005	2.850	0.945	4.754

Table 4-5 presented that the tourism activities did not cause coastal erosion (90%). A half of tourists (50%) strongly believed that tourism activities cause bad odor owing to garbage and smoke of boat as well as the landscape of Don Hoi Lot was blocked by small shop along it (45%). Furthermore, it created a huge of garbage which accounted for 70%. The waste water discharged from restaurants and small shops into Don Hoi Lot (75%). Otherwise, using lime stone for collecting razor clams

affected the ecosystem in low level. However, boats are used for visiting fishing village slough of gasoline on the surface of river (70%).

In short, the tourism activities have a high impact on Don Hoi Lot, especially bad odor, landscape, amount of garbage, wastewater discharged and scum of gasoline. The bad odor around Don Hoi Lot comes from garbage that is no exactly place for disposal and inadequate bins around tourism site, as well as wastewater form household, restaurant and factory discharge into Don Hoi Lot that cause polluted water. Boats which are used for visiting fishing village bring scum of gasoline.

Table 4-5 The attitudes of tourists towards tourism impact at Don Hoi Lot

Characteristics of impact	n= 20	Unit%
Coastal erosion		
High	0	
Moderate	10	
Low	90	
Bad odor		
High	50	
Moderate	30	
Low	20	
Landscape		
High	45	
Moderate	20	
Low	35	
Amount of garbage		
High	70	
Moderate	10	
Low	20	
Waste water discharged into wetland area		
High	75	
Moderate	20	
Low	5	
Using lime for collecting worm shell		
High	10	
Moderate	40	
Low	50	
Slough of gasoline		
High	70	
Moderate	15	
Low	15	

4.2.3 The opinion and attitude of tourism management

Table 4-6; it presented the tourists' attitude during the travel, the number of tourists (55%) did not receive any information for the duration of their visit; on the contrary, tourists gained information like Don Hoi Lot information from community information center (15%) and from information board around tourism site (15%).

The respondents in the interview recommended that the sign board as for giving direction need to be improved (85%) due to the fact that it is very rare and very difficult to recognize.

During the peak time (holiday), there were only few numbers of tourists feel inconvenient (10%).

Thus, the information board is unnoticeable and very rare and contents as well as quality require urgent improvement. Consequently, tourists cannot acquire much information at the same time most tourists visit Don Hoi Lot for shopping, meeting and eating.

Table 4-6 Opinion and attitudes of tourists towards Don Hoi Lot

Characteristics of Opinions and Attitudes	Unit% n = 20
Information perception	
<i>None</i>	55
Information sources	45
Community Information Center*	15%
Information board around tourism area*	15%
Guide*	5%
Other*	10%
The quality of information board or sign	
<i>Should be improved</i>	85
Fine	15
Congest felling	
High	10
<i>Moderate</i>	45
<i>Low</i>	45

Remark: * = Information source

The researcher used the statistical analysis for analyze the tourists' satisfaction. Table 4-7; the result showed that the shop arrangement at Don Hoi Lot made tourists satisfied at the same time during travelling at Don Hoi Lot, the majority of this group felt safety which is accounted 65% as well as liked the activities (39%) such as boating along the river (25%).

On the other hand, a vast number of this group was unsatisfied with the bill boarding/ sign direction (70%) and the parking area (50%). Some of this group agreed that the tourism information was fine but other group felt that it was not good enough. Furthermore, the amount of garbage around tourism site got low acceptable from tourists.

This result, thereby, can be determined that the sign direction is difficult to notice therefore so many tourists lose the way; in addition, during the peak time, there was not enough area for parking. Moreover, having not enough bins and no place for garbage disposal, the solid waste can be found around Don Hoi Lot and along the river.

Table 4-7 Tourists' satisfaction towards tourism management at Don Hoi Lot

Satisfaction characteristic	n= 20	Unit%
Land utilization		
High	40	
<i>Moderate</i>	60	
Low	0	
Shop arrangement		
<i>High</i>	40	
Moderate	35	
Low	25	
Pavement		
High	30	
Moderate	25	
<i>Low</i>	45	
Symbol/ bill boarding and sign		
High	25	
Moderate	5	
<i>Low</i>	70	

Table 4-7 Tourists’ satisfaction on tourism management at Don Hoi Lot (cont.)

Satisfaction characteristic	n = 20	Unit%
Tourism information		
High	25	
Moderate	30	
Low	45	
Convenience of car park		
High	20	
Moderate	30	
Low	50	
The amount of garbage		
High	15	
Moderate	40	
Low	45	
Safety		
High	65	
Moderate	35	
Low	0	
Boating at Don Hoi Lot		
High	25	
Moderate	55	
Low	20	

Similarity to the test for tourism impact, the satisfaction of tourists on tourism management is revealed through the one sample t-test. The average score of tourists’ satisfaction is 29 (table 4-8). The results of test value indicate that tourists’ satisfaction are significant different in terms of tourism management ($t = 3.026, p = 0.007$) (table 4-9). Because the p value in test value is lower than the 0.05 significance level. The t value part is lower than test value ($3.026 < 25$). In other words, tourists are unsatisfying.

Table 4-8 Tourists’ satisfaction on tourism management

	n=20	
	Mean	SD
Satisfaction of tourism management	29.000	5.911

Table 4-9 One sample t-tests (the satisfaction of tourists)

	Test Value = 25				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
satisfaction of tourism management	3.026	19	0.007	4.000	1.233	6.766

4.3 Traders

4.3.1 The general characteristics

The general information of traders includes gender, age, education level, occupation and monthly income which all 10 persons that are target groups have any characters as follows;

Gender: The study found that the most traders are female which is accounted for 60% and male have 40%.

Age: the ages of traders were from 31 years old to 45 years old which is accounted for 50% and traders were under or equal 30 years old which is accounted for 40%.

Level of Education: a large number of traders were either illiterate or primary school which is accounted for 90%.

Occupation: none of this group worked in relation to government officer and other fields. Half of them are farmers and laborers which accounted for 50% as well as another worked related to service and business section which accounted for 50% as well.

Monthly income: overall traders had monthly income under or equal 10,000 Baht.

It was anticipated that with more knowledge gained from the research process, male mostly are fisherman rather than trader. The teenagers mostly go to school and work in the big city such as Bangkok. However, their income is not high comparing with tourists due to the fact that they earn daily income which is not fixed.

Table 4-10 The general characteristics of traders

General characteristics	n=10	Unit%
Gender		
Male	40	
<i>Female</i>	<i>60</i>	
Age (years old)		
≤30	40	
31-45	50	
>45	10	
Education		
<i>None - primary school</i>	<i>90</i>	
Secondary school	10	
≥high school	0	
Occupation		
<i>Farmer and labor</i>	<i>50</i>	
<i>Service and business</i>	<i>50</i>	
Others		
Income (in BHT)		
≤10,000	100	
>10,000-30,000	0	
>30,000	0	

4.3.2 The attitude of tourism management

Table 4-11; the result presented that the tourism activities was not the main cause of coastal erosion which is accounted for 80%. On the other hand, it caused a bad odor (70%) and induced the amount of garbage (50%) in addition to discharged small amount of wastewater into wetland (70%). The majority of this group believed that using lime stone for collecting razor clam caused less effect on the wetland ecosystem. Using a boat for travelling along the Mae Klong River caused scum of oil on the surface of water.

Hence, there is less impact on coastal erosion because it has mangrove forests which act as a shelter. Wastewater discharged has less impact than the slough of gasoline because they do not clearly understand the negative impact on the ecosystem. Moreover, this impact cannot be obviously seen in comparison with the scum.

Table 4-11 Traders' attitude on tourism impact

Characteristics of impact	n= 10	Unit%
Coastal erosion		
High	10	
Moderate	10	
Low	80	
Bad odor		
High	30	
Moderate	70	
Low	0	
Landscape		
High	0	
Moderate	10	
Low	90	
Amount of garbage		
High	90	
Moderate	10	
Low	0	
Waste water discharged into wetland area		
High	50	
Moderate	10	
Low	40	
Using lime for collecting worm shell		
High	0	
Moderate	70	
Low	30	
Slough of gasoline		
High	10	
Moderate	50	
Low	40	

One sample t-test presents that tourism impact on site is statistically significant different ($t=-4.882$, $p=0.001$) (table 4-13) because t-value is lower than the test value ($-4.882 < 25$) and p value is lower than a significant confidence level of 99.5%.

Table 4-12 Attitudes on tourism impact

	n=10	
	Mean	SD
tourism impact on tourist site	19.400	3.627

Table 4-13 One sample t-test (tourists' attitude and tourism impact)

	Test Value = 25				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
tourism impact on tourist site	-4.882	9	0.001	-5.600	-8.1946	-3.0054

Table 4-14; the findings showed that half of this group agreed that the land utilization and the shop arrangement in this area were fine which is accounted for 60% and 50%, respectively. A half of this group (50%) called pavement low satisfaction. It is accounted for 60% that deemed the sign direction be unacceptable. It needed improvement. Additionally, the parking convenience was considerate which is accounted for 60%. One group felt satisfied with the amount of garbage (50%) but another was unsatisfied (50%). The mass of traders contented with security, tourism activities and boating.

Thus, the pavement at Don Hoi Lot is small and the road is too narrow meanwhile many shops sell their products on the pavement together with the sign direction is difficult for an eye to see.

Table 4-14 The satisfaction characteristics of traders towards tourism at Don Hoi Lot

Satisfaction characteristic	Unit%
	n=10
Land utilization	
High	20
<i>Moderate</i>	60
Low	20

Table 4-14 The satisfaction characteristics of traders towards tourism at Don Hoi Lot
(cont.)

Satisfaction characteristic	n=10	Unit%
Shop arrangement		
High	10	
<i>Moderate</i>	50	
Low	40	
Pavement		
High	0	
<i>Moderate</i>	50	
<i>Low</i>	50	
Symbol/ bill boarding and sign direction		
High	10	
Moderate	30	
<i>Low</i>	60	
Convenience of car park		
High	10	
<i>Moderate</i>	60	
Low	30	
The amount of garbage		
<i>High</i>	50	
Moderate	0	
<i>Low</i>	50	
Safety		
High	40	
<i>Moderate</i>	60	
Low	0	
Boating at Don Hoi Lot		
<i>High</i>	50	
<i>Moderate</i>	50	
Low	0	
Tourism activity		
<i>High</i>	50	
<i>Moderate</i>	50	
Low	0	

Respondents were asked to inform the tourism management content; it found that traders were unsatisfied. This is consistent with the fact that t-value is lower than test value ($8.061 < 17.5$). Traders significantly differ regarding the satisfaction of tourism management (table 4-15).

Table 4-15 Traders and tourism management

		n=10
	Mean	SD
satisfaction of tourism management	29.200	4.589

Table 4-16 One-sample t-test (Traders’ satisfaction and tourism management)

Test Value = 17.5					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
satisfaction of tourism management	8.061	9	0.000	11.700	8.416	14.983

4.4 The opinion and attitude comparison between tourists and traders towards tourism management

Table 4-17 shows the social demographic characteristics of the population between tourists and traders involving gender, age, level of education, occupation and monthly income. This study found that 55% of tourists are male meanwhile 60% of traders are female. With significant confidence level of 99.5%, results from chi-square testing ($\chi^2 = 0.6, p = 0.439$), it is that these two groups do not significantly different in terms of gender.

