

Ecotourism Management for Sustainability in Protected Areas in Thailand

Nirachorn Chitapanya

Master of Environmental Management



**Submitted in Partial Fulfillment of the Requirements for the Degree of Master
of Environmental Management**

**School of Geography and Environmental Studies
University of Tasmania
Hobart, Tasmania, Australia**

August 2005

STATEMENT OF AUTHENTICITY

This thesis contains no material which has been accepted for the award of any other higher degree or graduate diploma in any tertiary institution. To the best of my knowledge and belief, this thesis contains no copy or paraphrase of material previously published or written by other persons, except when due reference is made in the text of the thesis.



Nirachorn Chitapanya

ABSTRACT

Tourism is one of the largest industries in terms of employment. It has played a significant role in supporting many countries economies. Tourism, however, can harm the natural environment and cause problems such as biodiversity degradation, garbage and wastewater if tourism is inappropriately planned and managed. Over the past decade, there has been increasing in environmental awareness regarding the negative impacts of mass tourism on the environment.

Sustainable tourism and ecotourism have become more popular among tourists and environmentalists and are believed to meet the requirement of sustainable development. These two forms of tourism can be defined as alternative tourism which emphasizes minimum impact on the environment, maintains natural resources and consider the well-being of local people. As ecotourism is based the natural areas, and often take place in protected areas such as terrestrial and marine national parks. In Thailand, protected areas have long provided important natural resources and activities for visitor for education, tourism and recreation.

This research examines ecotourism in five selected protected areas in Thailand and examines whether or not ecotourism will generate benefits to local communities and meet sustainability criteria. The methods used in this research comprise a review of the literature and document analysis. In doing the document analysis, two major related approaches were taken; thematic analysis and criteria-based analysis. These two approaches enabled richer insight into the content of documents than could be obtained using a single approach.

The results of the research have shown that ecotourism in five selected protected areas can generate social and economic benefits to local communities in terms of providing employment opportunities and additional income. However, the study has indicated that "so-called ecotourism" has negative environmental impacts in tourist destinations in the parks. The major problems in the five parks are wildlife and coral

reef degradation, and waste and wastewater disposal. These may decrease the quality of visitors' experiences.

The results of this research have implications for protected areas in Thailand as a whole. Overall, ecotourism in protected areas ecotourism is well-managed in terms of socio-cultural and economic factors. Nevertheless, all related stakeholders such as park managers, planners and local communities need to focus more on environmental impact and the more effective management is required in this regard.

ACKNOWLEDGEMENT

This project has been completed under assistance and support from many people. In particular, I would like to thank the following people who have encouraged and sacrificed their time to give ideas, input, opinions and spirit.

- My supervisor, Dr. Michael Lockwood for his advise, ideas, direction, motivation encouragement, and continuous guidance;
- My family, father, mother, grandmother and brothers for their love, encouragement and financial support;
- Dr. Jim Russell for giving me a spirit and directions;
- Peter Ashley for his great help and suggestions in proof reading;
- Officers and students in Department of Conservation, Faculty of Forestry, Kasetsart University (KU), Thailand for their suggestions and information about ecotourism in Thailand;
- And also my friends Ko, Bon, Pae, Yee and my twin cousins for their encouraging, supporting, and time.

TABLE OF CONTENTS

| | |
|--|-----------|
| STATEMENT OF AUTHENTICITY..... | i |
| ABSTRACT | ii |
| ACKNOWLEDGEMENT | iv |
| CHAPTER ONE INTRODUCTION | 1 |
| 1.1 Background and significance of the research | 1 |
| 1.2 Research questions and objectives..... | 3 |
| 1.3 Chapter outline..... | 4 |
| CHAPTER TWO RESEARCH METHODOLOGY..... | 6 |
| 2.1 Overview | 6 |
| 2.2 Literature review | 6 |
| 2.3 Comparison of tourism research methods..... | 7 |
| 2.4 Selection of the method..... | 11 |
| 2.5 Document analysis as used in this research | 11 |
| 2.5.1 Selection of documents | 12 |
| 2.5.2 Analytical approaches | 13 |
| 2.6 Selection of study sites..... | 16 |
| 2.7 Chapter summary | 20 |
| CHAPTER THREE SUSTAINABLE DEVELOPMENT | |
| ANDECOTOURISM..... | 21 |
| 3.1 Overview | 21 |
| 3.2 The nature of tourism..... | 21 |
| 3.3 Tourism and natural environments | 23 |
| 3.4 Sustainable development and tourism..... | 23 |
| 3.5 Definitions and concepts of sustainable tourism..... | 26 |
| 3.6 Ecotourism | 28 |
| 3.6.1 Definitions and concepts..... | 28 |
| 3.6.2 Characteristics of ecotourism..... | 29 |
| 3.6.3 Impacts of ecotourism..... | 31 |
| 3.7 Chapter Summary | 35 |

CHAPTER FOUR ECOTOOURISM AND PROTECTED

AREAS IN THAILAND 36

| | |
|---|----|
| 4.1 Overview | 36 |
| 4.2 Overview of Thai tourism | 36 |
| 4.3 Background information on ecotourism in Thailand | 37 |
| 4.3.1 Ecotourism policy of Thailand | 38 |
| 4.4 Protected areas in Thailand | 40 |
| 4.4.1 Definition and characteristics of protected areas | 40 |
| 4.5 Ecotourism and Protected Areas in Thailand | 45 |
| 4.6 Chapter summary | 46 |

CHAPTER FIVE DOCUMENT ANALYSIS RESULTS 47

| | |
|--|----|
| 5.1 Overview | 47 |
| 5.2 Thematic classification | 47 |
| 5.2.1 Theme I: Socio-cultural | 52 |
| 5.2.2 Theme II: Economic | 53 |
| 5.2.3 Theme III: Environmental | 53 |
| 5.3 Criteria-based assessment | 54 |
| 5.3.1 Criterion 1: Local participation | 56 |
| 5.3.2 Criterion 2: Increase environmental awareness | 56 |
| 5.3.3 Criterion 3: Employment for locals | 57 |
| 5.3.4 Criterion 4: Revenues earned from tourism | 57 |
| 5.3.5 Criterion 5: Tourist's investment by residents | 57 |
| 5.3.6 Criterion 6: Biodiversity conservation | 58 |
| 5.3.7 Criterion 7: Waste minimization | 59 |
| 5.3.8 Criterion 8: Water management | 59 |
| 5.4 Chapter summary | 59 |

CHAPTER SIX DISCUSSION 61

| | |
|---------------------------------------|----|
| 6.1 Overview | 61 |
| 6.2 Socio-cultural concerns | 61 |
| 6.3 Economic concerns | 63 |
| 6.4 Environmental concerns | 64 |
| 6.5 Recreation experience | 66 |
| 6.6 Limitations of the research | 66 |

CHAPTER SEVEN CONCLUSION AND

RECOMMENDATION 67

7.1 Overview 67

7.2 Summary of the research..... 67

7.3 Recommendations 69

7.3.1 Socio-cultural concerns..... 69

7.3.2 Economic concerns 70

7.3.3 Environmental concerns..... 70

7.3.4 Recreation experience..... 71

BIBLIOGRAPHY 72

APPENDIX A LIST OF DOCUMENTS 82

LIST OF FIGURES

| | |
|---|----|
| Figure 2.1: Location of Five Selected Protected Areas | 19 |
| Figure 3.1: Types of Tourism | 22 |
| Figure 4.1: Map of Thailand's National Protected Areas System | 43 |

LIST OF TABLES

| | |
|---|----|
| Table 2.1: Determinations of Satisfaction Levels..... | 16 |
| Table 2.2: Study Sites Landscape Types and Intensity Use | 17 |
| Table 3.1: Simple Comparison between Ecotourism and Mass Tourism | 30 |
| Table 3.2: Hypothetical Costs and Benefits of Ecotourism | 33 |
| Table 4.1: Thailand's Protected Areas Category, Number of Units and Size of Coverage | 42 |
| Table 4.2: Number of Visitors in Thailand's National Parks in 2001 -2004 | 46 |
| Table 5.1: Documents Categorized by Themes | 48 |
| Table 5.2: Criteria-Base Analysis for Five Protected Areas | 55 |

CHAPTER ONE

INTRODUCTION

1.1 Background and significance of the research

Over the past decade, tourism has become the fastest growing and largest industry in many countries in terms of employment and share of global gross domestic product (Dowling, 1998; United Nation, 2001). In 2004, the World Tourism Organization (WTO) stated that worldwide there were 760 million international tourist arrivals and tourist receipts of US\$622 billion (World Tourism Organization, 2005). As global concern has grown about environmental conservation and the negative impacts of tourism development, ecotourism has become a popular model for nature-based tourism. Ecotourism and nature-based tourism provide for sustainable development when their scale is limited so that the negative impacts of tourism on social and environmental values are minimized (Dawson, 2001).

According to the Australian Department of Tourism, ecotourism is “nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable” (Diamantis, 1999, p.98). Ecotourism Australia gives a similar definition of ecotourism: “ecotourism is ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation” (Ecotourism Australia, 2005). Therefore, ecotourism is a new form of conventional tourism as it aims to educate tourists, provide improved environmental awareness as well as giving tourists experience of natural areas in order to ensure long-term sustainability of environments.

Ecotourism is expanding in many countries, creating benefits in terms of natural environmental conservation and sustainable development (Marion and Farrell, 1998). In the new South Africa, ecotourism is providing potential incentives for increasing the standard of living of local black residents, who are involving themselves in

ecotourism activities. Ecotourism in Galapagos Islands generates revenues to help preserve the entire Ecuador national park network. In Australia and New Zealand, ecotourism contributes a large proportion in tourism industry and contributes significantly to the economy of both countries (Ceballos-Lascurain, 1998). In addition, ecotourism is becoming a major market segment to help promoting nature-based tourism in many countries in South East Asia such as Indonesia, Malaysia and Thailand (Dowling, 1998).

In Thailand, tourism supports and stimulates the country's economic development. As the issues of sustainable development and environmental conservation have emerged as significant global issues, ecotourism is a tool to achieve sustainability, and has been the focus of attention in many countries and tourism strategies, including Thai. Ecotourism has been supported by both public and private organizations such as the Tourism Authority of Thailand (TAT) (Thailand Institute of Scientific and Technology Research, 1997).

As ecotourism activities commonly involve natural areas, they can have both positive and negative impacts on natural resources and the environment. Poorly managed ecotourism can also accelerate environmental degradation as it creates waste and littering, pollution, and overcrowding at tourism destinations. Therefore, it is important to promote ecotourism carefully so that it will minimize negative impacts on the environment (Israngkura, 1996).

Protected areas such as national parks and wildlife sanctuaries are the most popular ecotourism destinations in Thailand. These protected areas are important because of their environmental values (Pipithvanichthan, N/D). Due to the increasing number of tourists and consequent economic development in Thailand, protected areas have been threatened by human impacts. Many wildlife species have been negatively affected with some species becoming extinct or coming close to extinction (Emphandhu and Chettamart, 2003).

Over the past four decades, the shift in the Thai economy and society towards industrialization has also revolutionized the management of protected areas and related socio-economic conditions. Particularly during the last decade, the Thai

government has placed more emphasis on how protected areas can be managed sustainably. Moreover, public consultation and involvement have played a role in resolving conflicts as well as facilitating benefits to stakeholders and local communities (Emphandhu and Chettamart, 2003).

Degradation of biodiversity and natural resources in protected areas resulting from the negative impacts of tourism has led to concern amongst Thai tourism managers and various stakeholders in the tourism industry. Ecotourism is believed to be a way of providing satisfactory visitor experiences, local income as well as increasing awareness of natural conservation through the participation of local community (Israngkura, 1996; Thailand Institute of Scientific and Technology Research, 1997).

In order to address these negative impacts, effective management plans are required to ensure that management actions and strategies will be able to restrict those impacts to an acceptable level for both nature conservation and nature-based recreation (Dowling, 1998). It can be a challenge for Thai government policies in general and protected area management in particular to regulate visitor impacts.

Various research projects have been conducted in protected areas in Thailand, particularly national parks and wildlife sanctuaries. It is the purpose of this thesis to undertake a preliminary analysis of the sustainability of ecotourism in some selected protected areas in Thailand and reveal whether or not ecotourism will generate benefits to those protected areas and the economy. Further, this work will identify ways in which the management of ecotourism activities can be improved.

1.2 Research questions and objectives

The research questions for this research are:

1. Is current ecotourism in protected areas in Thailand sustainable?
2. How can ecotourism management in protected areas in Thailand be improved?

This thesis addresses three objectives which were developed to answer these research questions. These are:

1. To describe the characteristics and impacts of ecotourism in protected areas.
2. To analyse the sustainability of ecotourism management in protected areas in Thailand, with a focus on two marine national parks, two terrestrial national parks and one wildlife sanctuary.
3. To recommend how ecotourism in protected areas in Thailand can be improved.

1.3 Chapter outline

This thesis will be broken down into six different sections.

- Chapter two describes the methods used to obtain data for this research. The major methods used were a literature review and document analysis which employed two related approaches: thematic analysis and criteria-based analysis. These two approaches were used to examine the written documents that related to tourism and ecotourism in protected areas in Thailand. This chapter also explains the choice of the five protected areas that are the focus of this study.
- Chapter three reviews the literature pertaining to tourism, sustainable development and sustainable tourism. This chapter provides the definitions, concepts, characteristics of ecotourism. Further, socio-cultural, economic and environment impacts of impacts of ecotourism in protected areas are described.
- Chapter four contains background information on tourism and ecotourism in Thailand. This chapter examines Thailand's protected areas systems and categories and ecotourism in protected areas in Thailand.

- Chapter five gives an analysis of ecotourism and how it can benefit tourist destinations that are located in protected areas. It reports the results of the thematic analysis in which documentary data are organized by three main themes; namely socio-cultural, economic and environmental. In addition, the results of criteria-based assessment are presented based on nine criteria: local participation, increased environmental awareness, employment for locals, revenues earned from tourism, tourism investment by local residents, biodiversity conservation, waste minimization and water management.
- Chapter six discusses the implications of the results of the document analysis and literature review for sustainability of the Thai ecotourism industry with respect to protected areas. This chapter also includes discussion on the limitations of this research.
- Chapter seven concludes the thesis by drawing together the literature review and discussion of the research results to answer the research questions and recommends how ecotourism in protected areas in Thailand can be improved.

CHAPTER TWO

RESEARCH METHODOLOGY

2.1 Overview

The purpose of this chapter is to describe the methodology used for conducting this research. These methods consist of a review of the literature and document analysis. This chapter also addresses the two related methods that were used for the document analysis: thematic analysis and criteria-based analysis. Results of these analyses will be presented in chapter five.

2.2 Literature review

This research was conducted over an eight-month period between January and August 2005. A literature review – the major form of data collection of the research reported here – was undertaken at an early stage in the research in order to achieve the first research objective (*i.e.* to describe the characteristics and impacts of ecotourism in protected areas). A review of literature provided background information and knowledge, facilitating the design and development of my research.

Finn, Elliott-White and Walton (2000, p.234) point out that “it is important in any research project to establish the current state of knowledge of the subject under investigation”. A literature review can provide a reader with an understanding of the current state of knowledge and issue involving in the research. Neuman (2003) considers that a good review can increase a reader’s confidence in the researcher’s ability and background because the review tells a familiarity with the research topic of researcher to the reader.

The published sources of relevant literature were available from the University of Tasmania’s library such as books, reports, journal articles and newspaper articles.

Ecotourism-related literature from Thailand such as ecotourism policy and plans, was mostly sourced directly in Thailand. Thai sources comprised Thai government departments including the library of the Authority of Thailand, and libraries located at Srinakharinrajwong Prasarnmitr University and Kasetsart University. Unpublished documents were obtained from internet searches from the academic research and the home pages of organizations such as the Authority of Thailand, the International Union for the Conservation of Nature (IUCN) and The International Ecotourism Society. Results of the literature review are given in Chapter 3 and 4.

2.3 Comparison of tourism research methods

In order to achieve the second objective of my thesis (*i.e.* to analyse the sustainability of ecotourism management in protected areas in Thailand, with a focus on two marine national parks, two terrestrial national parks and one wildlife sanctuary), several possible methods could be used. In this section, I briefly describe these methods and indicate why I selected one of them, document analysis, for this particular study.

