



**UNIVERSITI PUTRA MALAYSIA**

**LOCAL VISITORS' PERCEPTIONS AND OPINIONS ON  
NATURE-BASED RECREATION DEVELOPMENT AND  
MANAGEMENT IN PHOU KHAO KHOUAY  
NATIONAL PARK, LAOS**

**SOUSATH SAYAKOUMMANE**

**FH 2001 8**

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IN PHOU KHAO KHOUAY NATIONAL PARK, LAOS**

**By**

**SOUSATH SAYAKOUMMANE**

**Thesis Submitted in Fulfilment of the Requirement for the  
Degree of Master of Science in Faculty of Forestry  
Universiti Putra Malaysia**

**May 2001**



# **SPECIAL DEDICATION**

**To my parents, for their endless prayers**

**and**

**to my dearly beloved wife Outhone PHETLUANGSY and  
daughter Pavinna SAYAKOUMMANE for their constant inspiration  
and encouragement**



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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**May 2001**

**Chairman: Wan Sabri Wan Mansor, Ph.D.**

**Faculty: Forestry**

This study looks at the local visitors' perceptions and opinions on natural resource characteristics as recreation resources as well as natural resource management within Phou Khao Khouay National Park, Laos. The specific objectives of the study are to assess visitors' perceptions and opinions on: 1) the importance and meaning of national parks and natural resources, 2) the reasons for using national parks as a recreation resource, 3) natural resource conditions, 4) causes of impacts on natural resources and 5) the natural resource management and management functions of a park agency. Visitors' perceptions and opinions were assessed through on-site questionnaire survey with a total of 313 respondents. The study was conducted in the three popular recreation areas, namely Tad Leuk, Tad Xang and Tad Phou Khao Khouay. The data were analysed using Statistical Package for Social Science (SPSS).



Generally, most visitors, especially those with a high level of education, had some knowledge on the importance and meaning of national parks. To the visitors, the establishment of national parks and the uses of natural resources within national parks should place major emphasis on conservation and recreation.

The results showed that the main problems facing the Park, especially Tad Xang and Tad Phou Khao Khouay, were vegetation, wildlife and water conditions. These were directly influenced by the local villagers' livelihoods as both sites are located near community centres. Tad Leuk had problems only with wildlife conditions which was mainly caused by the concession for logging in the past ten years and the current development of economic activities within and around the area. However, Park visitors and recreational activities did not cause any undue impacts on natural resources within the Park.

The majority of visitors, especially students and government officers with higher level of education were highly concerned with the changing conditions of natural resources within the Park. Visitors considered natural resource components as most important and that the natural resources within the Park must not be modified or damaged as a result of developments. In order to manage resources effectively, the Park staff should have more skill and knowledge on the Park ecosystem and also on the subject of recreation or ecotourism.

Several recommendations on the ways to limit the use of natural resources, on development for recreation and on ways to reduce impacts of use on natural resources are also highlighted.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**PERSEPSI DAN PENDAPAT PELAWAT TEMPATAN TERHADAP  
PEMBANGUNAN DAN PENGURUSAN REKREASI ALAM SEMULAJADI  
DI TAMAN NEGARA PHOU KHAO KHOUAY, LAOS**