The ages are categorized into three groups: group (≤ 30) with 33.3%; group 2 (31-45) with 40%; and group 3 (>45) with 26.7%. Both groups do not significantly differ concerning age ($\chi^2 = 2.318, p = 0.343$). In fact, Don Hoi Lot is not far from Bangkok and it is one day trip; therefore, it is convenient for the middle age people to visit and in case of traders, this interval ages is a working time.

The level of education of both groups was from illiterate to primary school which is accounted for 46.7%; secondary school was 36.7%; and higher or equal high school was 16.6%. Both tourists and traders are significantly different in terms of

level of education ($\chi^2 = 11.445$, $p = 0.003$) because the development of education of these ages was not developed comparing with the present time.

The tourists' respondents engaged in service and business (40%) and other fields, such as engineering and housewife, is accounted for 40% but the traders interviewees were farmer and labor (50%); together with service and business (50%). Based on the value derived from chi-square testing, these two groups significantly differ regarding type of occupation at the 0.05 significant level ($\chi^2 = 16.154$, $p < 0.05$).

In 30 respondents, 43.3% earned monthly income lower or equal 10,000 Baht and 6.7% earned monthly income higher than 30,000 Baht. The chi-square testing shows that the monthly income are statistically different in relation of income ($\chi^2 = 19.615$, $p = 0.000$).

Table 4-17 The general characteristic comparison between tourists and traders

General characteristics	Tourists n=20	Traders n=10	Total n=30 Unit%
Gender ($\chi^2=0.6$, df=1, $p=0.439$)	55	40	50
Male	45	60	50
Female			
Age ($\chi^2=2.138$, df=2, $p=.343$)			
≤30	30	40	33.3
31 - 45	35	50	40.0
>45	35	10	26.7
Education ($\chi^2=11.445$, df=2, $p=0.003$)			
None - primary school	25	90	46.7
Secondary school	50	10	36.7
≥high school	25		16.6
Occupation ($\chi^2=16.154$, df=3, $p=.001$)			
Farmer and labor		50	16.7
Service and business	40	50	43.3
Officers	20		13.3
Others	40		26.7
Income (in TBH) ($\chi^2=19.615$, df=2, $p=0.000$)			
≤10,000	15	100	43.3
10,001 - 30,000	75		50.0
>30,000	10		6.7

Table 4-18; the result shows that tourists and local people have similar attitude and idea in several aspects. To begin with the coastal erosion gets less impact from tourist activities. Indeed, the characteristic of Don Hoi Lot is estuary. The benefit of

mangrove forest prevents coastal erosion (Gunthawong, 2001). Next, the amount of garbage cause several impacts on Don Hoi Lot like destruction beautiful landscape, polluted water and cause bad odor which annoy both tourists and local people. Then, using lime for collecting razor clam has less effect on the ecosystem. Actually, nowadays razor clam is quite rare comparing with the previous time. According to Veeravaitaya (2007), the density of razor clam hastily declined in 1996-1997 (4.6 ± 3.7 individual/m²) compared with the density in 1994-1995 (49.86 ± 37.38 individual/m²).

Table 4-18 The comparison attitude and opinion about tourism effect between tourists and traders

Characteristics of tourism effect	Tourists	traders
Coastal erosion		
High	-	-
Moderate	-	-
Low	✓	✓
Bad odor		
High	✓	✓
Moderate	-	-
Low	-	-
Landscape		
High	✓	-
Moderate	-	-
Low	-	✓
Amount of garbage		
High	✓	✓
Moderate	-	-
Low	-	-
Waste water discharged into wetland area		
High	✓	-
Moderate	-	-
Low	-	✓
Using lime for collecting razor clam		
High	-	-
Moderate	-	-
Low	✓	✓

Table 4-18 The comparison attitude and opinion about tourism effect between tourists and traders (cont.)

Characteristics of tourism effect	Tourists	traders
Slough of gasoline		
High	√	-
Moderate	-	-
Low	-	√

To know whether these two groups are different or not in terms of attitude of tourism impact at Don Hoi Lot, the results in the *Equal Variances assumed* are used (table 4-20). The result derived from t-test shows that the *p* value is greater than 0.05 significance level ($t = 0.624, p = 0.538$). Therefore, there is no statistically significant difference between tourists and traders in relation to attitude of tourism impact.

Table 4-19 Attitudes of interviewees in terms of tourism impact on tourism site

	Interviewees	Mean	SD
tourism impact on tourist site	Tourists (n=20)	20.350	4.068
	Traders (n=10)	19.400	3.627

Table 4-20 T-test of independent samples test (Attitudes of respondents and tourism impact)

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
							Lower	Upper
tourism impact on tourist site	Equal variances assumed	0.000	0.985	0.624	28	0.538	-2.169	4.069
	Equal variances not assumed			0.649	20.116	0.524	-2.102	4.002

Table 4-21; this research found that there are only three aspects that the level of satisfaction on tourism management at Don Hoi Lot are different that is shop

arrangement, amount of garbage and tourism activities. To begin with the shop arrangement, tourists are happy with this because there are many shops which are set near the car park; hence, it is very suitable for them to shop conversely with the traders.

Table 4-21 Comparing level of satisfaction between tourists and traders

Characteristics of satisfaction	Tourists	Traders
Land utilization		
High	-	-
<i>Moderate</i>	√	√
Low	-	-
Shop arrangement		
High	√	-
Moderate	-	√
Low	-	-
Pavement		
High	-	-
Moderate	-	-
<i>Low</i>	√	√
Symbol/ bill boarding and sign direction		
High	-	-
Moderate	-	-
Low	√	√
Amount of garbage		
High	-	√
Moderate	-	-
Low	√	-
Convenience of car park		
High	-	-
Moderate	-	-
Low	√	√
Safety		
High	√	-
Moderate	-	√
Low	-	-
Boating at Don Hoi Lot		
High	-	√
<i>Moderate</i>	√	√
Low	-	-

Table 4-21 Comparing level of satisfaction between tourists and traders (cont.)

Characteristics of satisfaction	Tourists	Traders
Tourism activity		
High	√	-
Moderate	-	√
Low	-	√

The study found that there are little different between mean: tourists: 29 and traders = 29.20. The standard deviation values are quite high as a result of a considerable difference among respondents in both groups (table 4-22).

The homogeneity of variances is tested by Levene testing (table 4-23). The p value in the *Levene's Test for Equality of Variances* is greater than 0.05 significant level ($F = 0.298$, $p = 0.926$) indicating that the variances of both groups are not different.

Table 4-22 Attitudes of respondents on tourism management

	Respondents	Mean	SD
Satisfaction of tourism management	Tourists (n=20)	29.000	5.911
	Traders (n=10)	29.200	4.589

Table 4-23 T-test independent samples test (satisfaction of respondents and tourism management)

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
						Lower		Upper
satisfaction of tourism management	Equal variances assumed	0.928	0.344	-0.094	28	0.926	-4.580	4.180
	Equal variances not assumed			-0.102	22.718	0.920	-4.263	3.863

The study aims to determine whether these two groups are different or not regarding socio-cultural indicator, the average scores of traders are higher than the average scores of tourists (31.800 > 27.500) (table 4-24). Moreover, the result from t-test presents that the *p* value is lower than 0.05 significant level which means that these two groups statistically differ in terms of socio - culture (table 4-25). In other words, traders considered that the tourism development caused an impact on their socio-culture according to UN (2003) and Klongkumnuankarn (2005) mentioned that the uncontrolled, ill planned and rapid tourism development have caused not only the environmental degradation but also the socio-cultural impacts such as damaging the historical site, the community structure and the authenticity of social and cultural environment.

Table 4-24 Respondents and socio-cultural indicator

	Respondents	Mean	SD
Socio-culture indicator	Tourists (n=20)	27.500	3.316
	Traders (n=10)	31.800	4.467

Table 4-25 T-test independent samples test (socio-cultural indicator)

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
						Upper		Lower
Socio culture indicator	Equal variances assumed	2.466	0.128	-2.980	28	0.006	-7.255	-1.344
	Equal variances not assumed			-2.695	14.136	0.017	-7.718	-0.881

In table 4-26; the result shows that there are little different between mean. To know whether these two groups are different or not in terms of environmental concern, the results in the *Equal variances assumed* are used (table 4-27). The result

derived from the t-test shows that the p value is greater than the 0.05 significance level ($t = 1.498$, $p = 0.145$). Hence, their environmental concern is not significantly different.

Table 4-26 Respondents and environmental indicator

	Respondents	Mean	SD
Environmental indicator	Tourists (n=20)	20.600	1.698
	Traders (n=10)	19.600	1.776

Table 4-27 T-test independent samples test (environmental indicator)

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
						Upper		Lower
environmental indicator	Equal variances assumed	0.063	0.804	1.498	28	0.145	-.36755	2.36755
	Equal variances not assumed			1.475	17.386	0.158	-.42817	2.42817

Similarity to test for environmental indicator, the difference between tourists and traders regarding economic indicator is revealed through the independent samples t-test.

The study found that the mean of traders is slightly higher than the mean of tourists (table 4-28). However, the difference between the respondents is not remarkable: tourists scored 17.0500; while traders scored 17.3000.

Table 4-28 Respondents and economic indicator

	Respondents	Mean	SD
Economic indicator	Tourists (n=20)	17.050	2.459
	Traders (n=10)	17.300	2.213

This research aims to determine whether between tourists and traders has a different attitude with economic aspects or not. To do so, independent sample t-test is used to compare their difference between two groups. In table 4-29; the result shows that *p* value is greater than the significance level ($0.789 > 0.05$). Thus, there is no statistically significant difference between tourists and traders in relation to economic indicator.

Table 4-29 T-test independent samples test (economic indicator)

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
economic indicator	Equal variances assumed	0.455	0.505	-0.271	28	0.789	-2.140	1.640
	Equal variances not assumed			-0.281	19.942	0.782	-2.107	1.607

In case of the political aspect, traders did not draw the political aspects much according to the *t* value is lower than the test value ($12.499 < 22.5$) (table 4-31). Furthermore, the results shows that *p* value is lower than the 0.05 significance level ($t = 12.499, p = 0.000$). In other words, there is statistically significant different in terms of political indicator.

Table 4-30 Respondents and political indicator

	Mean	SD
Political indicator	31.900	2.378

Table 4-31 One-sample t-test (political indicator)

	Test Value = 22.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Political indicator	12.499	9	0.000	9.400	7.698	11.101

4.5 The management at Don Hoi Lot by sub-district Administrative Organization (SAO)

4.5.1 The structure of Bang Jakreng SAO

The structure of Bang Jakreng sub-district administrative organization is mainly divided into two parts: (1) the SAO council and (2) the administrative committee for the SAO.

The SAO council is comprised of the number of SAO council who is directly elected by local people from five villages: Baan Raman Tok, Baan Bang Jakreng, Baan Klong Klang and Baan Raman Tawan-Ok. Each village has to choose two members so there will be 10 members. Then, within 10 members, they have to choose the council chairman with the terms of four years.

Hence, SAO council has one council chairman, two council vices-chairmen, one secretary and six SAO council members as in Appendix A

Their responsibilities are to make an agreement on SAO development plan which acts as a management approach, to consider the SAO code of law as well as to draft the annual budget. In addition, they have to confine the administrative committee for the SAO work by making in line with law, policy, SAO development plan and government rules.