- **Participant observation**

Field research is “a qualitative style in which a researcher directly observes and participates in small-scale social settings in the present time and in the researcher’s home culture...The researcher learns about them and it can take over months or years appropriate when the research question involves learning about, understanding, or describing a group of interacting people” (Neuman, 2003, p.364). According to Babbie (2004, p.322), this method is suitable to “topics and processes that are not easily quantifiable, that are best studied in natural settings, or that change over time”. These topics are practices, relationship, groups, lifestyles or subcultures.

Some advantages of participant observation are that it is flexible because researchers can modify their field research design at any time (Babbie, 2004). In doing a field research, a researcher directly observes the environment or observes and talks with people being studied (Neuman, 2003). Therefore, a researcher becomes engaged in

the conversation, actions and lives of the participants (Hoyle, Harris and Charles, 2002) and increases a deeper and greater understanding of the people they study (Babbie, 2004). In comparison to surveys and experiments, “field research measurements generally have more validity but less reliability. Also, field research is generally not appropriate for arriving at statistical descriptions of large populations” (Babbie, 2004, p.324).

- **Survey of key informants**

Dooley (1990, p. 129) states that “a survey is a method for collecting information from a sample of people by the administration of a questionnaire”. Questionnaires offer a method of gathering information by asking questions to respondents or asking them to state their opinion such as agree or disagree with statements representing various points of view. Questions can be open-ended or closed-ended (Babbie, 2004).

Questionnaire surveys rely on obtaining information from respondents (Veal, 1997). A survey of key informants can be undertaken by using questionnaire surveys is common in tourism research. Questionnaire surveys often involve a sample of the population in which the researcher is studying. Information received from respondents by questionnaire depends on their own opinion, their honesty and the layout of the questions.

One advantage of using questionnaires in any research is their ease of use. Questionnaire surveys have been designed to measure ability, achievement, behavior, demographic characteristics, social relationships as well as social environments (Dooley, 1990). Clarke and Critcher (1985) argue that “there is always a gap between what people say and what they actually do and no study of work or leisure can afford to take what people say at face value, especially when the answers are contained in the questions” (Clarke and Critcher, 1985 as cited in Veal, 1997, p.145). However, Babbie (2004) states that questionnaire surveys are normally quicker and cheaper than say, face-to-face interview surveys.

- **Interviews of key informants**

The interview is a form of survey method that does not follow the questionnaires approach of asking a respondent to read questions and fill in their answers. Instead, an interviewer will read the question to the respondent and record their answer (Babbie, 2004). It is important that an interviewer must be well trained and familiar with the questionnaire in order to follow the question wording and question order accurately and to record answers exactly as they are given (Babbie, 2004). Interviews can either be conducted face-to-face or over the telephone. These two interview types are now described:

- *Face-to-face interviews.* Contact between respondent and interviewer is a reason for surveys having high response rates (Finn, Elliott-White and Walton, 2000). This rate of response can sometimes be over 80 percent. Hoyle, Harris and Judd (2002), state that the quality of information is the most important advantage of face-to-face interview. It can create relationship and inspire the respondent to answer completely and accurately. Moreover, an interviewer can use visual aids and nonverbal communication. Nevertheless, doing face-to-face interviews is quite expensive because the training, travel and personnel costs for interviews can be high. Bias is also a disadvantage of face-to-face interviews, and may be caused by such things as the appearance and tone of voice of the interviewer, and question wording (Neuman, 2003). The relationship between interviews and respondent, interviewer's expectations and personal characteristics can also influence responses (Frey and Oishi, 1995 as cited in, Hoyle, Harris and Judd, 2002).
- *Telephone interviews.* The number of people who have telephones can limit this interview type. There are also sampling problems associated with potential respondents having unlisted telephone numbers. However, an interviewer can correspond about themselves over the phone. It is also cheaper and quicker and can be more efficient than doing face-to-face interviews (Babbie, 2004). It typically costs only half what a face-to-face interview costs (Groves and Kahn, 1979 as cited in Dooley, 1990).

Interview can generate two types of data. Qualitative data, generally the result of open-ended questions, comes in the form of words, phrases and sentences spoken by the respondent. Qualitative data often involves responses to closed-ended questions (for example, a Likert scale) that are numerically coded by the researcher.

Qualitative data typically gives richer insight into respondents' opinions, attitudes and values. However, it takes longer to collect, limiting the number of respondents who can be interviewed. Quantitative data may be a 'shallow' representation of respondents' views, but is well suited to surveys that require large sample sizes.

- **Document analysis**

Document analysis has been defined by Krippendorff (1980 as cited in Finn, Elliott-White and Walton, 2000, p.21) as "a method of analyzing the contents of documents or other non-statistical material in such a way that it is possible to make statistical comparisons between them". This is a rather narrow definition, and other authors do not refer to the requirement for making statistical comparisons. Holsti (1968 cited in Berg, 2004, p.266) defines content analysis as "any technique for making inferences by systematically and objectively identifying special characteristics of messages". This definition suggests that document analysis is primarily a qualitative method. Sources of material for document analysis can be words, written documents, symbols, pictures, transcriptions of recorded oral interactions as well as videotape, photographs or any items which can be communicated and made into text (Berg, 2004).

Krippendorff (1980 as cited in Finn, Elliott-White and Walton, 2000, p.21) states that like all research techniques, the purpose of content analysis is to provide "knowledge, new insight, a representation of 'fact' and a practical guide to action". Hakim (1982) points out that rather than thinking about the practical and methodological problems of collecting new data, secondary analysis, such as document analysis, a researcher will think more closely about the theoretical aims and substantive issues of the study (Finn, Elliott-White and Walton, 2000). In doing document analysis, a researcher relies on documents arising from the words of other authors. This kind of research is usually easily and inexpensively accessible.

However, research by document analysis is sometimes unreliable since researchers are not themselves engaged in the original sourcing of the information (Berg, 2004). It also may be difficult to gain documents that directly address the research being examined.

2.4 Selection of the method

With regard to my research, I considered that the most appropriate method was doing a document analysis to examine ecotourism management in selected protected areas in Thailand. Document analysis does not require high cost and the relevant documents could be obtained from the internet and some organizations. The other research methods (above) would not be suitable for achieving my research goals. Several reasons for not using the other methods are as follows:

- Doing field research often involves observation and detailed measurement. Observing and measuring environmental, social and economic consequences of tourism can take a long time and research costs can be very high, meaning that the method is beyond the scope of what can be achieved here.
- Conducting interviews and questionnaire surveys of key informants from government, researchers, local communities and tourists in Thailand can be very difficult. For example, some people especially in government organizations and researchers might not be useful research contacts or participants without firstly providing them an incentive such as money. High cost is also disadvantage of these methods.

2.5 Document analysis as used in this research

Document analysis can be done using a technique known as content analysis. It has been suggested by Neuman (2003) that content analysis is suitable for containing research problems for the following three reasons.

- It can be used for analyzing a large volume of text.
- Researchers can use content analysis when they are studying historical documents. It is useful when a research topic must be studied at a distance.

According to Neuman (2003, p.310), content analysis is a nonreactive research technique because “the process of placing words, messages, or symbols in a text to communicate to a reader or receiver occurs without influence from the researcher who analyzes its content”. In doing content analysis, a researcher can reveal implicit meanings in a source of communication such as a book apart from what might be otherwise acquired on face value just by reading (Neuman, 2003). Webb *et al.* (1981 as cited in Berg, 2004) agree that besides being an inexpensive and easily accessible analysis method, content analysis is also unobtrusive, this latter factor being a significant advantage over alternate analysis methods. In summary, Webb *et al.* (1981 as cited in Berg, 2004, p. 287) state:

Content analysis, although useful when analyzing depth interview data, may also be used nonreactively: no one needs to be interviewed, no one needs to fill out lengthy questionnaires, no one must enter a laboratory. Rather, newspaper accounts, public addresses, libraries archives and similar sources allow researchers to conduct analysis studies.

Berg (2004) also describes the advantages and disadvantages of content analysis including its limitation to analyzing already recorded material *i.e.* it is not necessarily current information; it is not appropriate for all research problems, although useful in various kinds of exploratory or descriptive studies. It is most appropriate for evaluating events or processes in social groups when public records exist.

2.5.1 Selection of documents

The selection of the most appropriate documents for analysis was dictated in the research reported here by the following research questions:

3. Is ecotourism in protected areas in Thailand sustainable?
4. How can ecotourism management in protected areas in Thailand be improved?

The most appropriate for this research are documents whose content includes references to ecotourism, protected areas and sustainability. Documents relevant to my study can potentially be obtained from various domestic and international sources such as academic institutions, government organizations, the tourist industry, local communities and tourists. However, as my research was restricted by available time and budget it was not possible to collect related information from all the sources named. For, example, it was not possible to access unpublished material held in government departments or by private companies. Therefore, the documents for analysis were obtained from the internet. Although, there were many documents relating to each site, only 12 documents were directly relevant to the research questions. Addressing these research questions required that each document included material on ecotourism, protected areas in Thailand and sustainability. A complete listing of the documents used in this study is provided in Appendix A.

2.5.2 Analytical approaches

In order to address the research goals, two related approaches were taken in analyzing the content of the documents, namely ‘thematic analysis’ and ‘criteria-based’ analysis. Using these two different and complementary approaches enables richer insight into the content of the documents that could be obtained from a single approach.

2.5.2.1 Thematic analysis

The three major dimensions of sustainability, namely ‘environmental’, ‘economic’ and ‘socio-cultural’, were employed in my research as themes in which to classify information derived from source documents. These themes were derived from a review of the sustainable development and ecotourism literature (see, for example,

Green Globe, 2004 and Weaver and Lawton, 1999). The themes are expanded upon below (see 2.5.2.2). Themes are generally identified by “bringing together components or fragments of ideas or experiences, which often are meaningless when viewed alone” (Leininger, 1985, p.60 as cited in Aronson, 1994).

The procedure to record and classify material was as follows:

1. Documents were read.
2. Information from the documents was recorded in a table as ‘items’. Items were numbered and classified into one of the three themes (above) depending on their content. In particular, key words or phrase were used. For example, employment opportunity, environmental awareness and local participation can be grouped in the social-cultural theme. Job, income, and tourist investment can be grouped in the economic theme. While, waste, water, biodiversity, wildlife and coral reef can be grouped in the environmental theme. Short items were recorded as direct quotations and long items were paraphrased.
3. Themes were then consolidated into another table so that all like theme items were together.
4. Items in each of the three themes were synthesized to produce a summary for each theme (see Chapter 5).

2.5.2.2 Criteria-based analysis

Criteria-based analysis uses a set of predetermined factors used to form qualitative judgments about performance. For this research, I required:

- 1) a set of evaluative criteria;
- 2) a mechanism for judging performance against individual criteria; and
- 3) a means of aggregating performance across all criteria.

The three sustainability indicators applied to this research (see above) are expanded upon here in order to establish criteria for this stage of the analysis. The following

indicators have been adapted from Green Globe (2004) and Weaver and Lawton (1999).

Socio-cultural

- local participation
- increased environmental awareness
- employment for locals

Economic

- revenues earned from tourism
- tourist investments by residents

Environmental

- biodiversity conservation
- waste minimization
- water management

The results of the analysis were presented in tables for each of the five protected areas chosen for this study (see below). Ratings of results were classified into one or more of three categories, either 'Fully Satisfied', 'Partially Satisfied' or 'Not Satisfied'. An explanation of how satisfaction levels were determined has been indicated in Table 2.1.

| Themes | Fully Satisfied | Partial Satisfied | Not Satisfied |
|-----------------------------------|--|--|--|
| Local participation | Evidence for equitable and comprehensive participation | Some participation but not everyone involved | Poorly developed participation |
| Increased environmental awareness | People awareness and appreciate in natural environment is well noticed. | Some people are willing to conserve the environment | People are not interested in environmental conservations |
| Employment for locals | People have better employment opportunity, high level of employment involved in tourism | Some people are not employed such as teenagers and elderly | High levels of unemployment, people have illegal occupations |
| Revenues earned from tourism | People have significant economic benefits, better standard of living | Some people earn little and limited income from tourism | Poorly distribution of income to local people |
| Tourists investment by residents | Locals have their own businesses involved in tourism | Some tourism businesses have been invested by local people | Most of business owners are not locals, revenues mostly flow to tourism investors outside parks |
| Biodiversity conservation | Illegal poaching and cutting trees are well control, high intensity of wildlife and marine ecosystem | Some wildlife and coral reefs in some areas are threaten by tourist activities | Illegal poaching and cutting trees are the serious problems, wildlife and coral reefs are damaged or are extinct |
| Waste minimization | Appropriate waste disposal | Waste problems in some areas | Poorly management, serious waste problems |
| Water management | Appropriate water management | Waste water and water supply problems in some areas | Poorly management, serious water problems |

Table 2.1: Determinations of Satisfaction Levels

2.6 Selection of study sites

There are 319 protected areas in Thailand (Chettamart, 2003). However, for this research I chose five protected areas in Thailand. These were Doi Inthanon National

Park, Khao Yai National Park, Umphang Wildlife Sanctuary, Koh Chang Marine National Park, and Koh Surin Marine National Park. I chose these five protected areas for three reasons:

1. They are located in different parts of Thailand; northern, central, western, eastern and southern. While it cannot be demonstrated that these five parks are representative of all Thai park, they do cover a cross section of the major landscape types and use intensity (Table 2.2). This range of characteristics will help in developing and understanding of the ecotourism situation throughout protected areas in the country as a whole.
2. All of these five protected areas have high visitation rates and are very important tourist destinations in terms of their economic, social and environmental values.
3. All five may have potential environmental problems caused by mass tourism and ecotourism.

| Parks | Their landscape types | Intensity of use |
|--------------------------------|--|--------------------------|
| Doi Inthanon National Park | Tropical forest, mountain, watershed | High level of visitation |
| Khao Yai National Park | Tropical rain forest, mountain, grassland, | High level of visitation |
| Umphang Wildlife Sanctuary | Forest, mountain, watershed | High level of visitation |
| Koh Chang Marine National Park | Marine, archipelago, coastal, forest, mountain | High level of visitation |
| Koh Surin Marine National Park | Marine, archipelago, coastal, rain forest | High level of visitation |

Table 2.2: Study Sites Landscape Types and Intensity Use

A brief description of each site is given below, and their locations are indicated in Figure 2.1.

- Doi Inthanon National Park is located in Chiang Mai province, which is the major tourism centre in the north. Doi Inthanon National Park is the highest point of the country, called “The Roof of Thailand”. The park covers an area of 482 sq km, taking in parts of the Son Pa Tong, Jom Tong, and Mae Jam districts (Thailand.com, 2002).
- Khao Yai National Park is Thailand’s first national park which was established in 1962. It is the second largest national park of the country, covering 2,168 sq km located in Central of Thailand. It encompasses 4 provinces namely Nakhon Nayok, Prachin Buri, Sara Buri and Nakhon Ratchasima (Thaiparks.com, 2002). It is a popular tourism destination for domestic and international tourists. The popular tourism activities in the park are visiting waterfalls, leisure walking, trekking and wildlife watching (TDRI, 1995 as cited in Panusittikorn and Prato, 2001).
- Umphang Wildlife Sanctuary is located in western Thailand. It covers an area of 2,590 sq km. This area is one of the major watersheds and contains forests and wildlife resources in Thailand. Umphang forests were declared as a Wildlife Sanctuary in 1989 (Churugsa, 1999).
- Koh Chang Marine National Park is a group of 52 islands, located off the coast of Trat province in eastern Thailand, bordering Cambodia. It covers an area of 650 sq km. The majority of Ko Chang comprises steep mountains with 15% of the area being low land (UNEP and GEF, 2004).
- Koh Surin Marine National Park is located in the Andaman Sea in southern Thailand. It is about 100 km to the north of Koh Similan. It is one of the best places to visit in Thailand. Koh Surin Marine National Park is a popular place for diving and snorkelling (Discovery Thailand.com, 2005).