Oleh

**SOUSATH SAYAKOUMMANE**

Mei 2001

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Kajian ini adalah mengenai persepsi dan pendapat pelawat tempatan terhadap ciri-ciri sumber alam semulajadi sebagai sumber rekreasi dan juga pengurusan sumber alam semulajadi di dalam Taman Negara Phou Khao Khouay, Laos. Objektif khusus dalam kajian ini adalah untuk mentafsir persepsi dan pendapat pelawat terhadap: 1) kepentingan dan makna taman negara serta sumber alam semulajadi, 2) sebab-sebab taman negara digunakan sebagai sumber rekreasi, 3) kewujudan keadaan-keadaan pada sumber alam semula jadi, 4) penyebab-penyebab terhadap kesan pada sumber alam semulajadi, dan 5) pengurusan sumber alam semulajadi dan fungsi-fungsi pengurusan oleh agensi taman. Persepsi dan pendapat pelawat adalah ditafsirkan melalui kajian soal selidik setempat menerusi sejumlah 313 responden. Kajian dilaksanakan pada tiga kawasan rekreasi yang popular, iaitu Tad Leuk, Tad Xang, dan Tad Phou Khao Khouay. Data yang dikumpul dianalisis dengan pakej statistik SPSS.

Umumnya, kebanyakan pelawat yang berpendidikan tinggi mempunyai pengetahuan mengenai kepentingan dan makna taman negara. Bagi pelawat, penubuhan taman negara dan penggunaan sumber alam semulajadi di dalam taman negara seharusnya lebih menekankan kepada pemuliharaan dan rekreasi.

Hasil kajian juga menunjukkan masalah utama yang dihadapi oleh taman negara terutamanya di Tad Xang dan Tad Phou Khao Khouay ialah tumbuh-tumbuhan, binatang liar dan keadaan air. Masalah-masalah ini adalah dipengaruhi secara langsung oleh pendapatan penghuni tempatan, dimana kedua-dua tapak terletak berdekatan pusat komuniti. Tad Leuk hanya mempunyai masalah dengan hidupan liar yang disebabkan oleh pembalakan sepuluh tahun yang lepas serta pembangunan aktiviti ekonomi semasa di dalam dan sekeliling kawasan tersebut. Akan tetapi, pelawat taman dan aktiviti rekreasi tidak menjejaskan sumber alam semulajadi di dalam taman ini.

Majoriti pelawat, terutamanya pelajar dan pegawai kerajaan yang berpendidikan tinggi menyedari perubahan keadaan yang berlaku di dalam taman. Pelawat beranggapan bahawa komponen sumber alam semulajadi adalah amat penting dan tidak seharusnya diubah atau termusnah disebabkan oleh aktiviti pembangunan. Untuk mengurus sumber dengan berkesan, pegawai taman seharusnya lebih berkemahiran dan berpengetahuan tentang ekosistem taman dan juga bidang rekreasi atau pelancongan ekologi.

Beberapa cadangan tentang batasan penggunaan sumber alam semulajadi, pembangunan rekreasi, dan pengurangan kesan penggunaan pada sumber alam semulajadi juga dikemukakan.

## ACKNOWLEDGEMENTS

First and foremost, I would like to express my heartfelt gratitude and my most sincere appreciation to my main supervisor, Dr. Wan Sabri Wan Mansor for his helpful advice, guidance, encouragement and constructive criticisms throughout the duration of the study. I am thankful for his patience and for the knowledge that I have gained from his comments and suggestions.

I am also equally grateful and sincerely thankful to my supervisory committee members, Prof. Dato' Dr. Nik Muhamad Ab. Majid, Dr. Zahid b. Emby and Assoc. Prof. Dr. Ahmad b. Shuib for their invaluable advice, suggestions and constructive criticisms that substantially improved this study.

I am deeply grateful to the Lao government, the Department of Forestry of Laos, in particular the Lao-Swedish Forestry Programme for granting me the study leave and financial support to enable completion of my study.

I am also grateful for the cooperation given by the Phou Khao Khouay National Park Centre for permission to use the area for data collection, the National Tourism Authority of Laos for their cooperation and information support during the fieldwork. My special thanks to my field research assistants, Mr. Sisouk Luang-A-Phay and Mr. Sinxay Duangsone for their invaluable help during my data collection.

Last but not least, my deepest gratitude and love to all my dear friends who have encouraged me throughout my study.