The administrative committee for the SAO consists of the president of administrative committee for the SAO who comes from the electoral vote by local community under the administrator of Bang Jakreng sub-district. The president of administrative committee for the SAO has terms duration of four years but cannot

continuously occupy a post two occasions. Moreover, the chairman of administrative committee for the SAO set up two deputies and one sub-district secretary (Appendix B)

Their responsibilities are to determine the policy and to govern SAO in accordance to the law, policy, SAO's development plan and government regulation. Moreover, they have to allocate, permit and approve the official work as well as to lay down the regulations to administer peace and order.

In general, its role and responsibilities was to develop the economic, social and culture, to promote the tourism industry, to create job for local community by enhancing their quality of life. At the same time, SAO had also to maintain, to manage and to utilize the environment and natural resource in the sustainable way.

It was anticipated that with more knowledge gain from the research process that Bang Jakreng sub-district administrative organization is consist of ten members of SAO council and three administrative committees together with one secretary. Moreover, their main roles and responsibilities are to improve quality of life of community and to develop the community by giving a chance to the local people involve the administrative process.

4.5.2 The existing condition and the management practices of SAO

The result gained from RRA approach could be summarized into two parts as follows:

4.5.2.1 The relevant problem at Don Hoi Lot

The participants identified the existing condition and relevant problem at Don Hoi Lot. The tourism activities regarded to collecting razor clam, boating and selling at Don Hoi Lot. The tourism is the driving force for economic development; conversely, it caused the environmental problem as well. The problem arose when there is no involvement of local people in management and the information announcement is not coveralls area.

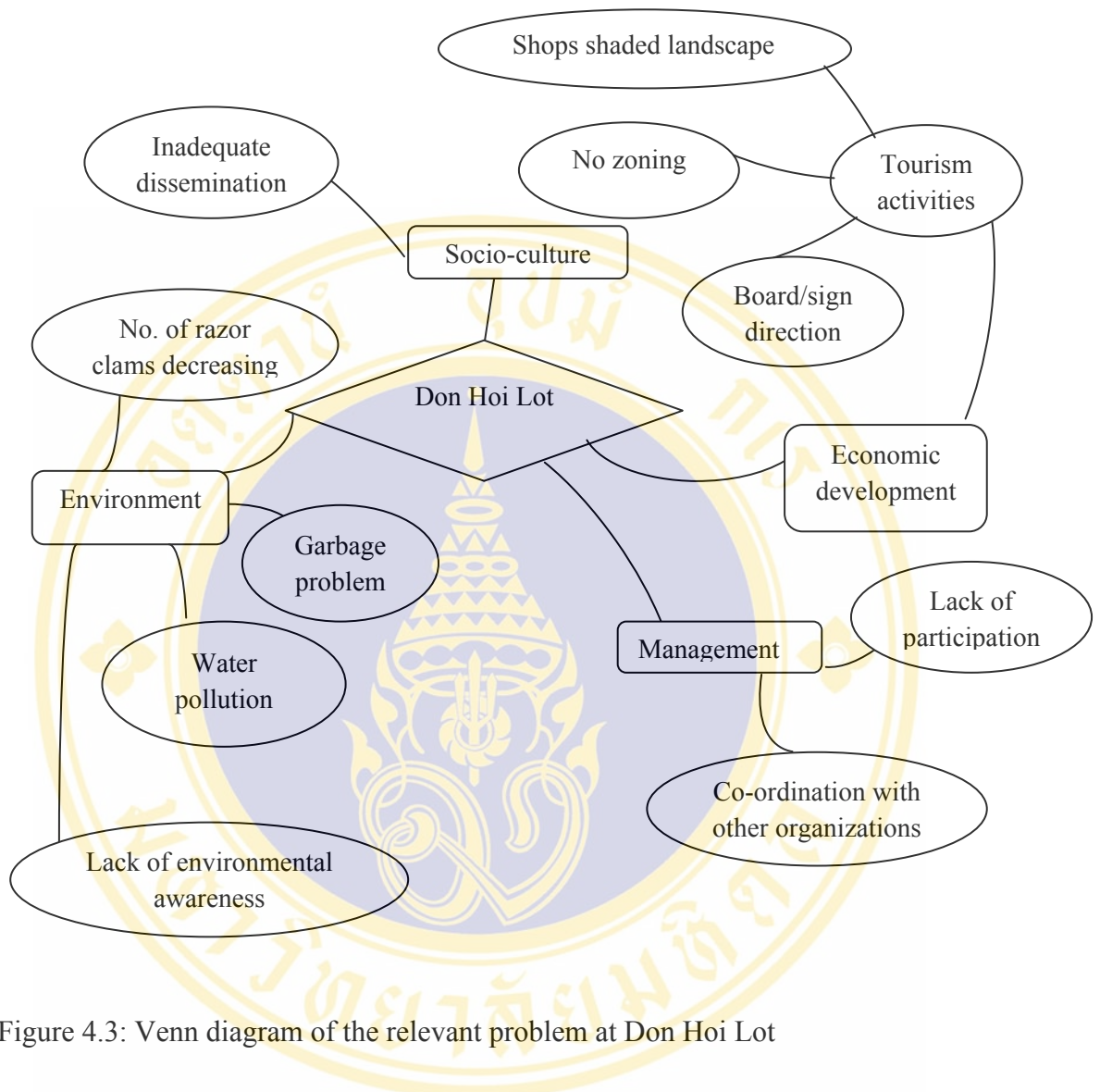


Figure 4.3: Venn diagram of the relevant problem at Don Hoi Lot

4.5.2.2 The management practices of SAO

This section mainly emphasized on the management of SAO in four aspects the environmental issues and problems, management and policy, socio-culture aspect and economic issue. All of these were fiercely related to the sustainable wetland tourism due to the fact these development plans responded the needs of local community; meanwhile, solved the urgent problem and improved the current situation.

Therefore, this section is to compare the management of SAO of the past with the present time. The previous time in this case is before Typhoon Gay hit the Gulf of Thailand in 1989; therefore, the present time is after this phenomenon.

The environmental issue and problem

To begin with the environmental field; table 4-32 indicated that the environmental issues, in the past, did not get much attention comparing with the present time.

In fact, this area used to be abundance of mangrove forests and razor clam but owing to the National Economic and Social Development Plans 1-7 mainly focused on boost up economic section (Thai Junior Encyclopedia, 1997), large areas of mangrove forests were cut down and converted to be shrimp and shell farm; besides, the public areas are invaded by local people despite of the population increased and economic development.

Razor clam, additionally, was collected without limitation and using inappropriate way for example, Caustic soda was used for collecting razor clam by local people. As a result of decline in mangrove forests and razor clam, SAO enacted the measurement and policy by replanting mangrove forest and rehabilitation Don Hoi Lot to increase the production.

The water quality at the present time is awfully polluted and cannot be consumed and used in both agriculture and livestock activities due to human activities especially domestic wastewater discharge without treatment system. The garbage problem is also severe because there is not enough garbage collecting truck and bins.

All of the environmental problems occurred due to lack of environmental awareness of the local people; thus, SAO set up the environmental training for local people in order to enhance their awareness to the importance of natural resources and environment; meanwhile, these activities were in line with the Policy, Measurement and Planning: Sustainable Biodiversity Conservation and Utilization (2003-2007) recommended that maintaining the important natural resources should strengthen the understanding the advantage of biodiversity and boost up local awareness by public

relation promotion and through providing education (Office of Natural Resource and Environmental Policy and Planning, 2003-2007).

This result can be summarized that in the previous time, there were plenty of mangrove forest but attributable to many driving forces and circumstances such as economic development, population increased and city expansion, all factors are the main deterioration of the natural resources and environment at Don Hoi Lot. SAO, nowadays, pays more attention on the natural resources and environment by promoting local residents to look after their environment and to clear up the garbage along river and road as well as providing bins and setting up environmental training, especially for protected Don Hoi Lot group.

Table 4-32 Environmental issue and problem of the past and the present of Don Hoi Lot

Environment issues	Past		Presents		Comments
	Level of important		Level of important		
	Most	Less	Most	Less	
Mangrove forest		√	√		<ul style="list-style-type: none"> before abundance of mangrove forest
Land conversion		√	√		<ul style="list-style-type: none"> economic development
Invade public area		√	√		
<i>Polluted water</i>	√		√		<ul style="list-style-type: none"> <i>the number of factory increasing</i>
Garbage management		√	√		<ul style="list-style-type: none"> no exactly place for garbage disposal
Amount of razor clam		√	√		
Number of production		√	√		<ul style="list-style-type: none"> turn to be decreased
Environmental policy and measurement		√	√		<ul style="list-style-type: none"> focused on economic development
Awareness of local people		√	√		
<i>Environmental training</i>	√		√		

Management and policy

The second aspect is the management and policy; table 4-33 indicated that providing information and communication between SAO and local people got the high priority than other issues from the past until now. It is really contradictory that there was no involvement of local people in tourism planning and decision-making which means that SAO did not decentralized bureaucracy because according to Mintzberg (1979), the centralized bureaucracy condition occurs when the situation is stable and not complicated together with an organization is small. In the case of Bang Jakreng sub-district, this SAO is small organization and there is a few of administration.

But at the moment, SAO promotes and encourages the local participation in tourism planning in order to know the exact problems and needs of the local community. According to Pongpit (2008) have mentioned that the local participation in decision making and planning represents the fundamental rights of the community in terms of community management. In addition, according to The Concept and Direction of the Participatory Watershed Management mentioned that the sustainable management has to respect the local wisdom through local participation in decision making and having rights to manage the natural resources (Wongklongkaew, 2000).

Besides, the administration actually paid attention on dissemination information, understanding of benefits of natural resource, conservation and biodiversity utilization via local broadcast and poster which acted as a middleman for the sake of connecting local residents and SAO.

Jiraporn Kaewudom (2002), anyhow, suggested that the appropriate media for providing information or knowledge and calling for attention was a television due to the fact that the television was the most popular media according National Statistical Office Thailand (2008) surveyed there were 57 million people, 94.6% watched television. Moreover, the National Statistical Office Thailand conducted the survey in a topic of the television consumer during 1989-2008 found that the behavior of Thai people ages above 6 years old was trend to continuously increase watching television (NSOT, 2008).

Unlike previous time, the economic received the privilege priority than other consequently there was no strict regulations, measurements and policies towards environmental management.

The human resource, is an important factor to make an organization development owing to a capability and an effectiveness of human resource administrative (Sunchamutkhon, 2006); therefore, SAO gives a significance for human resource by visiting the successful organization which is similar with Ta-Kham sub-district. This SAO emphasized on the human resources because developing human resources helped local community be able to self-reliance (Pongpit, 2008).

Hence, not only to promote local participation but also to develop public relations that will make local residents understand the policy and management of SAO. The involvement of local people in tourism planning helps SAO to improve the tourism site and activities.

Table 4-33 Management and policy of the past and the present of Don Hoi Lot

Political issues	Past		Presents		Comments
	Level of important		Level of important		
	Most	Less	Most	Less	
The involvement of local people in tourism planning		√	√		<ul style="list-style-type: none"> The past mainly focused on top-down The past mainly focused on top - down
Promote local participation		√	√		
Public relation development			√	√	<ul style="list-style-type: none"> Focused on economic development
Providing information	√			√	
Regulations, measurement policies towards environmental mgt.			√	√	
Communication between local people and SAO	√			√	

Table 4-33 Management and policy of the past and the present of Don Hoi Lot (cont.)