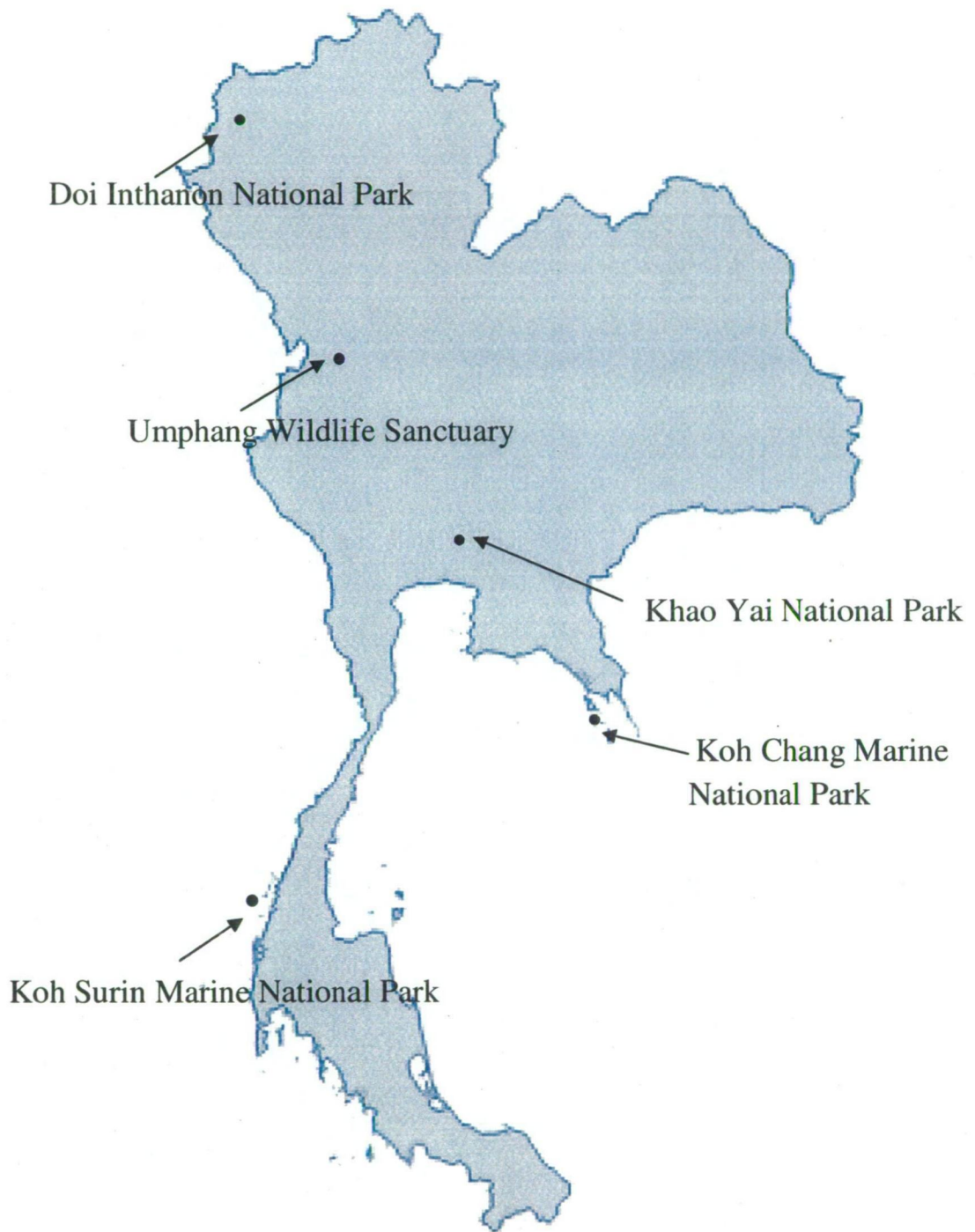


Figure 2.1: Location of Five Selected Protected Areas

2.7 Chapter summary

This chapter described the two main methods used in my research namely a review of the literature and document analysis. The document analysis consists of thematic analysis and criteria-based analysis. Results of the literature review are presented in Chapter 3 and 4. Results of the document analysis are given in Chapter 5.

CHAPTER THREE

SUSTAINABLE DEVELOPMENT AND ECOTOURISM

3.1 Overview

The chapter begins by clarifying the nature of tourism and the relationship between tourism and the environment. The chapter proceeds to address the definitions, concepts of sustainable development, sustainable tourism and ecotourism. This chapter also provides definitions and concepts of ecotourism as well as its characteristics and impacts.

3.2 The nature of tourism

Tourism is defined as a “movement in space from a person’s home district to one or more destinations and then back again...is the idea of being away from home for a certain period of time” (Aronsson, 2000, p.23-4). Fennell (1999, p.3) gives a definition of tourism as ‘the interrelated system that includes tourists and the associated service that are provide and utilised (facilities, attractions, transportation, and accommodation) to aid their movement’. Furthermore, a tourist is defined as a person travelling to places for pleasure, business and other purposes for a period of not more than six months for a person travelling in his or her own country, and one consecutive year for international tourists (World Tourism Organization as cited in Eagles, McCool and Haynes, 2002; Goodwin, 1995).

Tourism is one of the world’s largest industries and most pervasive activities. It has important economic consequences for businesses, localities and governments in terms of employment and revenue. Also, tourism has significant impacts on social, cultural, economic and environments (Fennell, 2003; Richardson and Fluker, 2004).

Tourism has related to many sectors across the industry such as hospitality, marketing, transport, service and government regulation. So, tourism studies can be investigated from various academic perspectives (Hall, 1998).

Smith and Eadington (1992 as cited in Newsome, Moore and Dowling, 2002) point out that tourism can be separated into mass and alternative tourism. Alternative tourism is referred to as ‘special interest tourism’ or ‘responsible tourism’. It emphasizes understanding between visitors and the environment and between visitors and local people. Cater (1993 as cited in Newsome, Moore and Dowling, 2002, p.11) states that alternative tourism is small-scale. It aims to have minimal negative impacts on the social and natural environment. It also encourages locals’ participation in the decision-making process in tourism planing. Holden (2000 as cited in Newsome, Moore and Dowling, 2002, p.11) argues that “alternative tourism can be viewed as being synonymous with the concept of sustainable tourism development”. These points of view are summarized in the framework illustrated in Figure 3.1.

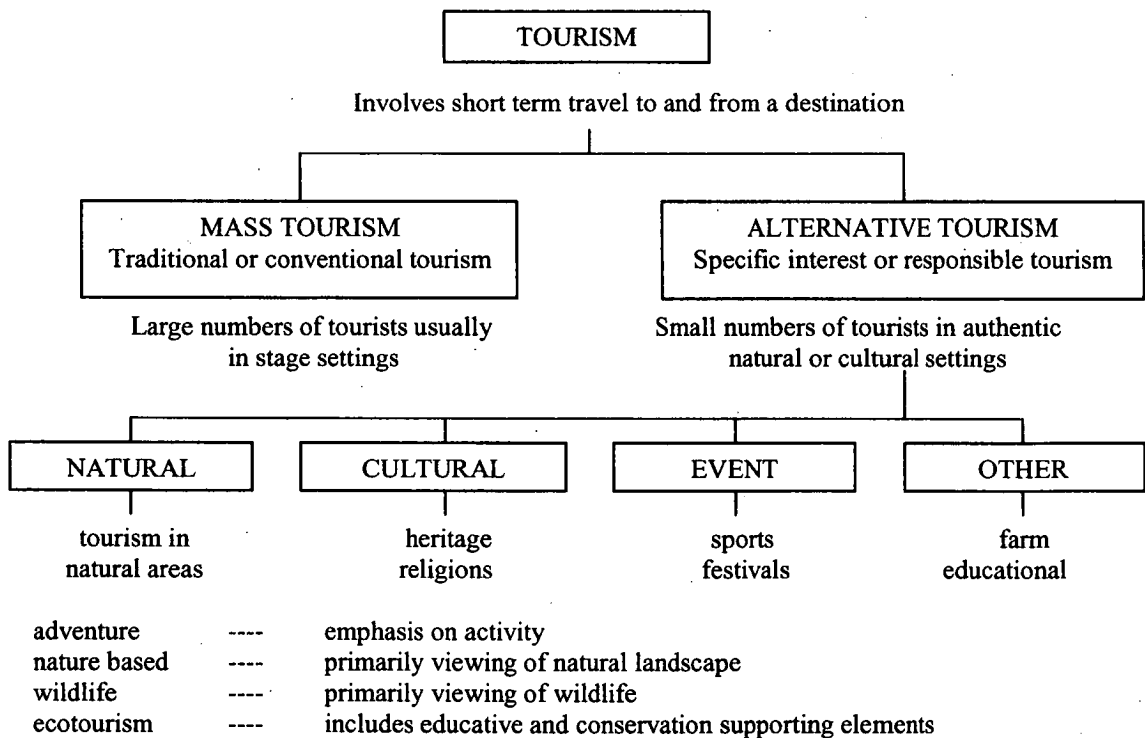


Figure 3.1: Types of Tourism

Source: Newsome, Moore and Dowling, 2002

3.3 Tourism and natural environments

The relationship between tourism and environments is significant because the natural environment provides the important resources such as beaches, mountains and forests for many forms of tourism such as nature-based tourism and ecotourism (Leung, Marion and Farrell, 2001). However, tourism can create a positive or negative impact on environments, “depending how well development is planned and controlled” (Leung, Marion and Farrell, 2001; Lickorish and Jenkins, 1997, p.87). The environment can be affected positively by tourist activities and tourism development by contributing nature preservation efforts (Leung, Marion and Farrell, 2001). Thus, tourism can encourage the conservation of natural and cultural areas and generate financial resources for the conservation and management of the environment (Arronsson, 2002). Budowski (1976 as cited in Hall, 1998, p.226) argues that the relationship between tourism and environment may have economic benefits for and improve the quality of life in host communities.

On the other hand, a matter of great concern is that the world is facing environmental degradation result from tourism development and tourist activities. For example, the pyramids in Egypt are threatened by excess carrying capacity of tourists (Lickorish and Jenkins, 1997); wildlife disturbance occurs in East African safaris; and coral reefs degradation is evident in the Great Barrier Reef of Australia (Leung, Marion and Farrell, 2001). Although, tourism can also contribute importantly to environmental conservation, the sustainability of tourism can be threatened by negative environment impacts. Thus, tourism and the environment are interconnected and interdependent in complex ways (United Nations, 2001).

3.4 Sustainable development and tourism

Sustainable development is the fashionable buzzword in environmental conservation circles and in much of the world of international development (Pearce, Barbier and Markanya, 1990). Over the past several years, the terms sustainable development and sustainability have come to dominate the field of environmental policy and politics (Jacobs, 1999). The concept of sustainable development was defined and popularised

by the publication of the 'Brundtland Report' *Our Common Future*, published in 1987 by the World Commission on Environment and Development (WCED) also known as Brundtland Commission. It means "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Hagerhall, 1988 as cited in Aronsson, 2000, p.32; WCED, 1987 as cited in Haland, 1999, p.48). According to WCED (1987), the definition of sustainable development in the Brundtland Report contains two main concepts:

- The concept of 'need', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs (Laffery and Langhelle, 1999, p.5)

Hurka (1992) argues that a concept of sustainable development is an attempt to balance two ethical demands. The first demand is for 'development', including economic growth. It arises mostly from the interests of people in developing countries, whose present poverty requires steps to improve their quality of life. The second demand is for 'sustainability', for ensuring that we do not mortgage the future for the sake of gains in the present. Jacobs (1995) argues that a concept of sustainability is a specific environmental ethic against which outcomes can be judged. Sustainability is the requirement that the natural capital stock, the amount of environmental assets and services should be preserved over time. As such, sustainability is basically an ethical principle, concerned with intergenerational fairness. Future generations should be allowed to enjoy the same opportunities supplied by a healthy environment as those accessible to the current generation.

According to Cairns (2002, p.7), "sustainable development is being approached component by component – socioeconomic, sustainable agriculture, transportation, forestry, energy use, cities, and the like – but, leaving a habitable planet for future generations will require the development of a broadly shared paradigm". This development will be assisted by a discussion of goals and those conditions required to meet them. The currently shared paradigm is that economic growth will alleviate

all the public problems, such as overpopulation, poverty, environmental degeneration, and the rising gap between rich and poor.

In order to meet these sustainability conditions, “it requires new ways of thinking about the nature and purpose of development and growth, and the role of individuals, government and the private sector in developing sustainable futures, a concern that is increasingly at the forefront in the analysis of tourism” (Hall and Lew, 1998, p.4).

Pearce (1998 as cited in Milne, 1998, p. 35) points out that sustainability means ‘making thing last’. These things can be an ecosystem, an economy, an industry, a culture and an ethnic grouping. According to Davidson (2004), sustainable development consists of six core ideas as follows.

1. Protection of biodiversity and ecosystem processes: reducing pollution and environmental degradation and more efficient use of resources.
2. Participation: recognition that sustainable development needs the support and understanding of all groups or stakeholders in community.
3. Precaution: recognition of the requirement to protect critical life support processes.
4. Equity: a commitment to meeting the basic requirements of the poverty of the current generation.
5. Integration: ensuring that environmental protection and economic development are included in planning and implementation.
6. Quality of life: recognition that human well being is constituted by more than just income growth.

Goeldner and Ritchie (2003, p.473) claim that “the concept of sustainable development is an approach by which efforts are made to balance the benefits or outputs of an industry with the investments and restrictions require to ensure that the

industry can continue to exist without depleting or destroying the resources base on which it depends. In the tourism sector, this implies caring for the natural and built environments in a way that will ensure their continuing viability and well-being”.

Boyden and Shirlow (1989 as cited in Bushell, 2001) state that tourism development must be environmentally responsible by embracing a more ecological and balanced approach in order to meet the requirements of sustainability. Tourism, however, normally demands high consumption and unsustainable usage of natural resources in both developed and less developed countries. This is a reason for tourism to “strive to demonstrate truly sustainable development rather than promoting excesses of luxury and a hedonistic lifestyle” (Bushell, 2001, p.33).

3.5 Definitions and concepts of sustainable tourism

According to WTTC *et al.* (1995 as cited in Leung, Marion, and Farrell, 2001, p.21), sustainable tourism is a form of development that ‘meets the need of present tourists and host regions while protecting and enhancing opportunity for the future’. Butler (1993 as cited in Sebantian and McArthur, 1998, p.21) defines sustainable tourism as:

Tourism which is developed and maintained in an area in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment (human and physical) in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and process.

From the point of view of the Brundtland Report, sustainable tourism will “meet the needs of tourists and locals both today and in the future and it will consider the physical and other limits of the natural and cultural environments” (Ross, 2003, p.7). According to Leuandee (2001 as cited in Ross, 2003), generally, the concept of sustainability is development that does not degrade natural, social, cultural and economic well-being in the present or future generations, so that it must address environmental, social and economic dimentions:

- Environmental sustainability: this usually emphasizes protection and preservation of biogenetic resources and biodiversity and management of ecosystems in a way which guarantees their being able to continue serving their purpose rather than damage them.
- Social sustainability: this dimension often refers to basic human needs such as food, water and shelter, education, work, health service, recreation, happiness, liberty, justice as well as the capacity to conserve our culture and customs.
- Economic sustainability: economic growth is the key component of this dimension. However, it might also include the use of renewable resources to non-renewable.

According to World Tourism Organization (2000 as cited in Richardson and Fluker, 2004), sustainable tourism includes tourism development, administration and operations that conserve the social, economic and the environment integrity and welfare of natural and cultural resources. In terms of the relationship between sustainable development and tourism, the 1992 United Nations Conference on Environmental and Development (UNCED) the Rio Earth Summit, identified travel and tourism as one of the major industry sectors that could contribute to achieve development which is socially, economically and ecologically sustainable (World Travel and Tourism and Organization and International Hotel and Restaurant Association, 1999). There are several reasons for this.

- Tourism has less impact on natural resources and the environment compared to other industry sectors.
- As tourism is based on enjoyment of the local culture, heritage and natural environment of the destinations, it has a motivation to conserve natural and cultural values.
- Tourism has the potential to maintain natural resources as it can contribute financial support to the environment conservation and management (World

Travel and Tourism and Organization and International Hotel and Restaurant Association, 1999).

3.6 Ecotourism

3.6.1 Definitions and concepts

The term ecotourism was adopted by the tourism industry as both concept and practice in the mid-1980s. The new term of ecotourism was described as tourism is environmentally responsible and focused (Weaver, 2001). Ecotourism is a buzzword which is often misunderstood or misused and its definitions are still evolving. Ecotourism has developed as a form of sustainable development which preserves natural resources and the environments and the well-being of local communities (Wood, 2001). Ecotourism was first defined by Ceballos-Lascurain (1987 as cited in Diamantis, 1999, p.96) as

traveling to relatively undisturbed or uncontaminated natural areas with the specific objectives of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas.

Recently, Tourism Queensland has updated its ecotourism definition which emphasizes the role of both natural and cultural heritage in ecotourism. It states that “ecotourism encompasses a spectrum of nature-based activities that foster visitor appreciation and understanding of natural and cultural heritage and are managed to be ecologically, economically and socially sustainable” (Tourism Queensland, 2002, p.5).