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## LIST OF ABBREVIATIONS

GDP	Gross Domestic Product
IUCN	The World Conservation Union
Lao PDR	Lao People's Democratic Republic
NBCA	National Bio-diversity Conservation Areas
NPS	National Parks Services
PKKNP	Phou Khao Khouay National Park
TL	Tad Leuk Waterfall
TPKK	Tad Phou Khao Khouay Waterfall
TX	Tad Xang Waterfall
UN	United Nation





# CHAPTER I

## INTRODUCTION

### Background of the Lao P.D.R

The People's Democratic Republic of Lao (Lao PDR or Laos) is a landlocked country comprising of approximately 4.9 million people. The country still has poor infrastructure, with limited international communication and transport facilities. There is also inadequate finance to support the planning and implementation of infrastructure and inadequate personnel and professional services. About 13% of the population live in the capital city of Vientiane. There are 47 different ethnic groups in Laos. These can be classified into three broad groups, namely: (i) the Lao Lum (lowlanders), comprising 56% of the population and predominantly live along the Mekong River, (ii) the Lao Theung (highlanders) who make up approximately 34% of the population and live on slopes of hills with an elevation of less than 1,000 metres and (iii) the Lao Sung (uplanders), comprising approximately 9% of the population and live in the mountainous areas.

Laos is located in the centre of Indochina, sharing borders with China to the north, Myanmar to the northwest, Thailand to the west, Cambodia to the south and Vietnam to the east. The total area of Laos is 236,800 square kilometres. Around 70% of its terrain is mountainous, reaching a maximum elevation of 2,820 metres in the Xieng Khouang province. The landscape of northern Laos and the regions adjacent to Vietnam in particular, are dominated by hills. The Mekong River,



which flows through nearly 1,900 kilometres of Lao territory, is the main geographical feature in the west, and in fact, forms a natural border with Thailand in some areas.

Laos enjoys a tropical climate with two distinct seasons, the rainy season from the beginning of May to the end of September and the dry season from October through to April. The yearly average temperature is approximately 28.0 °C, rising to a maximum of approximately 38.0 °C in April and May. Laos has one of the most pristine forest ecosystems in Southeast Asia. It is estimated that half of its woodlands consist of tropical forest, in particular the primary forest. In addition to the fascinating vegetation, Laos plays host to a very diverse animal kingdom.

### **Outdoor Recreation and Nature-based Tourism in Laos**

Although, Laos has recently adopted an ‘open door policy’ in tourism, it is a highly debated issue involving policy planning and implementation. Tourism and ecotourism development policies in Laos are one of the many priorities of the National Development Plan that is determined by the Lao government. It has also been developed as an important sector in the economy of Laos. Although at present tourism and ecotourism contribute little to the national Gross Domestic Product (GDP), it gives support to small businesses and income for the rural areas through services offered and travel tours. Outdoor recreation and nature-based tourism have become important sector in the tourism strategy of Laos for the past

few years. This is possible because in Laos the natural resources are unspoilt, with many interesting hill tribes, attractive scenery, and friendly as well as hospitable local inhabitants. The concept of tourism market development involves setting up of organisational bodies, international publicity and relating these to sight-seeing, aesthetics, adventure, trekking, Lao's tribe culture, Lao life-style tourism, recreational tourism for local and foreign visitors (Anon, 1999). The tourism development policy of the Lao government established the basis for developing and managing tourism. It consists of a series of statements on various aspects of tourism development. It is based on several considerations including achieving the objectives of developing tourism and reflecting the overall development policy of the region or country.