Political issues	Past		Presents		Comments
	Level of important		Level of important		
	Most	Less	Most	Less	
Human resource development		√	√		• To enhance the quality of organization

Socio-culture aspect

Table 4-34, expressed that SAO have highly paid attention on this aspect due to the fact those human resources is important for economic development. Don Hoi Lot is the important tourism site of Bang Jakreng sub-district so the infrastructure development is essential. The convenient basic infrastructure is able to allure tourists to visit Don Hoi Lot; at the same time, the number of hire rate increase; therefore, the quality of life of local people is better not only the infrastructure but also health and hygiene

Moreover, maintaining and supporting their own culture, tradition and religion activities called a great attention from tourists to visit Don Hoi Lot additionally this way made Don Hoi Lot become remarkable and well-known in local, national and international level. In other words, SAO promoted, supported, conserved, contributed and remained the culture, tradition and religion activities including ancient building, antique and local wisdom

However, the quality of life of local community is not as good as it should be since their level education was hardly low because the numbers of local people, graduated secondary school; additionally, there is no community library and information center for searching the information and acquiring knowledge. Conversely, the national education strategies mentioned that there is a measurement supporting the resources like education, human resources, library and equipment for building learning community (Pongpit, 2008).

Pongpit (2008), in fact, recommended that education acted as a tool to strength the community as well as the educational development is another way to develop the society; at the same time, the local people are able to apply their knowledge to

sustainable exploit natural resources and to wisely develop the nature-based tourism which creates jobs and income distribution among community. Therefore, it can be said that education is very essential.

In short, SAO really gives priority in socio-cultural issue due to the fact that human resources have a great impact or influence on development.

Table 4-34 Socio-cultural issues of Don Hoi Lot in the past and in the present time

Socio-culture issues	Past		Presents		Comments
	Level of important		Level of important		
	Most	Less	Most	Less	
<i>Basic infrastructure development</i>	✓		✓		• <i>economic development</i>
<i>Occupation and increased income promotion</i>	✓		✓		
<i>Health and hygiene</i>	✓		✓		
<i>Maintaining tradition and culture</i>	✓		✓		• <i>Attract tourists</i>
<i>Promoting common practice and religion activities</i>	✓		✓		• <i>Attract tourists</i>
<i>Living standard/ quality of life</i>	✓		✓		
Strength of community		✓	✓		
Education		✓	✓		

Economic issue

Lastly table 4-35, the study found that the collaboration with other organization and promote public relations in the past were less important because they used to work separately. Moreover, tourism section as well as service section got less attention from SAO because ecotourism, in the past, was not given much focus as the present time. Generally speaking, people nowadays are more concern about environment.

SAO have considered local employment and income distribution among the community from the past until now because their goal is to create job and increase

salary of local people by promoting the local product and supporting fund for running business.

Local economy is influenced and affected by global economy crisis, for example the industry section has to lay out many employees that cause many jobless; hence, SAO promotes the king’s philosophy “sufficiency economy” to the local residents.

Hence, SAO continuously hires local residents and raises income distribution among community due to the fact that both of these situations rely on each other, for example the economic growth and development, the number of hire rate augments; together with promoting tourism, SAO works with other organizations such as private section and tour agency. This point will make Don Hoi Lot be well-known. For the moment, local people have to face the economy crisis, SAO truly supports local people in every aspect such promote local product, provide fund and disseminate sufficiency economy.

Table 4-35 Economic issues of Don Hoi Lot in the past and in the present time

Economic issues	Past		Presents		Comments
	Level of important		Level of important		
	Most	Less	Most	Less	
<i>Local employment</i>	✓		✓		• <i>Economic growth, a number of hire rate increased</i>
<i>Income distribution</i>	✓		✓		•
Public relation and collaboration with other organizations		✓	✓		• To promote tourism
Develop and promote tourism site and service section		✓	✓		• Distribute income to community and improve sign direction
Promote local products		✓	✓		• Distribute income to community

Table 4-35 Economic issues of Don Hoi Lot in the past and in the present time

(cont.)

Economic issues	Past		Presents		Comments
	Level of important		Level of important		
	Most	Less	Most	Less	
Promote and support stimulated local economy project		√	√		

4.6 Influenced sustainable factors on tourism management

This section is to consider the big picture of SAO management at Don Hoi Lot in four categories: political, economic, sociological, and environmental (PESE), by applying PESTLE analysis.

Table 4-36; shows PESE analysis factor which is divided into four parts. To begin with political aspect, the SAO structure follows out the Act of sub-district Council and SAOs in 1994 has a high positive impact on management because this structure helps officers understand their responsibilities and their duties as well as their work and their tasks are clearly spilled out which prevent overlapping. As a result of having clear structure, the service and process are very systematic, efficient and fast. It is critical importance that management has the environmental regulation and protection to prevent natural resources degradation and to use it in a sustainable way. In spite of the budget limitation, the SAO cannot buy the new equipment and new technology for developing and improving their governed area. Additionally, there is low local participation in management and decision making even the government is decentralized due to the fact that the local community does not understand well about their rights.

The economic part, secondly, is that even though Bang Jakreng sub-district has an attractive tourism site, the local people have to face of poverty problem owing to low hire rate, low income and economic crisis, which is critical importance because this problem has a high negative impact on local community. This study found that SAO tries to solve this problem by promoting local product (OTOP) and providing the market for local people which is another way to help their people.

Then, the quality of life of local people is not as good as expected because of limited budget for public health and hygiene development; on the contrary, the security of life and assets is high potential. The education level of local people, yet, is not so high because this area has no library and information center for local people to study and search information. In addition, their income is not stable inasmuch as a large number of local are agriculture, fisherman and laborer. The agricultural activities do have high investment but when the time for harvest, the price of product sometimes is extremely low; at the same time, they cannot produce much due to the natural phenomena.

Finally, the environmental factor is that SAO promotes environmental conservation at the same time setting up environmental training because the awareness and concern of local people is low. Moreover, the pollution as water pollution and garbage problem is critical impacted on the environment. The overexploitation of aquatic animal, especially razor clam gradually decreases thus SAO rehabilitates Don Hoi Lot because most tourists come to Don Hoi Lot to taste and buy razor clam as well as collecting it.

Table 4-36 Sustainable factors analyzed by PESE

PESE Analysis Factor	Potential Impact	Implication and Importance		
		Type	Impact	Relative Importance
Political				
<ul style="list-style-type: none"> the government structure follows the Act of sub - district Council and SAOs the service system is very fast 	H	+	=	Important
<ul style="list-style-type: none"> environment regulation and protection 	M	+	=	Important
<ul style="list-style-type: none"> SAO budget is limitation 	H	-	>	Critical
<ul style="list-style-type: none"> there is low local participation 	U	-	Un.	Important
<ul style="list-style-type: none"> local people do not understand well about the management and policy 	H	-	=	Important

Table 4-36 Sustainable factors analyzed by PESE (cont.)

PESE Analysis Factor	Potential Impact	Implication and Importance		
		Type	Impact	Relative Importance
<ul style="list-style-type: none"> the administer area is small 	M	+	=	Un-Im.
Economic				
<ul style="list-style-type: none"> the price of product is reasonable 	M	+	=	Important
<ul style="list-style-type: none"> Low income and low hire rate 	H	-	>	Critical
<ul style="list-style-type: none"> poverty problem 	H	-	>	Critical
<ul style="list-style-type: none"> their income is not stable 	H	-	>	Critical
Social				
<ul style="list-style-type: none"> no public library and the information center 	H	-	>	Critical
<ul style="list-style-type: none"> a little number of local people continue their study after finishing secondary school 	H	-	>	Critical
<ul style="list-style-type: none"> having health and hygiene problem 	H	-	=	Important
<ul style="list-style-type: none"> life and properties are secure 	H	+	=	Important
<ul style="list-style-type: none"> their income is not stable 	H	-	>	Critical
Environmental				
<ul style="list-style-type: none"> promoting environmental conservation 	H	+	>	Critical
<ul style="list-style-type: none"> setting up environmental training program to enhance awareness of local people 	H	+	>	Important
<ul style="list-style-type: none"> rehabilitate Don Hoi Lot 	H	+	>	Important
<ul style="list-style-type: none"> environmental problem: water pollution, garbage problem and dusty 	H	-	>	Critical
<ul style="list-style-type: none"> number of razor clam is gradually decreased by local people 	H	-	>	Critical

Remark: H = high, M = medium, L = low, U = undetermined

+ = positive, - = negative

> = increasing, = unchanged, < = decreasing

CHAPTER V

CONCLUSION AND RECOMMENDATION

This part aimed to summarize the findings of this study and formulated the recommendations that could contribute to further studies. This part, moreover, mentioned the limitations of this study. However, this research was successful in meeting its objective.

5.1 Summary of major findings

In total 30 respondents, no difference was found in age and occupation while gender, level of education and income were different. Most tourists were male and their level of education was higher than traders. The monthly income of traders was lower or equal 10,000 Baht.

Derived from the tourism impact on tourism site question, the attitudes of both groups were not different. The main impact was garbage because of inadequate bins at the tourism site as well as at the settlement area. Moreover, there was no exact place for dumping the garbage. At the same time, the garbage was one factor that brought about the bad smell and induced water pollution. Another cause of water pollution was wastewater discharged both direct and indirect into the river; in addition, the slough of gasoline was one more factor that is harmful the wetland ecosystem. As a result, the local communities cannot be consumed and used this water for all activities, particularly drinking. On the other hand, the tourism activities do not cause the coastal erosion because there are mangrove forests along the coastal line which help to prevent coastal erosion.

No difference was found in the satisfaction on tourism management. Both of these two groups indulged in this management, acceptably the pavement because many small shops sell alongside the pavement; therefore, it was very difficult for

tourists to walk. Some of them had to walk on road which was dangerous for them. In the meantime, the car park was quite congestion during the peak time. Likewise, the sign direction/ bill boarding made both of these groups unpleasant for the reason that it was difficult to notice as well as the tourists was unsatisfactory with the tourism information because there is rare and during travel at Don Hoi Lot, they did not gain much of the information.

It was found that there was the difference regarding socio-cultural indicator despite the fact that traders regarded that the tourism development impacted on their socio-culture. Relation to the environmental and economic aspects, the attitudes' respondents were not different but for the environmental issue, the tourists slightly concerned about the environment. Moreover, traders did not pay much attention to the politics.

This research also found that the management of SAO which was divided into four pillars: politics, economic, social and environmental aspects. In this case, political aspect focused mainly on the management of SAO. The structure of Bang Jakreng sub-district follows out the Act of sub-district Council and SAOs in 1994. Therefore, the responsibilities have been clearly split up so the officers have not worked overlapping as well as the services and processes are more organized. In spite of having the environmental regulation and protection, the natural resources and environment are conserved, maintained and utilized in a sustainable ways. Nonetheless, the limitation of budget for development was the constraint of SAO. Yet, the participatory of local community was small as a result of low comprehension of SAO's management and their rights.