Weaver (2001) states that ecotourism is a subset of nature-based and sustainable tourism. “Ecotourism involves education and interpretation of the natural environment and is managed to be ecologically sustainable” (Weaver, 1999, p.11). Forestry Tasmania also labelled ecotourism as a subset of the nature-based tourism as it has been defined as a type of tourism which involves with natural environment

(Diamantis, 1999). Ecotourism is a unique form of tourism which is oriented towards conserving the ecological system in which the tourism takes places. Ecotourism, as a sustainability tool, should avoid environmental degradation while distributing economic benefits to local people. According to Goeldner and Ritchie (2003), the benefits commonly associated with ecotourism may include the following:

- employment opportunities and additional income for local communities;
- environment education for tourists;
- financial support for natural resources protection of the areas in order to attract more visitors; and
- improvement of environmental and heritage conservation.

3.6.2 Characteristics of ecotourism

Ecotourism has four major characteristics. Firstly, ecotourism is based on natural resources such as forests and wildlife. Secondly, ecotourism should not have negative impacts on the environment but it should benefit environment preservation. Thirdly, ecotourism should emphasize education for tourists and improve their understanding of ecological characteristics of destinations. Fourthly, local people should gain benefit from the tourist activities (Dearden, N/D). The World Tourism Organization describes the characteristics of ecotourism as follows.

- Ecotourism includes all nature-based forms of tourism in which the main motivation of the tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas.
- It contains educational and interpretation features.

- It is generally, but not exclusively, organized for small groups by specialized and small, locally-owned business. Foreign operations of varying sizes also organize, operate and/or market ecotourism tours, generally for small groups.
- It minimizes negative impacts upon the natural and socio-cultural environment.
- It supports the protection of natural areas by:
 - generating economic benefits for host communities, organizations and authorities managing natural areas with conservation purpose
 - providing alternative employment and income opportunities for local communities; and
 - increasing awareness of the conservation of natural and cultural assets, among both locals and tourists (Richardson and Fluker, 2004, p. 73-74).

Given the definitions and above characteristics, ecotourism differs from mass tourism in several ways which are summarised in Table 3.1 (Ross, 2003).

| | Ecotourism | Mass tourism |
|---|---|--|
| Scale | Small | Large |
| Use of resources | Local resources | Exploitative |
| Run by | Local people | Business (often foreign to the site or country) |
| Purpose | Alternative source of income for local people | Profit |
| Education of local ecosystem, culture, customs etc | Major goal | Not a major concern or only as a source of income, an artificial show for tourists |
| Sustainable | Major goal | Not a major concern |
| Nature conservation | Very important | Not a major concern |
| Cultural conservation | Very important | Not a major concern |

Table 3.1: Simple Comparison between Ecotourism and Mass Tourism

Source: Ross, 2003

In comparing ecotourists and mass tourists, Ceballos-Lascurain (1991 as cited in Diamantis, 1999, p.96) points out both groups are interested in visiting the natural areas but ecotourists “have a more active role through a non-consumptive use of wildlife and natural resources, through activities” such as wildlife observation and nature photography. In contrast, mass tourists “have a more passive role with nature, participating in activities which do not relate to the true concern over nature or ecology” such as biking and jogging. ‘Active participants’ of ecotourism argue that it must involve activities that contribute the well-being to the environments. ‘Passive perspectives’, on the other hand, only require that the activities do not cause negative impacts on environments (Weaver, 1998).

Researchers employed by Tourism Queensland point out that ecotourism activities such as bushwalking, bird and wildlife watching, camping, scuba diving and snorkeling are similar to other nature tourism activities. But the difference between ecotourism and other nature tourism is the addition of conservation and education functions which are the major characteristics of ecotourism (Richardson and Flucker, 2004).

3.6.3 Impacts of ecotourism

In practice, ecotourism has grown rapidly in popularity, resulting in both positive and negative environmental impacts. Protected area management is very important because managers are responsible in protecting the natural resources and promoting visitor experiences (Ceballos-Lascurain, 1996 as cited in Leung, Marion and Farrell, 2001, p.23). Diamantis (1999, p.105) states that “in examining the issues of sustainability within ecotourism, however, it is generally associated with the direct and indirect cost and benefits of the impact of tourism on the natural environment, economy, and local communities from destination to destination”. Table 3.2 shows hypothetical costs and benefits of ecotourism that was summarized by Weaver (1981 as cited in Diamantis, 1999, p.105).

Environmental impacts

In terms of environmental impacts, “ecotourism is supposed to foster caring and benign behavior on the part of practitioners and tourists, so its effects, theoretically, should all be positive” (Weaver, 2002, p.6). Ecotourism provides incentives for conservation of natural and the environments. Ecotourism also provides financial benefit to protected areas as they are generally involve with the natural resources (Weaver, 1998). Israngkura (1996) states that the financial contributed from ecotourism can help to maintain against degradation of the environments.

Despite its environmentally friendly goals, ecotourism can also create negative environmental impacts such as pollution and waste, pressure on natural resources, social and cultural pressure relating to conservation, sustainable use of biodiversity and pressure on the local resources such as food, energy and raw materials which may in short supply locally (Frangialli, 2001).

| Environmental impacts | |
|--|---|
| Direct benefits | Direct costs |
| <ul style="list-style-type: none"> - provides incentive to protect environment, both formally (protected areas) and informally - provides incentive for restoration and conversion of modified habitats - ecotourists actively assist in habitat enhancement (donations, policing, maintenance, etc.) | <p>danger that environmental carrying capacities will be unintentionally exceed, due to:</p> <ul style="list-style-type: none"> - rapid growth rates - difficulties in identifying, measuring and monitoring impacts over a long period - idea that all tourism induces stress |
| Indirect benefits | Indirect costs |
| <ul style="list-style-type: none"> - exposure to ecotourism fosters broader commitment to environmental well being - space protected because of ecotourism provide various environmental benefits | <ul style="list-style-type: none"> - fragile areas may be exposed to less benign forms of tourism (pioneer function) - may foster tendencies to put financial value on nature, depending upon attractiveness |
| Economic impacts | |
| Direct benefits | Direct costs |
| <ul style="list-style-type: none"> - revenue obtained directly from ecotourists - creation of direct employment opportunities - strong potential for linkages with other sectors of the local economy - stimulation of peripheral rural economies | <ul style="list-style-type: none"> - start-up expenses (acquisition of land, establishment of protected areas, superstructure, infrastructure) - ongoing expense (maintenance of infrastructure, promotion, wages) |
| Indirect benefits | Indirect costs |
| <ul style="list-style-type: none"> - indirect revenue from ecotourists (high multiplier effect) - tendency of ecotourists to patronize cultural and heritage attractions as 'add-ons' - economic benefits from sustainable use of protected areas and inherent existence | <ul style="list-style-type: none"> - revenue uncertainties to <i>in situ</i> nature if consumption - revenue leakages due to imports, expatriate or non-local participation, etc. - opportunity costs - damage to crops by wildlife |
| Socio-cultural impacts | |
| Direct benefits | Direct costs |
| <ul style="list-style-type: none"> - ecotourism accessible to a broad spectrum of the population - aesthetic/spiritual element of experiences - foster environmental awareness among ecotourists and local population | <ul style="list-style-type: none"> - instructions upon local and possibly isolates cultures - imposition of elite alien value system - displacement of local cultures by parks - erosion of local control (foreign experts, in-migration of job seekers). |
| Indirect benefits | Indirect costs |
| <ul style="list-style-type: none"> - option and existence benefits | <ul style="list-style-type: none"> - potential resentment and antagonism of locals - tourist opposition to aspects of local culture (e.g. hunting, slash-burn agriculture). |

Table 3.2: Hypothetical Costs and Benefits of Ecotourism

Source: Weaver (1981 as cited in Diamantis, 1999, p.105).

Economic impacts

A general goal of ecotourism is to generate benefits to destinations such as profits for tourist companies, jobs for locals or revenues for parks (Lindberg, 1996). Lickorish and Jenkins (1997, p.63) state that “the main positive economic impacts of tourism relate to foreign exchange earnings, contributions to government revenues, generation of employment and income, and stimulate to regional development”. The proper management of ecotourism can help to redistribute income to local communities. Such income from tourists can be used for a range of infrastructure, development projects, ensuring long-term sustainability for tourism destinations as well as create other indirect benefit within the areas (Israngkura, 1996).

In addition to the above, other indirect economic benefits include increasing political and financial support for conservation, preserving of biodiversity, maintaining of watersheds (Lindberg, 1996) and managing of soil erosion, which will ensure water supply to the agricultural zone and absorb air pollution from industry sectors (Israngkura, 1996). According to the Commonwealth of Australia, 1995 and Cater, 1993 as cited in Diamantis, 1999, p.109), “the direct and indirect benefits which are derived from biodiversity conservation, represent the fundamental goal of ecotourism, by attracting visitors to the natural settings and using the revenues to fund conservation and fuel economic development”. Lindberg (1996) points out that ecotourism is a means for improving preservation of protected areas as these economic benefits of ecotourism can lead to increased maintain for the natural resources.

However, Lindberg (1998) estimates that in most ecotourism destinations, about 90 percent of tourism income leak away from the local economy. “Leakage is the term used for the money which escapes from the destination, reducing the income received by the community from the tourism expenditure” (Richardson and Fluker, 2004, p.96). For example, there is leakage in many African countries because many products uses in tourism such as safari vehicles are imported (Frangialli, 2001).

Socio-cultural impacts

With respect to socio-cultural impacts, ecotourism is supposed to have benefits to local communities such as creating employment opportunities, providing special jobs which require skill of locals such as traditional crafts and local activities (Israngkura, 1996). On this point, Weaver (1998) states that ecotourism may help to increase environmental awareness and cultural issues among tourists and local communities.

However, ecotourism may harm host communities through overcrowding, and tourists might introduce new culture or change the tradition life styles and value of communities (UNEP, 2002). Weaver (1998, p.27) argues that as “ecotourism penetrates into isolated environments, contact with less modernized cultures is inevitable. However, well intended, the more intimate interaction sought by some ecotourists may result in intrusive or inappropriate behavior and the introduction of potentially harmful alien values”.

3.7 Chapter Summary

Tourism is one of the largest industries in the world economy in terms of employment and economic value. The relationship between tourism and the environment is important, as the environment provides the resources for the tourism and tourism depends on the quality of the environment. Nevertheless, inappropriate management of tourism can cause degradation of the environment. Sustainable tourism and ecotourism are supposed to be environmentally responsible tourism. They are becoming more important in tourism industry and believed to address the concept of sustainable development that involves maintaining the natural resource for future generations as well as benefit for local communities. Moreover, there are concerns that the rhetoric of sustainability and ecotourism may not match the reality of current practice.

CHAPTER FOUR

ECOTOURISM AND PROTECTED AREAS IN THAILAND

4.1 Overview

The purpose of this chapter is to provide information on ecotourism and protected areas in Thailand. The chapter begins with background information on Thai tourism. The following sections give an overview of protected areas in Thailand.

4.2 Overview of Thai tourism

Tourism is an important industry sectors which generates income and contributes to employment for Thailand's economy (World Tourism Organization, 2001; Sriyaporn, 2004). The evidence of the success of the tourism industry is that its revenue increased from about 109 billion baht in 1991 to 323 billion baht in 2002 (Thailand Institute of Scientific and Technological Research, 1997; Sriyaporn, 2004). Tourism Authority of Thailand reported that 8.5 million overseas visitors came to Thailand in 1999, with a 10.5% rise from 1998. Since 2001, tourism has ranked the most income earning sector contributing more than three hundred thousand million baht. Moreover, tourism industry contributes 3.42 million people in both direct and indirect employment, accounting for approximately 11% of the entire Thai work force (Tourism Authority of Thailand, 2001).

The Thai government has been trying to promote the tourism industry to generate more income for the country, and many tourism campaigns have been launched for both international and domestic tourists (Sriyaporn, 2004). The number of international tourists visiting Thailand increased significantly in 1987-1996 since Thai government had launched 'Visit Thailand Year' in 1987 (Thailand Development Research Institute, 1997). As the Asian financial crisis in mid-1997

affected the tourism industry in Thailand, the 'Amazing Thailand' promotion campaign was launched to attract tourists (World Tourism Organization, 2001). It emphasized shopping, Thai food, adventure tours and cultural demonstrations. It also presented that Thailand is a safe and inexpensive (compared to other South-east Asian destinations) tourist destination (Kontogeorgopoulos, 1999).

In 2003, the Thai tourism industry had been affected by SARS and the American-Iraqi conflict. As a result, the total of ten million international arrivals to Thailand, representing a decrease of 7.36 percent and generating income approximately 300,000 million baht which is decrease of 4.39 percent compare to the previous year (Tourism Authority of Thailand, 2004).

4.3 Background information on ecotourism in Thailand

Over the past decade, a 'Green Global Environment' has become more important in the world's environmental conservation. In 1992, 182 countries including Thailand signed 'Agenda 21' which is aimed to achieve sustainable development in social, environmental and economics terms. "The approach of this agenda is to keep the sustainable balance among the pattern of consumption, demographics and the world's capability to support lives, the development of technologies to respond to human needs and the careful management of natural resources" (Tourism Authority of Thailand, 2001).

Most third world countries have poverty problems and since the economics of those countries are still based on the exploitation of natural resources, there have often been increased conflicts between the governments which are charged with managing these resources for the benefit of the country and the people whose livelihood is based on resource exploitation. Ecotourism has attracted the attention of the Thai tourism authorities, tourism investors and local people who realize that the natural and biodiversity of the country make it an ideal ecotourism destination (Thailand Institute of Scientific and Technological Research, 1997, p.3).

Ecotourism is one of the components of the National Tourism Master Plan 2001-2010 (Wong, 2001). It has appeared as a strategy of sustainable tourism management in natural destinations (Tourism Authority of Thailand, 2001). This is because ecotourism emphasizes the balance between tourist activities and nature as well as stressing the minimal impact on the environment. Furthermore, it has the potential to distribute revenue to local communities and matches with the objective of environmental/ecological conservation (Thailand Institute of Scientific and Technological Research, 1997).

4.3.1 Ecotourism policy of Thailand

The Ecotourism Policy is situated in the national development framework. It is a strategic policy which supplies an operating structure and guidelines for ecotourism development of Thailand. It has a significant role to play in both tourism resource conservation and national tourism development. Ecotourism management aims to realize the economic, social and aesthetic values as well as to enhance a destination's cultural characteristics and ecological systems (Thailand Institute of Scientific and Technology Research, 1997). In general, the goals of ecotourism policy are to develop a sustainable tourism industry, to preserve a well-being of social and natural environment and to encourage self-reliance. The specific goals of ecotourism development in Thailand are as follows (Thailand Institute of Scientific and Technology Research, 1997, p.27).

1. To ensure that endemic natural resources and unique cultural resources and their surrounding ecological systems have an appropriate management system that emphasises conservation, rehabilitation and ecosystem maintenance. This should be done by calculating their carrying capacity and instituting a proper zoning scheme.
2. To promote people's awareness of how tourism can contribute to ecological sustainability. This would foster the comprehensive conservation of the natural and social environments.
3. To establish a management system that facilitates cooperation among all related sectors. This should include systematic joint-study. Thus, there must be participatory management of local people in tourism development. This will ensure that ecotourism development proceeds in a manner that produces appropriate benefits and establishes strong communities which can maintain important features of their existing way of life and adapt to changing social conditions where necessary.
4. To establish tourism facilities and services that maintain the environment and are thus compatible with tourism resources. Environmental management should aim to retain the natural and social characteristics of the areas, and provide a tourism atmosphere which strengthens the tourists' feeling of security.
5. To attract quality foreign eco-tourists to visit Thailand. But attempts should be made to promote ecotourism to a broader market segment of Thai tourists, particularly Thai youth. An attempt should be made to disperse tourists throughout the country's tourism resources.

4.4 Protected areas in Thailand

Thailand has developed its protected areas system since the first national park, Khao Yai, was established in 1962. There are 319 protected areas in Thailand, covering 108,064 sq. km or approximately 21 percent of the total land area which is very high ratio in comparison to other countries in South-East Asia (Chettamart, 2003). Protected areas include terrestrial national parks, marine national parks, wildlife sanctuaries and non-hunting areas. Each protected area has local communities serving many roles such as conservation, education and interpretation. The interpretation includes nature trek guiding, setting information booths and visitor centers (Lynam, N/D). Most revenue for protected areas comes from tourism and recreation, which are major motivations for establishing protected areas in Thailand (Panusittikorn and Prato, 2001).