The changes in socio-economic conditions of different geographical market segments have caused major shifts in the tourism market in Laos. These are among the more common obstacles to the development of tourism in Laos. In the past few years; especially since the Lao government adopted an open door policy on tourism, the greatest change has been the growth in number of visitors arrival from the Western European countries, America and Asia. According to the Laos Tourism Statistical Report (1997), the number of visitors to Laos increased rapidly from 1990-1997, with an average annual growth rate of 51.96%. The revenue from tourism also increased steadily from 1994-1997, with an increase from USD7,557,600 in 1994 to USD73,276,904 in 1997. The main factors which influenced the increase in number of visitors were: the 'open door policy' of the Lao government, the existence of the Lao-Thai Friendship Bridge, Thailand is the

main gateway to Indochina, most tourists flow coming through Thailand and Laos is seen as a new tourism destination in Southeast Asia. Visitor arrivals from neighbouring countries represented the largest portion totaling 403,781 people in 1997, a 12.89% increase over 1996. Nevertheless, the international visitors (considered as the most important market in Laos tourism) increase by 31.15% in 1997 in comparison with 1996.

On 6 January, 1996, the Lao government and the Malaysian government signed an agreement on tourism and resort development in Nam-Ngeum basin area which covers a total area of about 14,800 hectares. This is the biggest tourism and resort development project in Laos and it is to be implemented by the Lao-Syuen Company, with a total cost of about USD210 million (Anon, 1996). As of 30 December, 1998, a five-storey hotel incorporating a casino and also an access road has been built.

At present, tourism and outdoor recreation are seen as important economic sectors by state jurisdictions wishing to enhance the national economy. Ecotourism and nature tourism are identified as high priority by the Lao government in developing the national economy. To promote tourism development in view of getting more benefits for the national economic growth, the Lao government has declared 1999-2000 as the '*Visit Laos Year*'.

As Laos is a landlocked country, tourism has to rely on more diversified and dispersed resources, on two identifiable themes: natural and cultural resources. At present, unspoilt attractions are the destination of regular tours in Laos. With the support of United Nation (UN) advisors, Lao officials have declared their commitment to sustain development of the tourism industry. The Lao National Tourism Authority has planned to develop a tourism industry virtually from scratch and combine ecotourism with the appeal of the country's colourful hill tribe culture and scenery. However, the current challenging issue on ecotourism and nature tourism is how to set up a network of national parks and protected areas. Laird (1993) stated that such tourism revenues can support the maintenance of the whole park system and protected areas with a substantial portion of revenues flowing back into community development.

Ecotourism and nature-based recreation in Laos are relatively new, as are the set up of national parks and protected areas. Laos has good potential for developing ecotourism due to its many national parks and protected areas of scenic beauty and bio-diversity. It is stated in the Lao national and regional tourism plan (1998) that ecotourism and nature-based recreation will give utmost consideration to conservation of the natural environment and ethnic cultures, emphasise design of environmentally appropriate tourist and recreational facilities; include visitor interpretation to educate tourists and visitors on the local ecology and cultural patterns, and be developed in a manner that brings benefits to local communities.

Internationally, ecotourism is a specific concept and is defined in the National Tourism Plan for Laos as: 'travelling to natural areas to appreciate scenic beauty, learn about the ecology and bio-diversity of the areas, understand the cultural patterns of local ethnic communities, with utmost care taken to conserve the natural ecosystem and ethnic identities, and approaches used to produce economic opportunities for local communities'.

### **National Parks and Protected Areas in Laos**

Laos contains parts of four bio-geographic sub-units: Annam, Central Indochina, Northern Indochina and Indochina transition zones, which reflect differences in plant and animal distributions. These provide a natural spatial framework for planning a national park and protected area system. The aims of national park and protected area system for Laos should be to provide effective protection to 5-20% of the original area of each habitat type within each bio-geographic sub-unit (Bermuller *et al.*, 1993).

To date, 68 protected areas have been proposed to the Lao government, including four historic/cultural sites and five wetland areas. In total, these sites cover approximately 20% of the total area of Laos, but only an estimated 3/5 of this consist of original, largely undegraded habitat types (Salter *et al.*, 1989). At present, three National Parks and seventeen National Bio-diversity Conservation Areas (NBCA) have been identified and recommended by the Lao government and formally declared by decree. As such, conservation management of Lao forest