Because of having a fascinating tourism place, tourism industry distributed a huge of revenue to the community but this industry could not eradicate the poverty problem because of low hire rate, low income and economic crisis. Whereas, SAO attempted to solve this problem by promoting the local product, in both local and national level together with finding the market for local people.

Owing to the restriction of budget, SAO could not fully provide and improve the quality of health care and hygiene. Besides, the local people had low level of education; at the same time, they do not have the public library and information center to acquire learning.

The awareness of local people concerning the natural resources and environment was low; therefore, the SAO bothered to enhance their perception by setting up the environmental training and campaign. Yet, SAO battled against the pollution problem and the natural resources and environmental degradation to improve and to enrich the quality of the resources.

5.2 Limitations of study

There are some limitations during this research as followed:

- Time constraint meant that conducting the in-depth interview had to be postponed from August to October due to the local election.
- There were only few number of sub-district officers participated in the in-depth interview and some of sub-district officers had left before the discussion finished.
- Insufficient cooperation of SAO during conducting in-depth interview meant that the officers did not want to do some activities such as mapping and matrix ranking. The officers wanted the observer to do for them.
- Don Hoi Lot is not located only Bang Jakreng sub-district; therefore, it is difficult to manage.

5.3 Recommendation

5.3.1 Future research

- The future research of sustainable wetlands tourism management is needed. This may include not only the natural resource and environmental management but also the local participatory approach in decision making and tourism planning.

- The local community preferred systematic management of natural resources and environment management as well as administrating tourism database for their own management. It was highly recommended that future study should focus on the collection of local participation in tourism management.

- The study on building common understanding among academics and local agencies on the conceptual and practical approaches in line with the concrete participatory guidelines should be made. In this way, it should review the body of knowledge along with the concept and related researchers for the development and then construction of linkage from concept to actual practice.

- The researcher should focus more in every step of the participation process. This should be done in line with the systematic approach focusing on particular characteristics of the community.

- If the local people involve in the decision making and planning, SAO will get richer information base and information exchange.

- The local participatory approach reduces the conflicts among stakeholders through integrate their interest, building the agreements and responsibilities as well as is able to identify the future needs

5.3.2 Implementation

- Based on the strong interest of the local community and local organizations towards sustainable wetland tourism management at Don Hoi Lot, Samut Songkhram province.

- The critical point this study attempted to enhance the recognition of inter - linkage and benefits that could amplify local organization if natural resources and environment to be used sustainably and wisely.

- SAOs saving fund can be realistic by initiated with the formation of a community based local organization. Such local organization, in close collaboration with management agency and other stakeholders, could frame the management plan to cover environmental, economic, and social issues. Once formed, such community based organization should gradually build its partnership with Office of Natural Resources and Environment, Universities, and NGOs in be actively involved in sustainable wetland tourism management.

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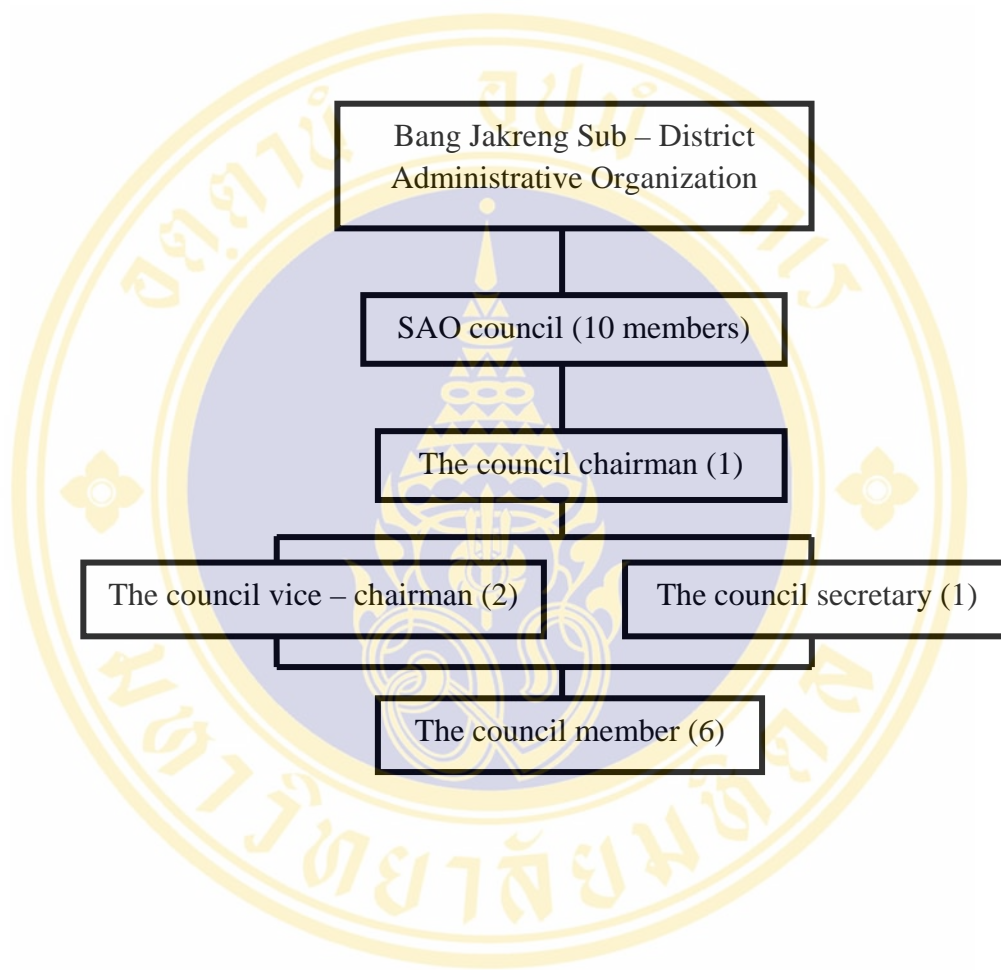
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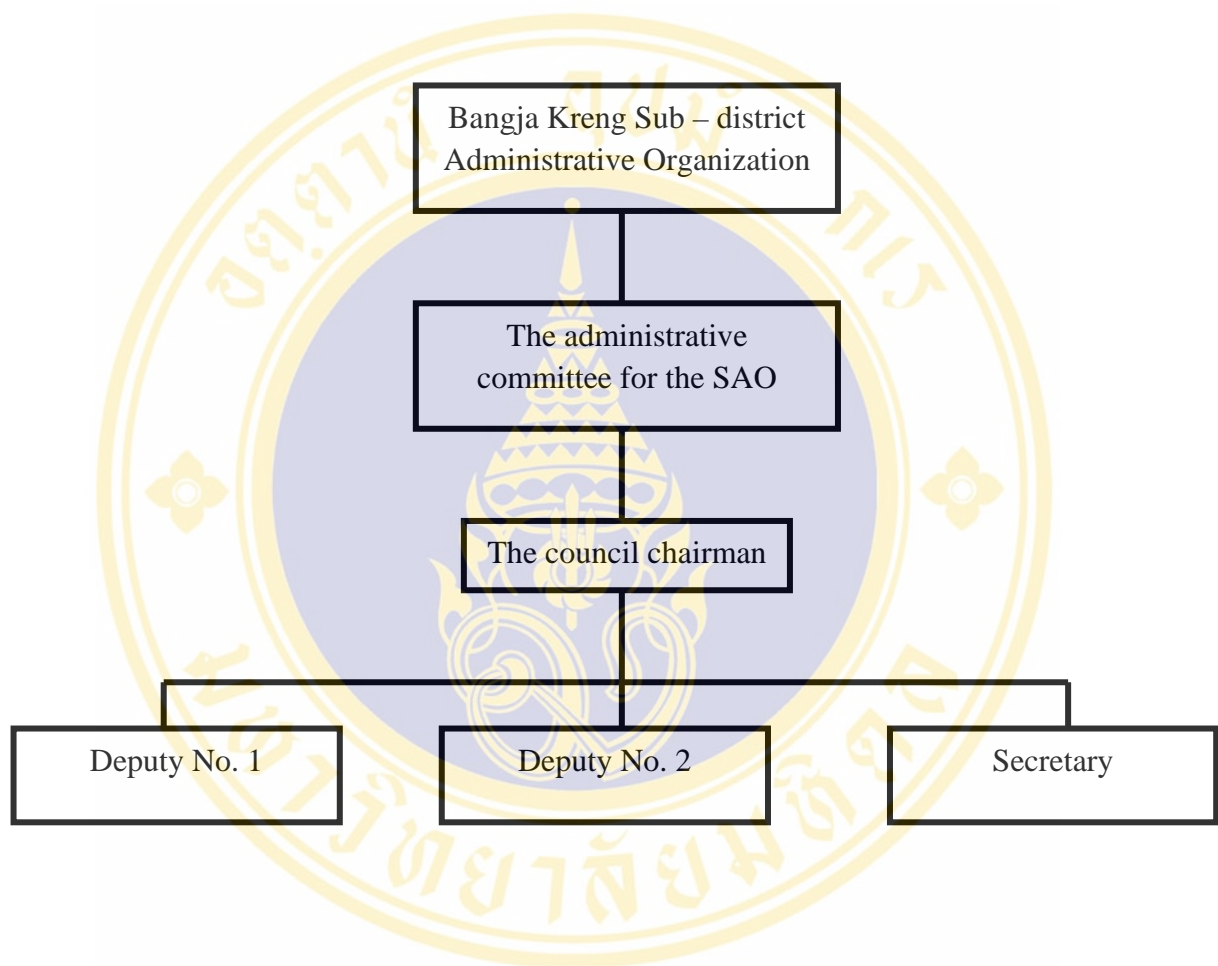
APPENDIX A

STRUCTURE OF BANG JAKRENG SAO



APPENDIX B

STRUCTURE OF ADMINISTRATIVE COMMITTEE FOR THE SAO



APPENDIX C

แบบสอบถามข้อมูลพื้นฐานสำหรับนักท่องเที่ยว
ประกอบการวิจัยเรื่อง “การจัดการการท่องเที่ยวพื้นที่ชุ่มน้ำแบบยั่งยืน
ดอนหอยหลอด จังหวัดสมุทรสงคราม

โดย นางสาว พิศณี โกพลรัตน์
นักศึกษาระดับปริญญาตรี สาขาบริหารธุรกิจ
สาขาการจัดการทรัพยากรธรรมชาติ (หลักสูตรนานาชาติ)
คณะสิ่งแวดล้อมและทรัพยากรศาสตร์ มหาวิทยาลัยมหิดล

คำชี้แจง

1. แบบสอบถามชุดนี้ทำขึ้นเพื่อใช้เป็นส่วนหนึ่งของวิทยานิพนธ์เรื่อง “การจัดการการท่องเที่ยวพื้นที่ชุ่มน้ำแบบยั่งยืน พื้นที่ศึกษา ดอนหอยหลอด จังหวัด สมุทรสงคราม”
2. แบบสอบถามนี้เป็นประโยชน์อย่างยิ่งต่อการวัดระดับความคิดเห็นของนักท่องเที่ยว เพื่อนำมาพัฒนาพื้นที่ ผู้วิจัยปรารถนาให้ผู้ตอบแบบสอบถามให้ข้อมูลตามเป็นจริง
3. ผู้วิจัยเห็นว่าคำตอบทั้งหมดเป็นความจริงและเป็นประโยชน์ต่อการประเมินผล อีกทั้งยังมีความสำคัญต่อการวิจัยต่อไปและพัฒนากการท่องเที่ยวแบบยั่งยืน สามารถเป็นตัวชี้วัดระดับการจัดการพื้นที่

ผู้ให้ข้อมูลชื่อ.....