4.4.1 Definition and characteristics of protected areas

The definition of protected area as given by IUCN (1994) is “an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources and managed through legal or other effective means”.

The IUCN has defined a series of protected areas management categories based on management objectives. Definitions of these categories, and examples of each, are provided in ‘*Guidelines for Protected Area Management Categories* (IUCN, 1994). These six categories are shown as follows.

CATEGORY Ia: Strict Nature Reserve: protected area managed mainly for science

Definition: Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

CATEGORY Ib: Wilderness Area: protected area managed mainly for wilderness protection

Definition: Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

CATEGORY II: National Park: protected area managed mainly for ecosystem protection and recreation

Definition: Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

CATEGORY III: Natural Monument: protected area managed mainly for conservation of specific natural features

Definition: Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

CATEGORY IV: Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

Definition: Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

CATEGORY V: Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

Definition: Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

CATEGORY VI: Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

Definition: Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

Protected areas in Thailand comprise 145 national parks, (both terrestrial and marine parks), 69 forest parks, 53 wildlife sanctuaries and 52 non-hunting areas (Table 4.1) (Department of National Parks, Wildlife and Plant, 2003 as cited in Chettamart, 2003, p.2). The present protected areas system does not include a number of small protected areas such as botanical gardens, arboreta and wildlife breeding centres. Large areas of watershed protection forest are also excluded because they often overlap with abovementioned protected areas and are difficult to differentiate as individual units (Chettamart, 2003). Each of the protected are type in Thailand are described below, and their distribution indicated in Figure 4.1.

| Protected Area category | Number of units | Size of coverage (sq. km) | % of country land area |
|-------------------------|-----------------|---------------------------|------------------------|
| National Parks | 145 | 68,929 | 13.46 |
| - Terrestrial | 119 | | 12.05 |
| - Marine | 26 | | 1.41 |
| Wildlife Sanctuaries | 53 | 34,848 | 6.81 |
| Non-hunting Areas | 52 | 3,408 | 0.67 |
| Forest Parks | 69 | 880 | 0.17 |
| Total | 319 | 108,064 | 21.11 |

Note: The table does not include Class I watershed Protection Forest (IUCN Category Ib), Mangrove Forest Reserves (IUCN Category VI), and other small protected areas")

Table 4.1: Thailand's Protected Areas Category,

Number of Units and Size of Coverage

**Source: Department of National Parks, Wildlife and Plant (2003)
as cited in Chettamart (2003, p.2)**

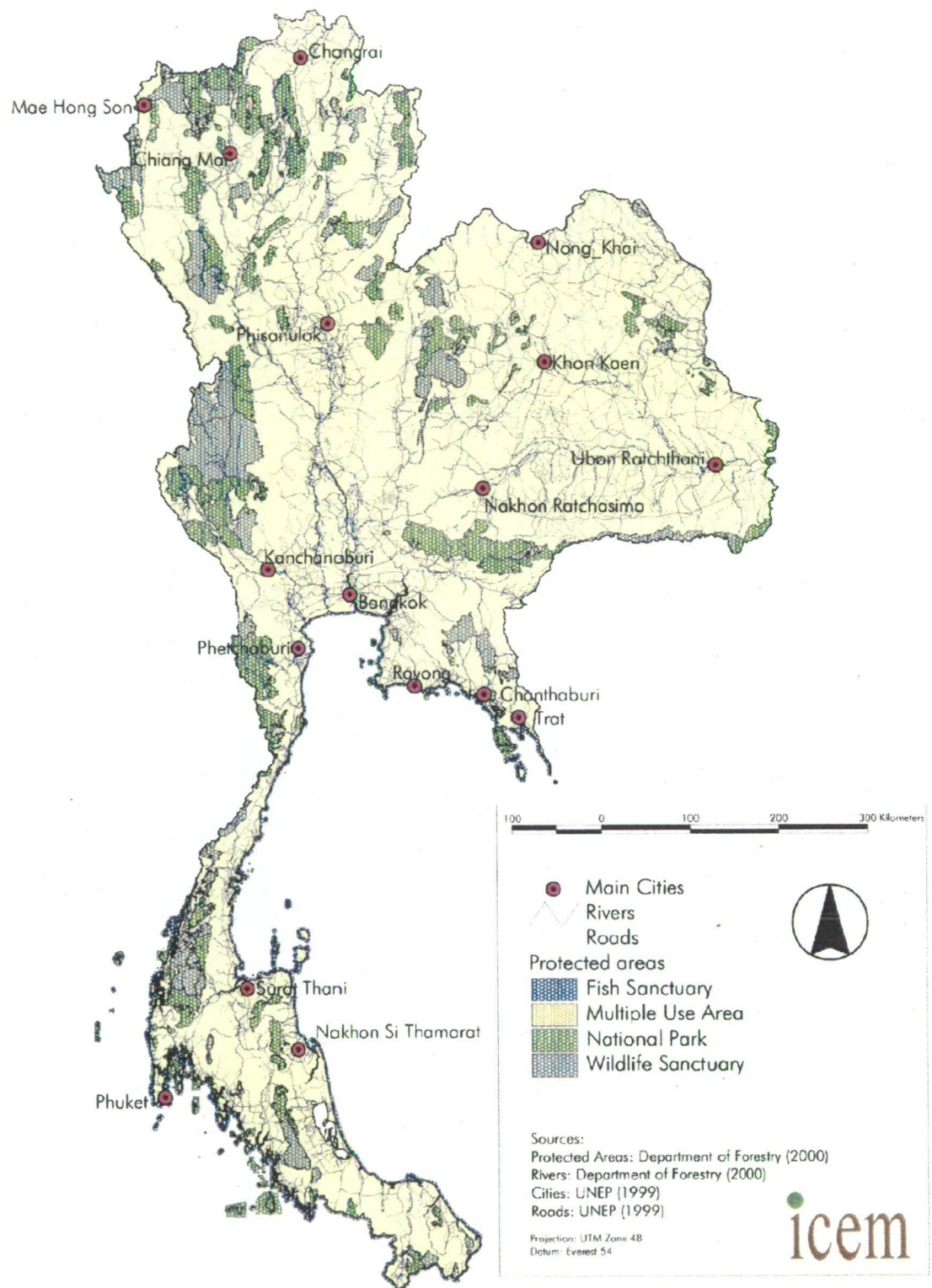


Figure 4.1: Map of Thailand's National Protected Areas System

Source: ICEM (2003)

National Parks

According to The National Park Act of 1961 in Thailand, a national park is “Land to include the surface of land in general, mountains, creeks and waterways, marshes and swamps, lakes, basins, island and seashore...”(Chettamart, 2003, p.4). It is an area with beautiful scenery, significant history, rare animal and plant species (Bugna and Rambaldi, 2001). The objectives for managing national parks are to preserve and maintain ecosystems and protected natural, cultural and historical resources (Pipithvanichtham, 1997), as well as to provide the opportunities to the general public for recreation and education. These management principles are generally consistent with the concept of ecotourism, so national parks in Thailand have great potential for ecotourism (Chettamart, 2003).

Forest Parks

A forest park is an area which is smaller in size than a national park. It contains unique natural characteristics or attractive landscape and provides the opportunities for the public for recreation activities (Khomkris, 1965). The main objectives of forest parks are to provide for recreation and to protect natural resources. All 69 units of forest parks have the potential to serve as the ecotourism destinations, if they are well-managed and developed. “With such development and management, the country’s forest parks not only can serve well for the tourists, but help minimizing the stresses on national parks and their resources as a results of high concentration of the tourists” (Chettamart, 2003, p.7).

Wildlife Sanctuaries

The Wild Animals Reservation and Protection Act of 1960 or WARPA defined a wildlife sanctuary as a land which is set by a Royal Decree for the protection and preservation of wildlife and their habitat (WARPA, 1960 as cited in (Chettamart, 2003). The main objective of wildlife sanctuaries is conserving the habitat for the well being of wildlife (Dixon and Sherman 1990 as cited in Panusittikorn and Prato,

2001). Wildlife sanctuaries can also benefit people by providing opportunities for the public to enjoy and experience the area (Chettamart, 2003, p.7).

Non-hunting Areas

According to the Office of Wildlife Conservation (2003), a non-hunting area is “public land to be set aside as the area for preserving specific wild animals, native and migratory, as listed in accordance with facts and prescribed by WARPA. Hunting of the prescribed species is prohibited, but other human activities are allowed” (Chettamart, 2003, p.8). In comparison to national parks and wildlife sanctuaries, non-hunting areas are smaller (Dixon and Sherman 1990 as cited in Panusittikorn and Prato, 2001). The objectives of non-hunting areas are to protect specific wildlife species and to provide opportunities for public recreation and education without conflict with species and habitat protection (Chettamart, 2003, p.8).

4.5 Ecotourism and Protected Areas in Thailand

As ecotourism and nature-based tourism require natural environments, they often involve and take place in protected and remote areas, areas of natural interest, outstanding beauty and cultural importance (Wearing and Neil, 1999). Over the last decade, ecotourism has been strongly promoted in protected areas in Thailand especially national parks (Emphandhu and Chettamart, 2003).

As a result, the number of tourists visiting Thailand’s protected areas has increased. It was recorded that the number of tourists in national parks had increased from 11.5 million in 1995 to 15.5 million in 1999. However, the total number of tourists in national parks had a small decrease in 2003 to 2004 (Table 4.2). This may be because of problems such as SARS, Bird Flu and the unstable political situation in southern provinces (Sriyaporn, 2004).

As domestic and international interest in natural area destinations such national parks has grown and ecotourism has become more popular among tourists, the Royal Forest Department needs to provide guidelines for all stakeholders such as park managers, planners and park users (Pipithvanichtham, 1997).

| Year | Terrestrial National Parks (in millions) | Marine National Parks (in millions) | Total |
|-------------|---|--|--------------|
| 2001 | 12.0 | 2.5 | 14.5 |
| 2002 | 13.0 | 2.3 | 15.3 |
| 2003 | 12.5 | 1.8 | 14.3 |
| 2004 | 11.2 | 2.1 | 13.3 |

Table 4.2: Number of Visitors in Thailand’s National Parks in 2001 -2004

Source: Department of National Park, Wildlife and Plant (2005)

4.6 Chapter summary

The tourism industry in Thailand has played a significant role in terms of employment and supporting economy of the country. Ecotourism has become more popular and important as a result increasing global concern regarding environment. In Thailand, ecotourism often takes place in natural areas such as protected areas, particularly national parks. This has implications for protected area management and the sustainability of the tourist industry, as discussed in Chapter 5.

CHAPTER FIVE

DOCUMENT ANALYSIS RESULTS

5.1 Overview

The purpose of the chapter is to present the results of the document analysis. The documents being used in the analysis are listed in Appendix A. This chapter describes the results obtained from thematic classification and criteria-based assessment. The thematic classification (Section 2.5.2.1) emphasized three major themes including, socio-cultural, economic and environmental. The criteria-based assessment (Section 2.5.2.2) was based on eight criteria; including, local participation, increased environmental awareness, employment for locals, revenues earned from tourism, tourism investment by local residents, biodiversity conservation, waste minimization and water management.

5.2 Thematic classification

All documents used were read carefully, relevant quote extracted and longer items paraphrased. These items were then organized into three major themes, as shown in Table 5.1. The content of items in each theme is represented in a more integrated form in the following subsections.

Table 5.1: Documents Categorized by Themes

| Themes | Supporting quote or paraphrase |
|---|---|
| I. Socio-cultural Document No.1 | <p>“At the beginning, the impacts of tourism development on the society [and] culture are perceived as not having much of an influence whether positive or negative but it stimulated the pride of their [Karen Communities] own identity. Consequently, tourism development created better employment opportunities ... [and] furthermore increased educational opportunity and improved the flow of cash to the communities”.</p> <p>Source: Suppibulpon (2001). Related park: Doi Inthanon National Park.</p> |
| Document No. 3 | <p>Bringing community-based tourism into Doi Inthanon national park results in increasing environmental awareness of the villagers, reducing conflict between the national park officers and villagers. Opportunities for working together and more understanding between government agencies and the villagers contribute to sustainable development. It also means villagers are learning new skills such as working in groups, participating in park management processes, and problem solving skills.</p> <p>Source: Asia-Pacific Environmental Innovation Strategies (2003). Related park: Doi Inthanon National Park.</p> |
| Document No. 2 | <p>“Generally villagers do not oppose community tourism enterprise and support it as necessary. Members [of villages] change their occupation from hunting [and] cutting trees to be nature guides”.</p> <p>Source: Emphandhu (N/D, p.10). Related park: Doi Inthanon National Park.</p> |
| Document No. 10 | <p>“Tourism problems have been addressed, primarily through cooperative efforts and agreements involving local community members. Local people are supportive of the growth of tourism in the area [Umphang Wildlife Sanctuary] and actively participate in the creation of new services and activities. For them, tourism generates considerable employment, including opportunities to develop and own their own businesses. The result is higher per capita income and an improved lifestyle. Perhaps most noticeable are the increased opportunities for women and youth”.</p> <p>Source: Churugsa (1999). Related park: Umphang Wildlife Sanctuary.</p> |

| Themes | Supporting quote or paraphrase |
|---------------------------------------|---|
| Document No. 8 | <p>“An important side effect of tourism is the immigration of job-seekers to the island [Koh Chang]. This has consequences for the local employment possibilities and, according to some, also negative impact on the social cohesion in certain villages”.</p> <p>Source: Gammeren and Marheineke (2003). Related park: Koh Chang Marine National Park.</p> |
| Document No. 13 | <p>“For the Moken [indigenous people] of the Surin Island, their continued presence and use of natural resources within the park area will be facilitated by receiving and accepting their shared responsibility for safeguarding heritage values, so that together with local authorities and government developments, they can explore sustainable development opportunities.”</p> <p>Source: UNESCO (2001, p.15). Related park: Surin Marine National Park.</p> |
| II. Economic Document No. 8 | <p>“On Koh Chang jobs and income have indeed been created, but the number of local people who profit is limited. Many receipts fall to investors and owners of accommodations, mostly from outside of the island”.</p> <p>Source: Gammeren and Marheineke (2003). Related park: Koh Chang Marine National Park.</p> |
| Document No. 10 | <p>“During the peak season, most local farmers act as tourist guides, punters, mahouts, mini-bus drivers, housekeepers and cooks, providing additional and important family income. Many also operate independent travel agencies, guest houses and restaurants. In 1999, there were 24 authorised travel agencies in Umphang, and almost all were owned and operated by local people providing services directly to the tourist population...This income is more widely distributed within the community”.</p> <p>Source: Churugsa (1999). Related park: Umphang Wildlife Sanctuary.</p> |
| Document No. 5 | <p>“In the early 80's as part of a conservation project at Ban Sap Tai [name of village] near Khao Yai, local farmers were hired to show tourists wildlife along forest trails. The farmers were paid daily wages above their normal income plus bonuses when elephant, gaur or other large mammals were seen. Other villagers were paid as guides, porters, cooks and drivers. Villagers preferred income from trekking because poaching was risky and not always profitable”.</p> <p>Source: Lynam (N/D) Related park: Khao Yai National Park.</p> |

| Themes | Supporting quote or paraphrase |
|--|--|
| Document No. 13 | <p>Indigenous people [Moken] in Surin Naitonal park can be supported by the park because the park hires some Moken as boatmen for tourists. Some widows are hired as unskilled labor for collecting garbage, cleaning tourist accommodations and cooking. Moken children sing their traditional songs for payment by tourists.</p> <p>Source: UNESCO (2001).</p> <p>Related park: Surin Marine National Park.</p> |
| Document No. 1 | <p>“Having a positive impact on income and on standard of living”.</p> <p>Source: Suppibulpon (2001)</p> <p>Related park: Doi Inthanon National Park.</p> |
| Document No. 4 | <p>“At Doi Inthanon, hill tribe villagers earn income by selling agricultural products such as ornamental flowers and strawberries to nearby cities. Also, about 80 percent of villagers collect plants and fuel wood for sell or personal use. They raise extra income by selling handicrafts or agricultural products to tourists. If locals can benefit economically from ecotourism, they might support habitat-conservation initiative and depend less on unsustainable consumes of park resources”.</p> <p>Source: Hvenegaard and Dearden (1996).</p> <p>Related park: Doi Inthanon National Park.</p> |
| Document No. 2 | <p>“Members earn additional income from tourism because of good marketing (tour operator’s connection, tourism promotion through several media). Have more outlets for selling agricultural products to tourists by bringing them to their farms and setting up display counter for some agricultural products (coffee) at visitor centre”.</p> <p>Source: Emphandhu (N/D, p.10).</p> <p>Related park: Doi Inthanon National Park.</p> |
| III.Environmental Document No. 1 | <p>“On environmental aspects, tourism development has also caused both positive and negative impacts as it caused the delay of forest degradation while on the other hand, it created pollution from waste, disturbing upper montane forest ecosystem and loss of access to places and recreational activities of the society”.</p> <p>Source: Suppibulpon (2001).</p> <p>Related park: Doi Inthanon National Park.</p> |