วัน/เดือน/ปี/...../.....

คำชี้แจง โปรดทำเครื่องหมาย ✓ ในช่อง ที่ตรงกับข้อมูลของท่านมากที่สุดเพียงข้อเดียว และหากท่านมีข้อเสนอแนะหรือต้องการแก้ไขประเด็นใดสามารถเสนอแนะได้ในท้ายแบบสอบถาม

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ให้สัมภาษณ์

1. เพศ 1. ชาย 2. หญิง
2. อายุ ปี
3. ระดับการศึกษาสูงสุด

1. <input type="checkbox"/> ไม่ได้เรียนหนังสือ	2. <input type="checkbox"/> ประถมศึกษาตอนต้น
3. <input type="checkbox"/> ประถมศึกษาตอนปลาย	4. <input type="checkbox"/> มัธยมศึกษาตอนต้น
5. <input type="checkbox"/> มัธยมศึกษาตอนปลาย, ปวช.	6. <input type="checkbox"/> ปวส. , อนุปริญญา
7. <input type="checkbox"/> ปริญญาตรี	8. <input type="checkbox"/> สูงกว่าปริญญาตรี
9. <input type="checkbox"/> อื่นๆ ระบุ.....	
4. อาชีพหลัก (อาชีพที่ทำรายได้ประจำ หรือรายได้หลัก)

1. <input type="checkbox"/> เกษตรกร	2. <input type="checkbox"/> ปศุสัตว์	3. <input type="checkbox"/> ค้าขาย
4. <input type="checkbox"/> รับจ้างทั่วไป	5. <input type="checkbox"/> ธุรกิจส่วนตัว	6. <input type="checkbox"/> พนักงานบริษัท/องค์กรเอกชน
7. <input type="checkbox"/> ข้าราชการ/พนักงานรัฐวิสาหกิจ	8. <input type="checkbox"/> แม่บ้าน/พ่อบ้าน	
9. <input type="checkbox"/> อื่น ๆ (ระบุ).....		
5. รายได้ของครอบครัวเฉลี่ยต่อเดือน.....บาท
6. ปัจจุบันท่านพักอยู่ในเขตจังหวัด (ระบุ).....

<input type="checkbox"/> กรุงเทพมหานคร	<input type="checkbox"/> ภาคกลาง
<input type="checkbox"/> ภาคเหนือ	<input type="checkbox"/> ภาคใต้
<input type="checkbox"/> ภาคตะวันออก	<input type="checkbox"/> ภาคตะวันตก
<input type="checkbox"/> ภาคตะวันออกเฉียงเหนือ	<input type="checkbox"/> ต่างประเทศ (ระบุ)
7. ก่อนหน้านี้ท่านเคยเดินทางมาเที่ยวที่คอนฮอยหลอดหรือไม่

<input type="checkbox"/> ไม่เคย เดือน.....ครั้ง	<input type="checkbox"/> เคยมาแล้วกี่ครั้งในรอบ 6
----------------------------------------------------	---------------------------------------------------

8. ท่านได้หาข้อมูลของแหล่งท่องเที่ยวคอนฮอยหลอด ก่อนหน้าเดินทางเข้ามาท่องเที่ยวหรือไม่

- ไม่ได้หาข้อมูล
- ได้หาข้อมูล จากแหล่ง
- | | |
|-----------------------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> เพื่อน | <input type="checkbox"/> ญาติพี่น้อง |
| <input type="checkbox"/> วารสารการท่องเที่ยว | <input type="checkbox"/> บริษัทนำเที่ยว |
| <input type="checkbox"/> เอกสาร/ แผ่นพับของหน่วยงานราชการ | <input type="checkbox"/> อินเทอร์เน็ต |
| <input type="checkbox"/> นิตยสาร (ระบุ)..... | <input type="checkbox"/> สื่อมวลชน ประเภท |
| <input type="checkbox"/> อื่น (ระบุ) | |

9. ท่านเดินทางมาท่องเที่ยวที่คอนฮอยหลอดอย่างไร

- รถยนต์นั่งส่วนบุคคล
- รถโดยสารประจำทาง
- รถตู้เช่า
- รถทัวร์ของบริษัทนำเที่ยว
- อื่นๆ (ระบุ)

ส่วนที่ 2 ความคิดเห็นและทัศนคติต่อการท่องเที่ยวในคอนฮอยหลอด

10. ท่านได้รับความรู้เกี่ยวกับทรัพยากรการท่องเที่ยวที่มีอยู่ในบริเวณคอนฮอยหลอดหรือไม่

- ไม่ได้ เพราะ
- ได้ จากที่ใด
- | |
|-------------------------------------------------------------------|
| <input type="checkbox"/> ศูนย์ข้อมูลชุมชน |
| <input type="checkbox"/> แผ่นป้ายข้อมูลที่มีอยู่ในแหล่งท่องเที่ยว |
| <input type="checkbox"/> พนักงานบริษัทนำเที่ยว |
| <input type="checkbox"/> อื่นๆ (ระบุ) |

11. แผ่นป้าย/ สัญลักษณ์ข้อมูลที่มีอยู่ในแหล่งท่องเที่ยวและบริเวณต่างๆ ควรมีการปรับปรุงหรือไม่

- ควรปรับปรุง เพราะ
- ไม่ต้องปรับปรุง เพราะ.....

12. ขณะที่ท่านท่องเที่ยวอยู่ในบริเวณนี้ ท่านรู้สึกอึดอัดจากนักท่องเที่ยวข้างเคียงมากน้อยเพียงใด

- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ส่วนที่ 3 ปัจจัยด้านการท่องเที่ยว

13. ท่านคิดว่าคอนฮอยหลอดอยู่ใกล้เส้นทางหลัก

- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

14. ความคิดเห็นและทัศนคติต่อการท่องเที่ยวในคอนฮอยหลอด

ระดับความแออัดของนักท่องเที่ยวในช่วงเวลาที่มีจำนวนนักท่องเที่ยวมากที่สุด

- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ตอนที่ 3.1 ระดับความพึงพอใจของท่านต่อการท่องเที่ยวคอนฮอยหลอด ให้ทำเครื่องหมาย ✓
(ระดับความพึงพอใจ 5 หมายถึง มากที่สุด - 1 หมายถึง น้อยที่สุด)

ความพึงพอใจ	ระดับความพึงพอใจ				
	(5)	(4)	(3)	(2)	(1)
15. การใช้ประโยชน์ในพื้นที่โดยรอบคอนฮอยหลอด					
16. การจัดระเบียบร้านค้าบริเวณโดยรอบคอนฮอยหลอด					
17. ทางเท้าสัญจรบริเวณรอบคอนฮอยหลอด					
18. เครื่องหมาย/ป้าย/สัญลักษณ์เพื่อบอกทิศทางในการมาคอนฮอยหลอด					
19. การได้รับความรู้เกี่ยวกับแหล่งท่องเที่ยว					
20. ความสะอาดสบายในการจอดรถ					
21. ปริมาณถังขยะบริเวณรอบๆคอนฮอยหลอด					
22. ความปลอดภัยในชีวิตและทรัพย์สิน					
23. การนั่งเรือชมคอนฮอยหลอด					

24. กิจกรรมการหยอดหอยหลอด					
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ตอนที่ 3.2 การประเมินผลกระทบจากกิจกรรมท่องเที่ยวที่สังเกตเห็นได้

(5 หมายถึง รุนแรงมากที่สุด และ 1 หมายถึงไม่ปรากฏหรือปรากฏน้อยมาก)

ผลกระทบที่ปรากฏเห็น	ระดับการประเมิน				
	5	4	3	2	1
25. <input type="checkbox"/> มีการกัดเซาะริมตลิ่ง					
26. <input type="checkbox"/> มีกลิ่นไม่พึงปรารถนา					
27. <input type="checkbox"/> การบดบังทัศนียภาพจากสิ่งปลูกสร้าง					
28. <input type="checkbox"/> ปริมาณขยะ					
29. <input type="checkbox"/> น้ำเสียที่ไหลลงบริเวณดอนหอยหลอด					
30. <input type="checkbox"/> การใช้ปูนในการขาวหอยหลอด					
31. <input type="checkbox"/> คราบน้ำมันจากเรือเข้าชมคูดอนหอยหลอด					
32. <input type="checkbox"/> อื่นๆ					

ตอนที่ 3.3 ด้านกิจกรรมการท่องเที่ยว

33. ท่านคิดว่าดอนหอยหลอดมีกิจกรรมการท่องเที่ยว ที่มีความเพลิดเพลิน น่าสนใจ และเป็นที่ต้องการของนักท่องเที่ยว

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

34. ท่านคิดว่ากิจกรรมการท่องเที่ยวที่ดอนหอยหลอด เป็นกิจกรรมที่สร้างจิตสำนึกและความตระหนักถึงคุณค่าของวิถีชีวิต วัฒนธรรม หรือการอนุรักษ์ทรัพยากร ธรรมชาติให้แก่ นักท่องเที่ยว

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

35. ท่านคิดว่ากิจกรรมการท่องเที่ยวที่ดอนหอยหลอดไม่ส่งผลกระทบต่อระบบนิเวศ

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

36. ท่านคิดว่ากิจกรรมการท่องเที่ยวที่คอนฮอยหลอด จะช่วยส่งเสริมให้นักท่องเที่ยวเกิดความตระหนักและสร้างจิตสำนึกในการอนุรักษ์
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ส่วนที่ 4 ตัวชี้วัดด้านการจัดการการท่องเที่ยว

ตอนที่ 4.1 ด้านสังคมและวัฒนธรรมในบริเวณแหล่งท่องเที่ยว

37. ท่านคิดว่าประชาชนในพื้นที่บริเวณคอนฮอยหลอดมีความพึงพอใจและมีทัศนคติที่ดีต่อการท่องเที่ยว
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
38. ท่านคิดว่าชุมชนท้องถิ่นควรดำเนินธุรกิจหรือกิจกรรมการท่องเที่ยวด้วยตัวเอง
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
39. ท่านคิดว่าปริมาณขยะในพื้นที่บริเวณคอนฮอยหลอดที่เพิ่มขึ้นเกี่ยวข้องกับกิจกรรมท่องเที่ยว
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
40. ท่านคิดว่าการท่องเที่ยวส่งผลให้พื้นที่บริเวณที่ท่านอยู่มีความแออัด เป็นสาเหตุให้การจราจรติดขัด และการโจรกรรม
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
41. ท่านคิดว่าการขายตัวด้านการท่องเที่ยวเป็นสาเหตุให้ภูมิปัญญาชาวบ้านสูญหาย
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
42. ท่านมีคิดว่าการขายตัวด้านการท่องเที่ยวส่งผลกระทบต่อคุณภาพชีวิตของท่าน
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
43. ท่านคิดว่าสิ่งปลูกสร้าง อาคารบริเวณแหล่งท่องเที่ยวมีรูปทรงและวัสดุก่อสร้างที่คงความเอกลักษณ์ของท้องถิ่นไว้อย่างสมบูรณ์
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
44. ท่านคิดว่าบริเวณแหล่งท่องเที่ยวมีการให้ข้อมูล ความรู้แก่นักท่องเที่ยวเกี่ยวกับวัฒนธรรมท้องถิ่นหรือไม่
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
45. มีการพบเห็นเจ้าหน้าที่ตรวจตราหรืออยู่ในพื้นที่ตลอดเวลา มีป้ายระบุงการ ใช้พื้นที่และเตือนอันตราย
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ตอนที่ 3.2 ตัวชี้วัดด้านสิ่งแวดล้อม