| Themes | Supporting quote or paraphrase |
|-----------------|--|
| Document No. 2 | <p>In terms of nature conservation, locals can earn income from tourism. This reduces agricultural land expansion. Also, “increase environmental awareness by learning from visitors that a healthy forest ecosystem is needed for viable tourism business in national park. However, only some tend to conserve natural resources and forest ecosystems while the rest is still not interested in conservation”</p> <p>Source: Emphandhu (N/D, p.10). Related park: Doi Inthanon National Park”.</p> |
| Document No. 6 | <p>“Human waste has become a problem because disposal facilities are insufficient and the methods used, such as incineration and burying, are inadequate. Wildlife in the park is directly threatened by human activities and many species are almost extinct on a local basis. Poaching has thrived because it is profitable for local restaurants surrounding the park to use certain organs of animals in preparing expensive dishes. Continued destruction of wildlife habitat has occurred due to conversion of forestland to agricultural land in areas adjacent to the park. Increased use of pesticides has harmed wildlife. Exotic species have increased disease transmission and compete with native species for habitat. Finally, there are not enough experienced wildlife specialists to monitor wildlife populations and protect their habitat”.</p> <p>Source: Panusittikorn and Prato (2001, p.74). Related park: Khao Yai National Park.</p> |
| Document No. 7 | <p>“As for waste water from the houses and public toilets ... well, at many places it is discharged into natural streams. That's why some people feel itchy after swimming in the park's famous waterfalls. Too bad they should think first before they jump into the water”.</p> <p>Source: Kongsanit (2001). Related park: Khao Yai National Park.</p> |
| Document No. 12 | <p>“Coral reef condition found during the survey period was a lot more deteriorated than that found in the past. The main causes were from the use of human beings by tourism, fishery, and Sea Gypsy life style, including natural occurrences such as an El Niño phenomenon and a change in water quality. However, some coral reefs were still in good condition, especially, the coral reef at Ko Torinla, which an effective management was applied by declaration as a protected area in the national park”.</p> <p>Source: TalayThai (2001). Related park: Koh Surin Marine National Park</p> |

| Themes | Supporting quote or paraphrase |
|-----------------|---|
| Document No. 11 | <p>According to the survey of graduated students of the Recreation and National Park Department, Faculty of Forestry, Kasetsart University, Thailand, wildlife in Umphang Wildlife Sanctuary has been affected by tourist activities such as animal watching, nature trails and photo safaris. Tourists also caused other problems such as waste, erosion and plant destruction.</p> <p>Source: Royal Forest Department (2001). Related park: Umphang Wildlife Sanctuary.</p> |
| | <p>“Garbage disposal and wastewater discharge were the most serious threats to the island, said Suksun Pengdith, coordinator of the Designated Area for Sustainable Tourism Administration (Dasta), a focal point for the Koh Chang development scheme. Koh Chang, one of Thailand's top tourist destinations, has neither a garbage disposal plant nor wastewater treatment plant at the moment”.</p> <p>Source: Bangkok Post (2005). Related park: Koh Chang Marine National Park.</p> |
| Document No. 8 | <p>“The distribution of garbage and the imminent shortage of water are the biggest problems concerning the environment. The behaviour of (particularly Thai) tourists causes the distribution of garbage. This extraction of water causes the ending of some waterfalls, which are also a tourist attraction. The physical damage, like the cutting of trees and eventual erosion, and the ecological impacts turn out to be less than expected, but the recent extensions and the increasing pressure on the National Park [Koh Chang Marine National Park] are not promising”.</p> <p>Source: Gammeren and Marheineke (2003). Related park: Koh Chang Marine National Park.</p> |

5.2.1 Theme I: Socio-cultural

In terms of locals' benefits, four documents indicate that ecotourism increases employment leading to higher incomes and improved standards of living. For example, in Umphang Wildlife Sanctuary ecotourism provides jobs particularly for women and young people. In addition, local people are supported to have their own businesses related to tourism such as guesthouses and restaurants. In Doi Inthanon National Park, locals change their occupations from wildlife hunting to be tourist guides.

In addition, five documents indicate that local people in some national parks such as Doi Inthanon, Umphang, Koh Surin and Khao Yai are participating with park officials to support tourism and environmental and heritage conservation. Locals have also become more concerned about environmental problems in the parks. Further, one of these five documents indicates that local involvement in Doi Inthanon National Park can reduce conflicts with park officials because of improvement in understanding in each other roles.

5.2.2 Theme II: Economic

With regard to the economic impact of ecotourism, seven documents indicate that local communities can benefit economically from ecotourism in terms of generating additional income. In Doi Inthanon National Park local people earn more income by selling their agricultural products such as flowers and coffee to tourists. In Khao Yai National Park and Umphang Wildlife Sanctuary villagers have tourism-related jobs such as guides, tourist accommodation cleaners and mini bus drivers. In particular, local people have been supported to have their own businesses such as guesthouses and restaurants.

One of these seven documents indicates that ecotourism also has positive benefits for indigenous people (Moken) in Koh Surin Marine National Park *e.g.* widows are hired as unskilled work such as collecting garbage and Moken children sing their traditional songs for tourist money. However, one document points out that in Koh Chang Marine National Park, local revenues received from ecotourism are limited to local communities because these incomes mostly flow to tourism investors from the cities such as Bangkok or international investors.

5.2.3 Theme III: Environmental

On environmental aspects, six documents from Table 5.1 indicate that ecotourism has negative impacts on the environment in terms of waste and wastewater problems. One document states that tourism development in Doi Inthanon National Park creates

pollution from waste. Another document focusing on Khao Yai National Park indicates that human waste is a problem in the park because it has inadequate disposal facilities. In Koh Chang Marine National Park, two documents indicate that the most serious threats to the island are garbage disposal and wastewater. This waste problem is caused by irresponsible tourists, including Thais, and is exacerbated by there being neither a garbage disposal plant nor wastewater treatment plant on the island.

One document indicates that some tourism activities such as wildlife watching and nature trails can threaten wildlife in Umphang Wildlife Sanctuary. In Khao Yai National Park, one document indicates that wildlife poaching for supplying restaurants and increased use of pesticides by local people can also reduce wildlife numbers. One document focusing on coral reefs in Koh Surin Marine National Park indicates that some coral reefs have been degraded by tourism, fisheries, a poor water quality and an apparent increase in the frequency and severity of El Niño. However, coral reefs are still a good condition in some areas of the park due to effective management protocols.

5.3 Criteria-based assessment

In the criteria-based analysis, I analyzed five protected areas in Thailand using sustainability criteria as a basis for my judgments about performance of each protected area (Section 2.6). Same documents and organized items were used in this analysis as for the thematic classification. The results of the criteria-based analysis are shown in the Table 5.2, and the performance of the parks with regard to each criterion is summarized in the following subsections.

Table 5.2: Criteria-Base Analysis for Five Protected Areas

| Park | Document Type | Social | | | Economic | | Environmental | | |
|--------------------------------|-------------------------|---------------------|-----------------------------------|-----------------------|------------------------------|----------------------------------|---------------------------|--------------------|------------------|
| | | Local participation | Increased environmental awareness | Employment for locals | Revenues earned from tourism | Tourists investment by residents | Biodiversity conservation | Waste minimization | Water management |
| Doi Inthanon National Park | Academic | NI | PS ² | FS ¹ | FS ^{1,2} | NI | NI | NS ² | NI |
| | Government Organization | FS ³ | FS ³ | NI | FS ³ | NI | NI | NI | NI |
| Khao Yai National Park | Government Organization | NI | NI | FS ⁵ | FS ⁵ | NI | NS ⁶ | NS ⁶ | NI |
| | Newspaper | NI | NI | NI | NI | NI | NI | NI | NS ⁷ |
| Koh Chang Marine National Park | Academic | NI | NI | FS ⁸ | FS ⁸ | PS ⁸ | PS ⁸ | NS ⁸ | NS ⁸ |
| | Newspaper | NI | NI | NI | NI | NI | NI | NS ⁹ | NS ⁹ |
| Umphang Wildlife Sanctuary | Government Organization | FS ¹⁰ | NI | FS ¹⁰ | FS ¹⁰ | FS ¹⁰ | NS ¹¹ | NS ¹¹ | NI |
| Surin Marine National Park | Academic | NI | NI | NI | NI | NI | PS ¹² | NI | NI |
| | Government Organization | FS ¹³ | NI | FS ¹³ | FS ¹³ | NI | NI | NI | NI |

Note: 1. A list of all document and superscripts indicate the item number as detailed in Appendix A.

2. Rating of results:
- FS = Fully Satisfied
- PS = Partially Satisfied
- NS = Not Satisfied
- NI = No relevant information in the documents

3. For example of how FS, PS and NS were allocated, see table 2.1.

5.3.1 Criterion 1: Local participation

One document from a government organization indicates that tourism problems in Umphang Wildlife Sanctuary have been addressed, primarily through cooperative efforts and agreements involving local community members. Local people are supportive of the growth of tourism in the area, and actively participate in the creation of new services and activities.

In Doi Inthanon National Park, one document from a government organization indicates that the conflict between locals and national park officers has reduced. Also local people have better understanding with the government agencies and now work with them towards sustainable development. As a result, they gain experience in group working, participation and problem solving skills.

In addition, UNESCO (2001, p.15) states that “for the Moken [indigenous people] of the Surin Island, their continued presence and use of natural resources within the park area will be facilitated by receiving and accepting their shared responsibility for safeguarding heritage values, so that together with local authorities and government development, they can explore sustainable development opportunities”. On this basis, therefore, it is reasonable to regard these three parks as fully satisfied (“FS”) with respect to this criterion and within the limitations of this analysis.

5.3.2 Criterion 2: Increase environmental awareness

In this criterion, a document from a government organization indicates that bringing community-based tourism into Doi Inthanon National Park can increase environmental awareness of local people. My judgment for this criterion is that it has been fully satisfied. However, the academic document analyzed (Table 5.1) points out that only some locals are likely to preserve natural resources and forest ecosystems while the remainders are still not concerned in preservation. Hence, the criterion is only partially satisfied (“PS”) in Table 5.2

5.3.3 Criterion 3: Employment for locals

As can be seen from Table 5.2, ecotourism in the five protected areas benefits local communities in terms of better employment opportunities. On this basis, it is reasonable to regard these parks as fully satisfying this criterion. For example, local people in Doi Inthanon National Park and Khao Yai National Park have traditional jobs related to ecotourism as guides, cleaners, cooks and drivers. This evidence came from academic and government organization documents.

One document from a government organization states that in Umphang Wildlife Sanctuary, besides offering better employment for women and young people, ecotourism generates opportunities for locals to have their own businesses such as guest houses, restaurants and travel agencies. Like the other three parks, indigenous people in Koh Surin Marine National park can earn revenue from tourism. Some widows are hired as unskilled workers such as tourist accommodation cleaners and cooks.

5.3.4 Criterion 4: Revenues earned from tourism

In terms of 'Revenues earned from tourism' criterion, analysis of the several documents indicates that these five protected areas have fully satisfied this criterion. For example, two academic and organization documents state that ecotourism generates additional income for local communities and improved standards of living in Doi Inthanon National Park. Besides agricultural or other tradition occupations, villagers in Khao Yai National Park and Umphang Wildlife Sanctuary have the additional job opportunities as guides or drivers for tourists. The evidence for these two national parks was from government organization documents.

5.3.5 Criterion 5: Tourist's investment by residents

The evidence from a government organization document points out that the local people own most travel agencies in Umphang Wildlife Sanctuary. Therefore the

income generated is distributed within local communities rather than outside stakeholders. Therefore I consider that this park fully satisfied this criterion.

However, my decision for Koh Chang Marine National Park against this criterion is partial satisfaction. According to Gammeren and Marheineke (2003), many of accommodation owners around this park are not local people. Therefore, these local communities only have limited revenue from ecotourism.

5.3.6 Criterion 6: Biodiversity conservation

In terms of biodiversity conservation, my judgment for this criterion in Khao Yai National Park and Umphang Wildlife Sanctuary is not satisfied. The academic document indicates that some wildlife species in Khao Yai National Park are almost extinct. Wildlife is poached and served as special and expensive dishes in restaurants. Wildlife is also affected by agricultural pesticides used by local people. Based of this evidence, biodiversity conservation is considered inadequate in Khao Yai National Park. According to the Royal Forest Department (2001), tourism activities such as nature trekking and wildlife watching also have negative impacts on wildlife in Umphang Wildlife Sanctuary.

My judgment for this criterion is that it is not satisfied in Koh Chang Marine National Park. Evidence from the academic document by Gammeren and Marheineke (2003) indicates “the physical damage, like the cutting of trees and eventual erosion, and the ecological impacts turn out to be less than expected, but the recent extensions and the increasing pressure on the national park are not promising”.

In Koh Surin Marine National Park, one academic document points out that coral reefs were more damaged than in the past. It goes on to say that tourism is one of the major causes for this. Fisheries, a change in water quality and natural disasters such as El Niño also causes the degradation of coral reefs. It is reasonable to regard this park as partially satisfying this criterion.

5.3.7 Criterion 7: Waste minimization

As can be seen from Table 5.2, my judgment for the ‘waste minimization’ criterion is that it is not satisfied for four protected areas: Doi Inthanon National Park, Khao Yai National Park, Koh Chang Marine National Park and Umphang Wildlife Sanctuary. Waste is a major problem in these four protected areas *e.g.* garbage produced by households and tourist accommodation.

Inadequate waste disposal and the methods used such as incineration and burying can also create waste problems in parks. One newspaper indicates that “Koh Chang, one of Thailand’s top tourist destinations, has neither a garbage disposal plant nor wastewater treatment plant at the moment” (Bangkok Post, June 2005).

5.3.8 Criterion 8: Water management

Dealing with wastewater is another problem faced by protected areas. In Khao Yai National Park, wastewater is discharged into streams or waterfalls and this causes discontent amongst tourists reducing the quality of their experience. Therefore, it is reasonable to regard this park as not satisfying this criterion.

My judgment for this criterion in Koh Chang Marine National Park is that it is not satisfied. For example, Bangkok Post (2005) states that wastewater is a severe problem threatening the island because there is no waste disposal plant or water treatment plant. There are also insufficient supplies of fresh water in the park due to increased visitor numbers drawing on available water. The additional demand is causing some of the waterfalls to dry up, this is also reducing the attractiveness of the park for tourists.

5.4 Chapter summary

The chapter presented the results of document analysis in five protected areas in Thailand. The results illustrated the impact ecotourism had on each area with respect to socio-cultural, economic and environmental themes or criteria. The results have

shown that ecotourism provides social and economic benefits to local communities in these five parks. However, ecotourism has negative impacts on the environment. In the following chapter, I discuss these results and the issues arising from them.

CHAPTER SIX

DISCUSSION

6.1 Overview

This chapter aims to discuss the results of the document analysis used in this research. My discussion will be focused on the three main sustainability themes: socio-cultural, economic and environmental concerns. The recreation experiences of visitors and limitations of this research are also discussed.

6.2 Socio-cultural concerns

A commonly cited theory is that ecotourism has positive social and cultural impacts on local communities and destinations as it provides additional jobs for locals and supports their traditional crafts and values (Israngkura, 1996; Diamantis, 1999). Weaver (2002, p.10) argued that it is because ecotourists “search for authenticity, which supports local cultural and traditions, and because they are educated and nice people who are genuinely interested in and concerned about local residents”.

With respect to socio-cultural consequences of ecotourism occurring in five protected areas in Thailand, results from the document analysis indicate that it is likely for ecotourism to have more positive than negative impacts on local people and visitors. Considering cultural impacts of ecotourism on local people, inappropriate ecotourism management can affect indigenous people such as hill tribes in terms of degradation native culture and threaten traditional lifestyles. Although the document analysis results presented in chapter 5 did not focus on cultural impacts of ecotourism because there was no relevant information on this topic, there is some information on cultural impacts of tourism in both park and non park areas. These cultural impacts include traditional houses being replaced by modern house styles in some remote areas; and the basis of traditional life, such as

coconut farming, being replaced by tourism in a popular tourist island in southern part of Thailand such as Koh Samui (Rattanasuwongchai, 1998).

In terms of positive social aspects, there is evidence that ecotourism can generate additional employment for locals whose traditional occupations are mostly farming. As local people can participate in ecotourism activities during the off farming season, this is particularly beneficial. Some unemployed people are trained as tourist guides or supported to sell food or handicrafts, decreasing unemployment and migration rates and also creating a higher standard of living.

In terms of reduction in unemployment and migration rates, normal migration patterns of Thai residents can be grouped under two categories; migration for education and migration for work. Ecotourism has played a significant role in changing the way of life of people. If local residents have a job related to tourism in their home areas, they can remain at home rather than move to their place of work, meaning that they can stay with their families. If ecotourism-related business increases, the percentage of employment will be increased accordingly. As local people have more opportunities for employment, they have more income to purchase food, houses, cars and meet other basic needs and for the education of their children. Improved education will provide opportunities for better employment. Therefore ecotourism can contribute to better standard of living in the communities.

In some parks such as Doi Inthanon and Khao Yai national parks, conflict between the park officials and local communities due to illegal wildlife hunting and forest encroachment has long been a problem. From the analysis of documents, it has been shown that ecotourism could reduce conflict between park officials and local residents by encouraging more responsibility in the conservation of the park's natural resources. Besides decreasing conflicts in the parks, participation of locals in ecotourism can help tourist experience and understand the local cultures. Participation in tourism also promotes understanding and appreciation between indigenous people and non-indigenous people. Conflict may be reduced as non-indigenous people observe and experience indigenous cultures and indigenous people become more involved in tourism (Hinch and Butler, 1996). Community involvement in tourism in Thailand also includes shopping at village markets for

items such as traditional handicraft products and local food, performance of traditional music and dancing, festivals for which visitors are welcomed and guided tours within a village or a village area (World Tourism Organization, 2001).

Moreover, in theory, ecotourism will help to promote the environmental awareness to visitors and local people. Because the benefits people gain from tourism in protected areas, they are likely to be aware of the importance of resources, and be willing to conserve the protected areas ecosystems. In practice, most locals are not interested in conservation. To overcome this problem, local residents or at least community leaders should be able to take part in planning and policy-making for ecotourism that may affect them. Local people must be consulted before tourism projects are started in order to understand their roles in these tourism projects. If the locals are not involved in initial decision-making for the project, it is likely that they will not care much about the success of the project.

6.3 Economic concerns

One of economic impacts of ecotourism in protected areas is to generate revenue for local communities. Lindberg (1998) argues that ecotourism provides an opportunity to generate employment and revenue and to generate economic benefits from natural areas. Ecotourists might support the importance of tourism benefiting local communities. Eagle *et al.*, (1992 as cited in Wearing and Neil, 1999, p.119) state that ecotourists “want to experience new lifestyles and meet people with similar interests to themselves and they want to see their traveling dollars contributing towards conservation and benefiting the local community. When local people gain benefits from tourism, they are more likely to support tourism and preservation such as protection against wildlife poaching or other encroachment and conserve natural resources for attracting tourists.

In considering Thailand, most villagers' occupation around protected areas is agriculture, producing rice and crops for their own use and selling these products as a source of income. Locals also sell their agriculture products and handicrafts to visitors. Some of them are employed as tourist guides or other occupations related to

ecotourism such as accommodation cleaners and mini bus drivers. These economic benefits can reduce the illegal hunting and cutting trees. For example, in Khao Yai national park, Lynam (N/D) states that “nature trekking has also disrupted poaching. As locals gained direct benefits from the park, their relations with park staff improved, and anti-poaching patrols were tolerated”. In Koh Surin marine national park, the Moken can also earn revenues during the turtle-nesting season by protecting turtle nests, facilitating environmental management of the islands. Moreover, the park can provide financial support for Moken turtle conservation activities (UNESCO, 2001).

However, the economic benefits on local communities from tourism have been low for various reasons. The unskilled jobs related in tourism industry in less developed countries tend to be low-paying (Farver, 1984; Rajotte 1987 as cited in Weaver, 1998). In Thailand, people are employed in low-paying jobs such as cleaning and driving. Many tourist accommodations and travel agencies are owned by non-local residents who take most of the profits. Incomes in the forms of taxes and fees will return to the central government (Rattanasuwongchai, 1998). This limitation on locals’ income would be solved by encouraging some local people to have their business or providing them more employment.

Lack of financial support from the government is also a problem in protected areas management. Khaosa-ard (1995) stated that since the Thai government is more concerned with economic development rather than environmental conservation, the protected areas gain only a small amount of the country’s budget. In 1995, the financial support for forest preservation was US\$347 million or about 1.2 percent of the forest department’s total budget of US\$ 2.86 billion (Panusittikorn and Prato, 2001).

6.4 Environmental concerns

The information presented in this research indicates that ecotourism in protected areas in Thailand has negative impacts on the environment. Large numbers of tourists cause waste which is a major problem in national parks. There are several

reasons for this. Irresponsible tourists can increase the garbage. Waste disposal is inappropriate in some tourist accommodations, particularly in small accommodations because they do not have enough money to take responsible care of the environment. In some popular national parks, tourists create many tons of waste that accumulates every day without being appropriately disposed of. For example, in Doi Suthep national park, Chiangmai, tourists create about three tons of rubbish a day (Thailand Development Research Institute, 1997).

Inadequate tourism management of parks and uncontrolled tourism destroys environments and natural resources such as wildlife and marine organism. Pattaya beach (which is a non park area) is an example of this. According to research conducted by the National Environmental Board, since 1986 the marine water quality at Pattaya had declined below the acceptable standard because of irresponsible visitors and an inappropriate management of garbage and waste water. Also, uncontrolled high levels of construction along the beach have decreased the attraction of Pattaya's tourist sites (ICEM, 2003). Such impacts are also likely to be occurring in marine and coastal protected areas.

Tourism has also degraded natural resources in other national parks. The Phi Phi Islands are a popular tourist destination due to beautiful beaches and coral reefs. They have been degraded however by tourist-related development such as rapid growth in tourist accommodations and inappropriate waste disposal facilities causing waste problems on islands. Collections of reefs coral as souvenirs by tourists and anchoring have also caused extensive damage to coral reefs (Panusittikorn and Prato, 2001).

Illegal logging and poaching in protected areas in Thailand has increased because of the development of extraction technologies and the road system in Thailand and because enforcement is also inadequate (ICEM, 2003). Illegal logging and poaching have had negative impacts on endangered species such as elephants, tigers and hornbills by damaging their habitats. In addition, there is illegal local and international wildlife trade that the Royal Forestry Department is unable to control (Panusittikorn and Prato, 2001).

6.5 Recreation experience

From the result of document analysis, there is no direct evidence concerning tourist satisfaction. However, the results indicate that garbage and waste water are the serious problems in five national parks caused by irresponsible tourists, and inappropriate waste and waste water disposal systems in tourist accommodations and parks. These problems may be implied that visitors may feel uncomfortable and unsatisfied during their visit because waste and waste water problems can cause the pollution to the tourist destinations.

In addition, Elliot (1993 as cited in ICEM, 2003) states that most of tourists satisfy with the accommodations, transport and walking track in Doi Inthanon and Doi Suthep National Park. However, most of tourists complain about lack of tourist information because the visitor centers at these two parks provide little information for tourists such as maps and guidebooks. Arbhabhirama *et al.* (1998 as cited in (Panusittikorn and Prato, 2001) argue that numbers of international tourists in national parks are less than Thai tourists because some parks lack tourism promotion such as information written in English. Khaosa-ard (1994) argues that this is because tourism in Thailand has aimed at quantity rather than quality.

6.6 Limitations of the research

In doing the document analysis, the related documents can be obtained from various sources such as academics, government organizations, tourism companies and visitors. However, as my research was restricted by limited time and budget, it was not possible to gain all information from all document sources. The results of my research would have been more comprehensive if I had been able to access a larger range of such sources. It would have also been beneficial if I had been able to conduct a survey using interviews of key informants or questionnaire surveys.

CHAPTER SEVEN

CONCLUSION

AND RECOMMENDATIONS

7.1 Overview

This chapter provides a preliminary and partial answer to the research question, '*Is current ecotourism in protected areas in Thailand sustainable?*' In addition, this chapter will fulfil the third research objective by providing recommendations for improving ecotourism management in protected areas in Thailand, based on information obtained from literature, document analysis results and discussion. Some suggestions for further research opportunities are also included.

7.2 Summary of the research

Tourism has played a significant role in terms of employment and supporting the economies of many countries. On the other hand, tourism has degraded environments that provide important resources to tourism. As nature-based and ecotourism in particular rely on natural resources, the concern about environmental degradation caused by tourists and tourism development has increased.

Ecotourism in protected areas in Thai national parks has become more popular for both Thai and international tourists. The management objectives of protected areas are conserving park ecosystems and providing recreation and education for tourists, for current and future generations. As some popular parks in Thailand are facing environmental problems such as pollution, wildlife and marine animals' disturbance and degradation from traditional tourism, bringing ecotourism into the parks is believed to solve these problems. Moreover, appropriate park management and the

participation of all levels of government, stakeholders and communities are also required.

This thesis examined the sustainability of the current ecotourism management in protected areas in Thailand using document analysis as a methodology. Five protected areas selected were; Doi Inthanon National Park, Khao Yai National Park, Koh Chang Marine National Park, Umphang Wildlife Sanctuary and Surin Island Marine National Park which are located in the Northern, Central, Eastern, Western and Southern parts of the country respectively. Various documents used in the analysis process were obtained from academic, government organizations and newspapers.

As the Tourism Authority of Thailand promoted tourism through campaigns such as 'Visit Thailand Year in 1987, 'Amazing Thailand' during 1998 and 1999, large numbers of tourists visited Thailand each year. On the other hand, many tourist destinations such as Phuket, Pattaya and Koh Samui have faced environmental problems caused by tourism and tourism development. The Thailand government has taken steps to achieve a balance between ecotourism in protected areas and sustainable development. It also established an Ecotourism Policy in order to facilitate ecotourism management of the country.

Although this research examines only five protected areas, similar situations tend to occur throughout protected areas in Thailand as a whole. This study has shown that ecotourism has played a significant role in protected areas in terms of social and economic positive impacts as it provides additional employment and income for local people and provides environmental education and opportunity for recreation for visitors.

However, in terms of environmental impacts, this study has shown that ecotourism may have more negative than positive effects on tourist destinations as biodiversity such as wildlife and marine animal have been degraded, and garbage and waste water are still major problems in many parks.

Although Thai tourism has made efforts to promote ecotourism in protected areas based on ecotourism policy and protected areas management plans in order to meet concepts of sustainable development, it has not yet achieved this goal because of the environmental impacts noted abuse. With respect to this particular study, the following are problems which protected areas management in Thailand have encountered:

- insufficient financial support from the government;
- inadequate enforcement of environmental laws and regulations;
- lack of local participation;
- lack of education; and
- lack of environmental awareness.

7.3 Recommendations

To improve ecotourism in the protected areas in Thailand, the following recommendations were developed.

7.3.1 Socio-cultural concerns

1. In order for the management of natural resources and environment to be more effective, all relevant people such as park staff, tourism company owners and community leaders should be provided information on, and trained about:
 - natural and cultural values of the park;
 - minimising environmental impacts in the park;
 - sustainable management practice in the park; and
 - maximising social and economic benefits from park tourism.
2. Visitors, locals and tourist investors should be directly and indirectly provided with information knowledge concerning the preservation of tourism resources and environments in order to treat them in a sustainable manner.

This should include consideration of cultural values of the park and how they can minimize the impacts and maximize the benefits of their visit.

3. Local residents should be encouraged to participate in management of the park in terms of planning, implementation and monitoring of ecotourism projects and natural resources conservation. This would help reduce conflicts between park official and local people. As tourism benefits local people by generating additional income for them, people will help to protect their park because conserving natural resources helps with attracting more visitors and thus increasing their income.

7.3.2 Economic concerns

1. Local communities should be encouraged and supported to start their own business such as tourist accommodation and restaurants.
2. Parks should provide more employment related to tourism to local people such as tourist guides so this can generate more income for locals.
3. Parks should support locals to produce goods and services in the area to avoid purchasing them from outside the local area.

7.3.3 Environmental concerns

1. The Thai government should provide financial support for parks for environmental problem solving and biodiversity conservation in high tourism destinations.
2. Parks should promote investment in garbage disposal systems and waste water treatment system. This would result in reduced waste and waste water problems in parks.

3. Tourism attractions such as natural and cultural sites should be well protected. This would help to attract more visitors.

7.3.4 Recreation experience

1. Local guides and tourist accommodation investors should be well educated and trained to enhance the service skills to meet the international standards in order to satisfy visitors and earn more income.
2. Parks should provide more information for tourists such as background information on parks, tourist attraction sites and maps which should be written in both Thai and English.

BIBLIOGRAPHY

Alder, H. J. (2001) A Spatial- Intertemporal Model for Tropical Forest Management Applied to Khao Yai National Park, Washington.

Aronsson, L. (2000) *The development of Sustainable Tourism*, Continuum, London.

Australian Department of Tourism (1994) *National Ecotourism Strategy*, Australia Government Publishing Service, Canberra.

Babbie, E. (2004) *The Basic of Social Research*, Third Edition, Thomson Learning, Inc., Belmont.

Berg, B. L. (2004) *Qualitative Research Methods for the Social Sciences*, Pearson, Boston.

Buckley, R. (1995) Where Tourism and Ecology Meet, Ecotourism Conference, Bangkok 6-8 February 1995, Srinakharinwirot University.

Bugna, S. and Rambaldi, B (2001) *A Review of the Protected Area System of Thailand*, Thailand.

Bushell, R. (2001) 'Practice, Provision and Impacts' in Douglas, N., Douglas, N. and Derrett, R. (eds), *Special Interest Tourism: Context and Cases*, John Wiley and Sons Australia, Ltd., Queensland, pp.29-55.

Butler, R. (1998) 'Sustainable tourism-looking backwards in order to progress?', in C. M. Hall and A. A. Lew (eds), *Sustainable Tourism: A Geographical Perspective*, Addison Wesley Longman Ltd., Harlow, pp.25-34.

Ceballos-Lascurain, H. (1996) *Tourism, ecotourism, and protected areas*. IUCN Protected Areas Programme, IUCN Gland, Switzerland and Cambridge, UK.

- Ceballos-Lascurain, H. (1998) 'Introduction', in Lindberg, K., Wood, M. E. and Engeldrum D. (eds) *Ecotourism: A Guide for Planners and Managers*, The Ecotourism Society, Vol. 2, Vermont, pp.7-11.
- Chettamart, S. (2003) 'Ecotourism Resources and Management in Thailand, A paper presented at Malasia-Thailand Technology and Business Partnership Dialogue, 27-28 July 2003, Langkawi, Malaysia.
- Churugsa, W. (1999) *Umphang District: A Community-based Ecotourism Project*, [Online], Available: <http://cullin.org/cbt/index.cfm?section=chapter&number=18> [2005, Jul, 10].
- Cairns, J. Jr. (2002) 'Defining Goals and Conditions for a Sustainable World', *Ethics in Science and Environmental Politics*.
- Davidson, J., (2004) Environment Management Systems, in *sustainable environmental management*, Distance Education Packages, KGA514 - sustainable environmental management, Geography and Environment Studies, University of Tasmania, Hobart.
- Dawson, C. P. (2001) Ecotourism and Nature-based Tourism: One End of the Tourism Opportunity Spectrum?, in McCool, S. F. and Moisey, R. N. (eds) *Tourism, Recreation and Sustainability: Linking Culture and the Environment*, CABI Publishing, Oxford, pp. 41-53.
- Dearden, P. (N/D) *Ecotourism and biodiversity conservation in Vietnam*, [Online], Available: <http://www.undp.org.vn/projects/vie96010/cemma/RAS93103/016.htm> [2005, Feb, 11].
- Department of National Park, Wildlife and Plant Conservation (2005) *Startistic of Tourist in National Parks*, [Online], Available: http://www.dnp.go.th/NPRD/develop/Stat_Tourist.asp, [2005, Jun, 11].
- Diamantis, D. (1999) 'The Concept of Ecotourism: Evolution and Trends', *Journal of Current Issues in Tourism*, vol. 2, no. 2&3, pp.93-122.