46. ท่านคิดว่าคอนกรีตควรมีมาตรการกำหนดจำนวนนักท่องเที่ยว/กิจกรรมการท่องเที่ยวให้เหมาะสมกับพื้นที่
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
47. . ท่านคิดว่าองค์กรท้องถิ่นควรมีมาตรการในการอนุรักษ์พลังงานและทรัพยากรธรรมชาติ
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
48. ท่านได้พบเห็นกลุ่มนักท่องเที่ยวที่ประกอบกิจกรรมไม่เหมาะสม ฝ่าฝืนกฎระเบียบของท้องถิ่น เช่น ทิ้งขยะในที่สาธารณะ จิตเจียนโบราณสถานหรือต้นไม้
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
49. . ท่านคิดว่าคอนกรีตควรมีการจัดการขยะที่เหมาะสม
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
50. ท่านคิดว่าชุมชนควรมีมาตรการหรือกฎระเบียบสำหรับนักท่องเที่ยวและผู้เกี่ยวข้องในการใช้ทรัพยากรธรรมชาติ
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
51. ท่านคิดว่าชุมชนควรมีการแบ่งพื้นที่ตามความเหมาะสมกับการใช้ประโยชน์
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ตอนที่ 3.3 ตัวชี้วัดด้านเศรษฐกิจ

52. ท่านคิดว่าการท่องเที่ยวเป็นรายได้หลักของประชาชนในพื้นที่หรือไม่
- ไม่ใช่รายได้หลักของคนในพื้นที่
- รายได้จากการท่องเที่ยวเป็นรายได้หลัก
53. ท่านคิดว่าการขยายตัวทางด้านการท่องเที่ยวส่งผลให้มีการว่าจ้างแรงงานเพิ่มขึ้น
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
54. ท่านคิดว่ารายได้จากการท่องเที่ยวเพียงพอต่อการดำรงชีวิตหรือไม่
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
55. ท่านคิดว่าองค์กรท้องถิ่นของท่านมีการสร้างระบบให้เกิดการกระจายประโยชน์สู่ชุมชน และผู้เกี่ยวข้องอย่างเป็นธรรม
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

56. ท่านคิดว่าพื้นที่ดอนหอยหลอด ควรมีการประชาสัมพันธ์และประสานงานกับหน่วยงานอื่นๆ เพื่อส่งเสริมท่องเที่ยวในชุมชน

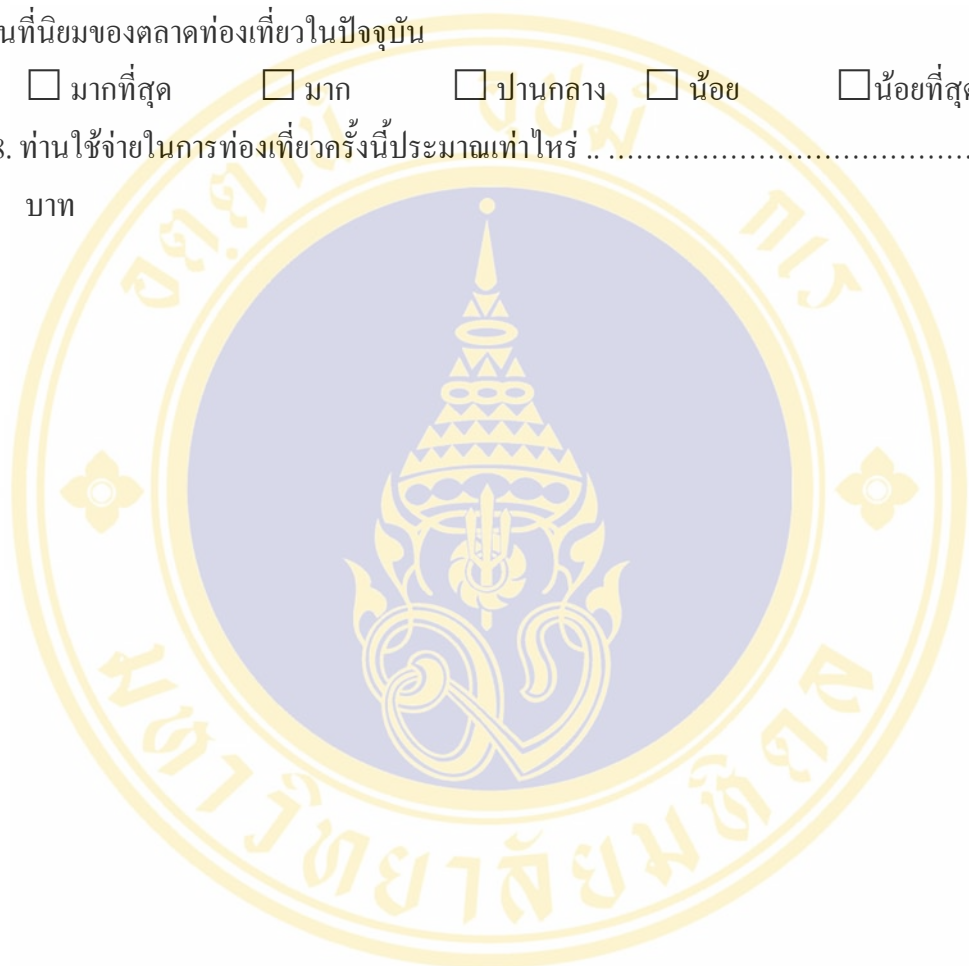
มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

57. . ท่านคิดว่าพื้นที่ดอนหอยหลอดควรมีทรัพยากร/กิจกรรมท่องเที่ยวที่น่าสนใจ ไม่ซ้ำแบบ และเป็นที่ยอมรับของตลาดท่องเที่ยวในปัจจุบัน

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

58. ท่านใช้จ่ายในการท่องเที่ยวครั้งนี้ประมาณเท่าไร?

บาท



APPENDIX D

แบบสอบถามข้อมูลพื้นฐานสำหรับชุมชน

ประกอบการวิจัยเรื่อง “การจัดการการท่องเที่ยวพื้นที่ชุ่มน้ำแบบยั่งยืน
ดอนหอยหลอด จังหวัดสมุทรสงคราม

โดย นางสาว พิศณี โกพลรัตน์
นักศึกษาหลักสูตรวิทยาศาสตรมหาบัณฑิต
สาขาการจัดการทรัพยากรธรรมชาติ (หลักสูตรนานาชาติ)
คณะสิ่งแวดล้อมและทรัพยากรศาสตร์ มหาวิทยาลัยมหิดล

คำชี้แจง

1. แบบสอบถามชุดนี้ทำขึ้นเพื่อใช้เป็นส่วนหนึ่งของวิทยานิพนธ์เรื่อง “การจัดการการท่องเที่ยวพื้นที่ชุ่มน้ำแบบยั่งยืน พื้นที่ศึกษา ดอนหอยหลอด จังหวัด สมุทรสงคราม”
2. แบบสอบถามนี้เป็นประโยชน์อย่างยิ่งต่อการวัดระดับความคิดเห็นของประชาชนในพื้นที่ เพื่อนำมาพัฒนาการจัดการการท่องเที่ยวแบบยั่งยืนพื้นที่ ผู้วิจัยปรารถนาให้ผู้ตอบแบบสอบถามให้ข้อมูลตามเป็นจริง
3. ผู้วิจัยเห็นว่าคำตอบทั้งหมดเป็นความจริงและเป็นประโยชน์ต่อการประเมินผล อีกทั้งยังมีความสำคัญต่อการวิจัยต่อไปและสามารถเป็นตัวชี้วัดระดับการจัดการพื้นที่

ผู้ให้ข้อมูลชื่อ.....

วัน/เดือน/ปี/...../.....

คำชี้แจง โปรดทำเครื่องหมาย ✓ ในช่อง ที่ตรงกับข้อมูลของท่านมากที่สุดเพียงข้อเดียว และหากท่านมีข้อเสนอแนะหรือต้องการแก้ไขประเด็นใดสามารถเสนอแนะได้ในท้ายแบบสอบถาม

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ให้สัมภาษณ์

1. เพศ 1. ชาย 2. หญิง
2. อายุ ปี
3. ระดับการศึกษาสูงสุด
- | | |
|-----------------------------------------------------|----------------------------------------------|
| 1. <input type="checkbox"/> ไม่ได้เรียนหนังสือ | 2. <input type="checkbox"/> ประถมศึกษาตอนต้น |
| 3. <input type="checkbox"/> ประถมศึกษาตอนปลาย | 4. <input type="checkbox"/> มัธยมศึกษาตอนต้น |
| 5. <input type="checkbox"/> มัธยมศึกษาตอนปลาย, ปวช. | 6. <input type="checkbox"/> ปวส. , อนุปริญญา |
| 7. <input type="checkbox"/> ปริญญาตรี | 8. <input type="checkbox"/> สูงกว่าปริญญาตรี |
| 9. <input type="checkbox"/> อื่นๆ ระบุ..... | |
4. อาชีพหลัก (อาชีพที่ทำรายได้หลัก)
- | | | |
|----------------------------------------------------------|---------------------------------------------|-------------------------------------------------------|
| 1. <input type="checkbox"/> เกษตรกร | 2. <input type="checkbox"/> ปศุสัตว์ | 3. <input type="checkbox"/> ค้าขาย |
| 4. <input type="checkbox"/> รับจ้างทั่วไป | 5. <input type="checkbox"/> ธุรกิจส่วนตัว | 6. <input type="checkbox"/> พนักงานบริษัท/องค์กรเอกชน |
| 7. <input type="checkbox"/> ข้าราชการ/พนักงานรัฐวิสาหกิจ | 8. <input type="checkbox"/> แม่บ้าน/พ่อบ้าน | |
| 9. <input type="checkbox"/> อื่น ๆ (ระบุ)..... | | |
5. รายได้ของครอบครัวเฉลี่ยต่อเดือน.....บาท
6. ภูมิลำเนาของท่านจังหวัด (ระบุ).....
- | | |
|------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> กรุงเทพมหานคร | <input type="checkbox"/> ภาคกลาง |
| <input type="checkbox"/> ภาคเหนือ | <input type="checkbox"/> ภาคใต้ |
| <input type="checkbox"/> ภาคตะวันออก | <input type="checkbox"/> ภาคตะวันตก |
| <input type="checkbox"/> ภาคตะวันออกเฉียงเหนือ | <input type="checkbox"/> ต่างประเทศ (ระบุ) |

ส่วนที่ 2 การประเมินผลกระทบจากกิจกรรมท่องเที่ยวที่สามารถสังเกตได้
(5 หมายถึง รุนแรงมากที่สุด และ 1 หมายถึง ไม่ปรากฏหรือปรากฏน้อยมาก)

ผลกระทบที่ปรากฏเห็น	ระดับการประเมิน				
	5	4	3	2	1
7. <input type="checkbox"/> มีการกัดเซาะริมตลิ่ง					
8. <input type="checkbox"/> มีกลิ่นไม่พึงปรารถนา					
9. <input type="checkbox"/> การบดบังทัศนียภาพจากสิ่งปลูกสร้าง					
10. <input type="checkbox"/> ปริมาณขยะ					
11. <input type="checkbox"/> คราบน้ำมันจากเรือเที่ยวชมดอนหอยหลอด					
12. <input type="checkbox"/> การใช้ปูนขาวหอยดหอยหลอด					
13. <input type="checkbox"/> น้ำเสียจาก ร้านค้าและ ร้านอาหาร					
14. <input type="checkbox"/> อื่นๆ					

ตอนที่ 2.1 ระดับความพึงพอใจของท่านต่อการท่องเที่ยวดอนหอยหลอดให้ทำเครื่องหมาย ✓
(ระดับความพึงพอใจ 5 หมายถึง มากที่สุด - 1 หมายถึง น้อยที่สุด)

ความพึงพอใจ	ระดับความพึงพอใจ				
	(5)	(4)	(3)	(2)	(1)
15. การใช้ประโยชน์ในพื้นที่โดยรอบดอนหอยหลอด					
16. การจัดระเบียบร้านค้าบริเวณ โดยรอบดอนหอยหลอด					
17. ทางเท้าสัญจรบริเวณรอบดอนหอยหลอด					
18. เครื่องหมาย/ป้าย/สัญลักษณ์เพื่อบอกทิศทางในการมาดอนหอยหลอด					
19. การให้ความรู้เกี่ยวกับแหล่งท่องเที่ยว					
20. ความสะอาดสบายในการจอดรถ					
21. ปริมาณถังขยะบริเวณรอบๆ ดอนหอยหลอด					

22. ความปลอดภัยในชีวิตและทรัพย์สิน					
23. การนั่งเรือคอนฮอยหลอด					
24. กิจกรรมการหยอดฮอยหลอด					

ส่วนที่ 3 ตัวชี้วัดการจัดการการท่องเที่ยวแบบยั่งยืน

ตอนที่ 3.1 ตัวชี้วัดด้านสังคมและวัฒนธรรมในบริเวณแหล่งท่องเที่ยว

25. ท่านคิดว่าประชาชนในพื้นที่บริเวณคอนฮอยหลอดมีความพึงพอใจและมีทัศนคติที่ดีต่อการท่องเที่ยว

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

26. ท่านคิดว่าชุมชนท้องถิ่นควรดำเนินธุรกิจหรือกิจกรรมการท่องเที่ยวด้วยตัวเอง

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

27. ท่านคิดว่าปริมาณขยะในพื้นที่บริเวณคอนฮอยหลอดที่เพิ่มขึ้นเกี่ยวข้องกับกิจกรรมท่องเที่ยว

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

28. ท่านคิดว่าการท่องเที่ยวส่งผลให้พื้นที่บริเวณที่ท่านอยู่มีความแออัด เป็นสาเหตุให้การจราจรติดขัด และการโจรกรรม

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

29. ท่านคิดว่าการขยายตัวด้านการท่องเที่ยวเป็นสาเหตุให้ภูมิปัญญาชาวบ้านสูญหาย

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

30. ท่านมีคิดว่าการขยายตัวด้านการท่องเที่ยวส่งผลกระทบต่อคุณภาพชีวิตของท่าน

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

31. ท่านคิดว่าสิ่งปลูกสร้าง อาคารบริเวณแหล่งท่องเที่ยวมีรูปทรงและวัสดุก่อสร้างที่คงความเอกลักษณ์ของท้องถิ่นไว้อย่างสมบูรณ์

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

32. ท่านคิดว่าบริเวณแหล่งท่องเที่ยวมีการให้ข้อมูล ความรู้แก่นักท่องเที่ยวเกี่ยวกับวัฒนธรรมท้องถิ่นหรือไม่

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

33. มีการพบเห็นเจ้าหน้าที่ตรวจตราหรืออยู่ในพื้นที่ตลอดเวลา มีป้ายระบุงการใช้พื้นที่และเตือนอันตราย

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ตอนที่ 3.2 ตัวชี้วัดด้านสิ่งแวดล้อม

34. ท่านคิดว่าคอนกรีตหรือวัสดุอื่นที่มีมาตรการกำหนดจำนวนนักท่องเที่ยว/กิจกรรมการท่องเที่ยวให้เหมาะสมกับพื้นที่

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

35. ท่านคิดว่าชุมชนควรมีมาตรการหรือกฎระเบียบสำหรับนักท่องเที่ยวและผู้เกี่ยวข้องในการใช้ทรัพยากรธรรมชาติ

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

36. ท่านคิดว่าชุมชนควรมีมาตรการในการอนุรักษ์พลังงานและทรัพยากรธรรมชาติ

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

37. ท่านคิดว่าคอนกรีตหรือวัสดุอื่นที่มีการจัดการขยะที่เหมาะสม

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

38. ท่านได้พบเห็นกลุ่มนักท่องเที่ยวที่ประกอบกิจกรรมไม่เหมาะสม ฝ่าฝืนกฎระเบียบของท้องถิ่น เช่น ทิ้งขยะในที่สาธารณะ ชีดเขียนโบราณสถานหรือต้นไม้

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

39. ท่านคิดว่าชุมชนควรมีการแบ่งพื้นที่ตามความเหมาะสมกับการใช้ประโยชน์

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

40. ชุมชนท้องถิ่นได้มีกิจกรรมหรืออบรมที่เกี่ยวข้องกับการอนุรักษ์และปลูกจิตสำนึกด้านสิ่งแวดล้อมหรือไม่ ถ้ามีเป็นกิจกรรมลักษณะใด และระดับผู้เข้าร่วมกิจกรรม

มี

ลักษณะของกิจกรรม

ระดับผู้เข้าร่วมโครงการ

ประถมศึกษาตอนต้น

ประถมศึกษาตอนปลาย

มัธยมศึกษาตอนต้น

มัธยมศึกษาตอนปลาย, ปวช.

ปวส. , อนุปริญญา

ปริญญาตรี

สูงกว่าปริญญาตรี

อื่นๆ ระบุ

.....

ไม่มีการจัดอบรมหรือกิจกรรมด้านสิ่งแวดล้อม

ตอนที่ 3.3 ตัวชี้วัดด้านเศรษฐกิจ

41. ท่านคิดว่าการท่องเที่ยวเป็นรายได้หลักของประชาชนในพื้นที่หรือไม่
- ไม่ใช่รายได้หลักของคนในพื้นที่
- รายได้จากการท่องเที่ยวเป็นรายได้หลัก
42. ท่านคิดว่าการขยายตัวทางด้านการท่องเที่ยวส่งผลให้มีการว่าจ้างแรงงานเพิ่มขึ้น
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
43. ท่านคิดว่ารายได้จากการท่องเที่ยวเพียงพอต่อการดำรงชีวิตหรือไม่
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
44. ท่านคิดว่าองค์กรท้องถิ่นของท่านมีการสร้างระบบให้เกิดการกระจายประโยชน์สู่ชุมชน และผู้เกี่ยวข้องอย่างเป็นธรรม
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
45. ท่านคิดว่าพื้นที่ดอนหอยหลอด ควรมีการประชาสัมพันธ์และประสานงานกับหน่วยงานอื่นๆ เพื่อส่งเสริมท่องเที่ยวในชุมชน
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
46. ท่านคิดว่าพื้นที่ดอนหอยหลอดควรมีทรัพยากร กิจกรรมท่องเที่ยว ที่น่าสนใจ ไม่ซ้ำแบบ และเป็นที่ยอมรับของตลาดท่องเที่ยวในปัจจุบัน
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ตอนที่ 3.4 ตัวชี้วัดด้านการปกครองและการมีส่วนร่วมของประชาชน

47. ชุมชนมีส่วนร่วมในการวางแผนการจัดการการท่องเที่ยว
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
48. ท่านคิดว่าองค์กรชุมชนควรมีการรองรับการดำเนินงานและจัดการการท่องเที่ยว
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
49. ท่านคิดว่าชุมชนของท่านควรมีความสามัคคีและให้ความร่วมมือในการดำเนินงาน มีจิตสำนึกในการพัฒนาชุมชน มีผู้นำที่เข้มแข็งและเป็นที่น่าเชื่อถือของชุมชน
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
50. ท่านคิดว่าชุมชนของท่านควรมีระบบการบริหารจัดการด้านการเงินที่โปร่งใส
- มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
51. ท่านทราบหรือไม่ว่าแผนนโยบายของชุมชนมีมาตรการด้านการจัดการมลพิษ เช่น น้ำเน่าเสีย ขยะ
- ทราบ มีการจัดการด้านในบ้างโปรครระบุ

1. 3.

2. 4.

ไม่ทราบ

52. ประชาชนในพื้นที่ที่มีการติดต่อสื่อสารและร่วมมือกับองค์กรส่วนท้องถิ่น

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

53. ท่านคิดว่าองค์กรส่วนท้องถิ่นของท่านควรมีโอกาสได้รับการสนับสนุนเงินทุนจากหน่วยงานภาครัฐ หรือหน่วยงานภายนอก

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

54. ท่านคิดว่าองค์กรส่วนท้องถิ่นได้มีการตรวจสอบหรือควบคุมผู้ประกอบการการท่องเที่ยว สิ่งอำนวยความสะดวกสำหรับนักท่องเที่ยวและ นักท่องเที่ยว

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

55. ท่านคิดว่าองค์กรส่วนท้องถิ่นของท่านควรมีระบบการคืนผลประโยชน์สู่การอนุรักษ์สิ่งแวดล้อม และท้องถิ่น

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

56. ท่านคิดว่าองค์กรส่วนท้องถิ่นของท่านควรมีการสร้างระบบให้เกิดการกระจายประโยชน์สู่ชุมชน และผู้เกี่ยวข้องอย่างเป็นธรรม

มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

APPENDIX E
STAKEHOLDER ANALYSIS (MATRIX RANKING)

		Importance of Stakeholder			
		Unknown	Little/ No importance	Some importance	Significant importance
Influence of Stakeholder	Significant influence	C		A	
	Somewhat influence				
	Little / No influence	D		B	
	Unknown				

APPENDIX F



Picture D – 1 the existing condition of Don Hoi Lot




Picture D – 2 Interviewed tourists at Don Hoi Lot



Picture D – 3 Interviewed local people at Don Hoi Lot



Picture D – 4 in – depth interview with SAO officers

BIOGRAPHY

NAME	Pisane Kopolratana
DATE OF BIRTH	November 29 th , 1983
PLACE OF BIRTH	Sakon Nakhon
INSTITUTIONS ATTENDED	Kasetsart University, 2001 – 2005 Bachelor of Arts (English) Mahidol University, 2007 – 2008 Master of Science (Natural Resource Management)
RESEARCH GRANT	Supported in part by the Thesis Grant, Master of Science Programme (International Programme), Faculty of Environment and Resources Studies, Mahidol University, 2008
HOME ADDRESS	496/49 Soi Chareungkit, Rama IV, Bangrak Bangkok , Thailand 10500
E-MAIL ADDRESS	van_dadida@hotmail.com
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