- Discovery Thailand.com (2005) Surin Islands National Marine Park in Phang-Nga, [Online], Available: http://www.discoverythailand.com/Phang-Nga_Surin_Islands_National_Marine_Park.asp [2005, Aug, 12].
- Dooley, D. (1990) *Social Research Methods*, Prentice-Hall, Inc., New Jersey.
- Doswell, R. (1997) *Tourism: How effective management makes the different*, Butterworth-Heinemann, Oxford, pp.6.
- Dowling, R. K. (1998) *Ecotourism in Southeast Asia: Appropriate Tourism or Environmental Appropriation?*, [Online], Available: http://www.hotel-online.com/Neo/Trends/AsiaPacificJournal/July98_EcotourismSoutheastAsia.html [2005, Jan, 12].
- Eagles, P. F. J. (1997) *International Ecotourism Management: Using Australia and Africa as case studies*, [Online], Available: <http://www.ahs.uwaterloo.ca/rec/ecotour.htm> [2005, Jun 1].
- Eagles, P. F. G., McCool, S. F. and Haynes, C. D. (2002) *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*, IUCN, Gland, Switzerland, and Cambridge, UK, the United Nations Environment Programme and the World Tourism Organization.
- Ecotourism Australia (2005) *What is Ecotourism?*, [Online], Available: <http://www.ecotourism.org.au/> [2005, May 6].
- Emphandhu, D. and Chettamart, S. (2003) 'Thailand Experience in Protected Area Management', Paper presented at Vth IUCN World Park Congress, Durban, South Africa, 8-17 September 2003.
- Fennell, D. A. (2003) *Ecotourism: An Introduction*, Routledge, London.
- Finn, M., Elliott-White, M. and Walton, M. (2000) *Tourism and leisure research methods: data collection, analysis, and interpretation*, Longman, Harlow.

- Frangialli, F. (2001) 'Ecotourism: Facts and Figures', *Journal of Industry and Environment*, vol. 24, no. 3-4, pp. 5-9.
- Gammeren, J. V. and Marheineke, V. (2003) *Ecotourism on Koh Chang?*, Master Thesis Summary.
- Goeldner, C. R. and Ritchie, J. R. B. (2003) *Tourism: Principles, Practices, Philosophies*, Ninth Edition, Wiley, Hoboken.
- Goodwin, H. (1995) 'Tourism and the Environment', vol. 42, no. 3, pp.129-133.
- Haland, W. (1999) On Needs-a Central Concept in the Brundtland Report, in Lafferty, W. M. and Langhelle, O. (eds), *Toward Sustainable Development: On the Goal of Development - and the Condition of Sustainability*, Macmillan Press LTD, London, pp. 48-69.
- Hall, C. M. (1998) *Introduction to Tourism: development: dimensions and issues*, Pearson Education Australia.
- Hall, C. M. and Lew, A. A. (1998) The Geography of Sustainable Tourism Development: an Introduction, in Hall, C. M. and Lew, A. A.(eds), *Sustainable Tourism: A Geographical Perspective*, Addison Wesley Longman Limited, Harlow, pp.1-12.
- Hinch, T. and Butler, R. (1996) 'Indigenous Tourism: a Common Ground for Discussion', in Hinch, T and Butler, R. (eds) *Tourism and Indigenous People*, International Thomson Business Press, London.
- Holye, R. H., Harris, M. J. and Judd, C.M. (2002) *Research Methods in Social Relations*, Thomsom Learning Inc., Australia: Wadsworth.
- Hurka, T. (1992) *Sustainable Development: What do we owe to future generations?*, [Online], Available: <http://www.ethics.ubc.ca/papers/susdev.html#hurka> [2004, Oct. 6].

- Hvenegaard, G. T. and Dearden, P. (1996) *Ecotourism in Northern Thailand*, [Online], Available:<http://archive.idrc.ca/books/reports/1996/15-01e.html> [2005, Mar. 29].
- ICEM (2003) *Thailand National Report on Protected Areas and Development: Review of Protected Areas and Development in the Lower Mekong River Region*, Queensland, Australia.
- Israngkura, A. (1996) *Ecotourism*, Published in *TDRI Quarterly Review* Vol. 11 No. 2, pp. 10-15. [Online], Available: http://www.info.tdri.or.th/library/quarterly/text/j96_2.htm [2005, Feb, 20].
- IUCN (1994) *Guidelines for Protected Areas Management Categories*, The World Conservation Union, Gland, Switzerland, and Cambridge, UK.
- Jacobs, M., (1995) 'Sustainability and "the market": A Typology of Environmental Economics', in R. Edersley (ed), *Markets, the State and the Environment*, Macmillan Education, South Melbourne (Vic.), pp.46-47.
- Jacobs, M. (1999) 'Sustainable Development as a contested concept', in Dobson, A. (ed.), *Fairness and Futurity*, Oxford University Press: New York, pp. 21-45.
- Kaosa-ard, M. S. (1994) *Thailand Tourism Industry: What do we gain and lose?*, Published in *TDRI Quarterly Review* Vol. 9 No. 3, pp. 23-26. [Online], Available:
- Khomkris, T. (1996) *Forestry in Thailand*, Faculty of Forestry, Kasetsart University, Bangkok.
- Kongsanit, P. (2001) *Khao Yai: Concrete Jungle*, [Online], Available: http://www.ecologyasia.com/newsarchives/2001/mar01/bangkokpost_260301_Outlook01.htm [2005, May, 2].
- Kontogeorgopoulos (1999) 'Sustainable Tourism or Sustainable Development?: Financial Crisis, Ecotourism, and the 'Amazing Thailand' Campaign', *Journal of Current Issues in Tourism*, vol. 2, no. 4, p.316-332.

- Lafferty, W. M. and Langhelle, O. (1999) Sustainable Development as Concept and Norm, in Lafferty, W. M. and Langhelle, O. (eds), *Toward Sustainable Development: On the Goal of Development - and the Condition of Sustainability*, Macmillan Press LTD, London, pp. 1- 29.
- Lickorish, L. J. and Jenkins, C. L. (1997) *An Introduction of Tourism*, Butterworth-Heinemann, Oxford.
- Lindberg, K. (1996) The Economic Impacts of Ecotourism, [Online], Available: <http://www.ecotourism.ee/oko/kreg.html> [2005, Jun. 20].
- Lindberg, K. (1998) 'Economic Aspects of Ecotourism', in Lindberg, K., Wood, M. E. and Engeldrum D. (eds) *Ecotourism: A Guide for Planners and Managers*, Vol. 2, The Ecotourism Society, Vermont, pp.87-117.
- Leung, Y.-F, Marion, J.L. and Farrell, T.A. (2001) The Role of Recreation Ecology in Sustainable Tourism and Ecotourism, in Mcfool, S.F and Moisey, R.N. (eds), *Tourism, Recreation and Sustainability: Linking Culture and the Environment* CABI Publishing, Oxford, pp. 21-39.
- Lynam, A. J. (N/D) *Models for sustainable nature tourism in Thailand: Nature trekking in Khao Yai*, [Online], Available: <http://www.tatnews.org/conservation/1927.asp> [2005, Apr, 12].
- Marion, J. L. and Farrell, T. A. (1998) 'Managing ecotourism visitation in protected areas', in Lindberg, K., Wood, M. E. and Engeldrum D. (eds) *Ecotourism: A Guide for Planners and Managers*, Vol. 2, The Ecotourism Society, Vermont, pp.155-181.
- Milne, S. S. (1998) 'Tourism and sustainable development: exploring the global-local nexus', in Hall, C. M. and Lew, A. A. (eds.), *Sustainable Tourism: a Geographical Perspective*, Addison Wesley Longman Limited, Harlow, pp.35-48.
- Neuman, W. L. (2003) *Social Research Methods: Qualitative and Quantitative Approaches*, London: Allyn and Bacon, Boston.

- Newsome, D., Moore, S. A. and Dowling, R. K. (2002) *Natural Area Tourism: Ecology Impacts and Management*, Fifth Edition, Channel View Applications, Clevedon.
- Panusittikorn, P. and Prato, T. (2001) 'Conservation of Protected Areas in Thailand': The Case of Khao Yai National Park', *Journal of Protected Areas in East Asia*, vol. 18, no. 2, p.66-76.
- Pearce, D., Barbier E. and Markanya A. (1990) *Sustainable Development: Economics and Environment in the Third World*, Edward Elgar Publishing Limited, Hants.
- Pipithvanichtham, P. (1997) 'Issues and Challenges of Ecotourism in the National Parks of Thailand', in Bornemeier, J., Victor, M. and P. Durst (eds), *Ecotourism for Forest Conservation and Community Development. Proceedings of an International Seminar held in Chiang Mai, Thailand, 28 – 31 January 1997*. Bangkok, Thailand.
- Pleumarom, A. (2002) 'How Sustainable in Mekong Tourism?', in Harris, R., Griffin, T. and Williams, P. (eds), *Sustainable Tourism: A Global Perspective*, Elsevier Betterworth-Heinemann, Oxford, pp.140-166.
- Rattanasuwongchai, N (1998) *Rural Tourism – the Impact on Rural Communities II*, Thailand, Bangkok.
- Richardson, J. I. and Fluker, M. (2004) *Understanding and Managing Tourism*, Pearson Education Australia, New South Wales.
- Royal Forest Department (2001) *Extend Western Forest's life with Ecotoursim*, [Online], Available: http://www.forest.go.th/WEFCOM/E_BThaiPost.htm [2005, Jul 29].
- Ross, W. (2003) 'Sustainable Tourism in Thailand: Can Ecotourism Protect the Natural and Cultural Environments?', *Second Meeting of the Academic Forum for Sustainable Development*, International sustainability conference 17-19 September 2003, Fremantle, Western Australia, pp.1-16.

- Sebastian, I. and McArthur, S. (1998) *Introducing the Sustainability Barometer – a Tool to Measure the Sustainability of Tourism*, The Ecotourism Association of Australia, National Conference.
- Suppibulpon, S. (2001) *Ecotourism and Changing of Karen 's Communities at Ban Mae Klang Luang and Ban Angka Noi, Doi Inthanon National Park* Changwat Chiang Mai, Chiang Mai University.
- TalayThai (2001) *Survey Report in Mu Ko Surin Marine National Park Area Presented to UNESCO Project*, [Online], Available: <http://www.talaythai.com/English/unesco/index.php3> [Aug, 19].
- Thailand Development Research Institute (1997) *Thailand Tourism: Vision 2012*, in Thailand's Tourism Master Plan, Bangkok.
- Thailand Institute of Scientific and Technological Research (1997) *Operational Study Project to Determine Ecotourism Policy (summary)*, Tourism Authority of Thailand, Bangkok.
- Thailpark.com (2002) *Doi Inthanon National Park*, [Online], Available: <http://www.thaiparks123.com/en/nationalpark.cfm?parkid=1> [Jun, 11].
- The International Ecotourism Society (2003) *What is Ecotourism?* [Online], Available: <http://www.ecotourism.org/index2.php?what-is-ecotourism> [2005, May. 6].
- Tourism Authority of Thailand (2001) *Historical Background of Ecotourism in Thailand*, [Online], Available: <http://conservation.forest.ku.ac.th/ecotourdb/english/HisBG/HisBack.htm> [2005, Jan, 2].
- Tourism Authority of Thailand (2004) *Tourism Statistics: Situation, 2003*, [Online], Available: http://www2.tat.or.th/stat/web/static_index.php?IndID=6 [2005, Jul, 20].
- Tourism Queensland (2002) *Queensland and Ecotourism Plan 2003-2008: Sustainable Tourism in Queensland's Natural Areas*, State of Queensland, Brisbane.

- UNEP (2002) *Socio-cultural Impact of Tourism*, [Online], Available: <http://www.uneptie.org/pc/tourism/sust-tourism/social.htm> [2005, May 10].
- UNEP-GEF (2004) Proposal for pilot activities in land-based pollution from Thailand, *Fourth Meeting of the Regional Working Group for the Coral Reef Sub-component of the UNEP/GEF Project: "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"* Guangzhou 30th March -2nd April 2004, Marine Environment Division, Water Quality Management Bureau, Pollution Control Department, Bangkok, 1-20.
- UNESCO (2001) 'Indigenous People and Parks: The Surin Islands Project', the United Nations Educational, Scientific and Cultural Organization, Paris.
- United Nations (2001) 'Managing Sustainable Tourism Development' *ESCAP Tourism Review*, no. 22, United Nations Publication.
- Veal, A. J. (1997) *Research Methods for Leisure and Tourism: A Practical Guide*, Second Edition, Pearson Education, Harlow.
- Wearing, S. and Neil, J. (1999) *Ecotourism: Impacts and Possibilities*, Butterworth-Heinemann, Oxford.
- Weaver, D. B. (1998) *Ecotourism in the Less Developed World*, Cab International, Wallingford.
- Weaver, D. B. (2001) *Ecotourism*, John Wiley & Sons Australia, Ltd, Queensland.
- Weaver, D. B. (2002) 'Ecotourism as a Tool for Development in Peripheral Regions', in *Ecotourism in Mountain Areas*, the 4th International Environmental Congress of Andorra: July, 2002, USA.
- Weaver, D. B., Faulkner, B. and Lawton, L. (1999) *Nature-based Tourism in Australia and Beyond: A Preliminary Investigation*, National Library of Australia Cataloging in Publication Data.

- Weaver, D. B. and Lawton, L. (1999) *Sustainable Tourism: A Critical Analysis*, National Library of Australia Cataloging in Publication Data.
- Weeradet, T. (1999) *Captivated by Khao Yai*, [Online], Available: http://www.bangkokpost.net/horizons/050899_Horizons01.html [2005, Apr, 11].
- Wong, P. P. (2001) 'Trends in coastal ecotourism in Southeast Asia', *Journal of Industry and Environment*, vol. 24, no. 3-4, p.20-24.
- Wood, M. E. (2001) 'Ecotourism and Sustainable', *Journal of Industry and Environment*, vol. 24, no. 3-4, p.10-12.
- World Bank Group (2001) *Thailand Environment Monitor 2001*, [Online], Available: <http://www.worldbank.or.th> [2005, May, 20].
- World Bank Group (2004) *Thailand Environment Monitor 2004*, [Online], Available: <http://www.worldbank.or.th> [2005, May, 20].
- World Tourism Organization (2001) *Sustainable Tourism Development for Thailand*, Madrid.
- World Travel and Tourism and Organization and International Hotel and Restaurant Association (1999) 'Tourism and Sustainable Development: The Global Importance of Tourism', *Commission on Sustainable Development*, Seventh Session, 19-30 April, 1999, New York.
- World Tourism Organization (2005) *WTO World Tourism Barometer*, Volume 3, No. 2, June 2005, [Online], Available: <http://www.world-tourism.org/facts/wtb.html> [2005, Aug 10].

APPENDIX A

LIST OF DOCUMENTS

| Reference | Author type |
|--|-------------------------|
| 1. Ecotourism and Changing of Karen 's Communities at Ban Mae Klang Luang and Ban Angka Noi, Doi Inthanon National Park Changwat Chiang Mai (Suppibulpon, 2001). | Academic |
| 2. Background Paper: Facilitating Community-based tourism in Protected Areas in Thailand (Emphandhu, N/D). | Academic |
| 3.Community-based tourism in Doi Inthanon National Park: Case Study of Mae Klang Luang Tourism Alliance, Chiangmai, Thailand (Asia-Pacific Environmental Innovation Strategies, 2003 | Government Organization |
| 4. Ecotourism in Northern Thailand (Hvenegaard and Dearden, 1996). | Academic |
| 5. Models for sustainable nature tourism in Thailand: Nature trekking in Khao Yai (Lynam, N/D). | Government Organization |
| 6. Conservation of Protected Areas in Thailand: The Case of Khao Yai National Park (Panusittikorn and Prato, 2001). | Academic |
| 7. Khao Yai: Concrete Jungle (Kongsanit, 2001) | Newspaper |
| 8. Ecotourism on Koh Chang? (Gammeren and Marheineke, 2003). | Academic |
| 9. Koh Chang in the newspapers: No place for all the rubbish (Bangkok Post, June 2005). | Newspaper |
| 10. Umphang District: A Community-based Ecotourism Project (Churugsa, 1999). | Government Organization |

| Reference | Author type |
|---|-------------------------|
| 11. Extend Western Forest's life with Ecotourism (Royal Forest Department, 2001). | Government Organization |
| 12. Survey Report in Mu Ko Surin Marine National Park Area Presented to UNESCO Project (TalayThai, 2001). | Academic |
| 13. Indigenous People and Parks: The Surin Inland Project (UNESCO, 2001). | Government Organization |