MENGKAJI KEUPAYAAN RIZAB HIDUPAN LIAR TABIN SEBAGAI DESTINASI PELANCONGAN ALAM SEMULAJADI

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2005



BORANG PENGESAHAN STATUS TESIS

JUDUL : "Tabin Wildlife Reserve: A Potential Nature Tourism Site".

IJAZAH : SARJANA SAINS (Pelancongan Alam Semulajadi)

SESI PENGAJIAN : 2000-2005

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NORAINI-BINTI NASARUDDIN PS 2000 – 05 – 265 29 OCTOBER 2004



In the name of Allah, the most Merciful, the most Mercy-Giving

First of all, I would like to express my high gratitude to Allah for giving me strength and will to finish the task.

I wish to express my sincere gratitude to Prof Datin Dr Maryati Mohamed, my supervisor for her encouragement and guidance, throughout the study and writing up of my thesis. I am grateful to Madam Jennifer Chan Kim Lian, my former supervisor, and Mr Awangku Hassanal for their assistance and support.

Deepest gratitude is also extended to DANCED for sponsoring this study. Thanks to DANCED for sponsoring me to go to the ANeT Workshop 2001 in Vietnam and for En Martubat Jamlan (UMTP) for giving the permission to use some of his pictures. I would also like to thank the Sabah Wildlife Department especially the staff at the Tabin Wildlife Reserve; David Gakim, David Anthonius, Herman Stawin, Rayner Benedict, Zulkifli Juhar, Biliknis Lantung, Justin Endi and Justin Wilfred, Easter David, and my assistance Yujin for helping me during fieldwork in the core area.

Thanks also to the manager of Tabin Wildlife Snd Bhd, Datuk Wilfred Lingham for giving the permission to gather information from the tourists and staff; Harjinder, Irene, Sudian, Lina, Suzie, Mike, Johnny, Perimus, Kuni, Perry, and others. Not to forget all respondents from plantations, Kg Dagat, Kg Parit, Kg Tidong, tourist guides and the tourists.

Many thanks to the Institute for Tropical Biology and Conservation, lecturers and staff; Assoc Prof Dr Mashitah, Assoc. Prof Dr Menno, Dr Henry, Dr Monica, Dr Homa, En Zulhazman, En Fairus, En Mahadi, Cik Nurhuda, En Bakhtiar, En Kelvin, En Ahmad Sudin, En Zaidie, En Nordin, En Zainal, Kak Lucy, Kak Zima, Kak Gom, Johny, Azrie, Ros, Jonin and my friends Mohd Zaini Ayub, Juls, Pethe, Madi, Kak Jang, Kak Len, Halle, Noel, Alona, Qla, Daniel, Din, Kak Yam, Yvonne, Hassan, Sukarman, Rajan, John, Chris, Sik, Mus, Lam, Naran, Avel, Arman, and specially to Kak Zu, Abang Nasir and the kids.

Last but not the least, my beloved family; Hjh Khuzaimah Mohd (mum) and Hj Nasaruddin Alang Aziz – Din (dad), Abang Man, Kak Dyna, Comel, Hanim and Najib and my grandparents for their prayers and constant encouragement, which have spurred me to complete successfully this study.





ABSTRAK

MENGKAJI KEUPAYAAN RIZAB HIDUPAN LIAR TABIN SEBAGAI DESTINASI PELANCONGAN ALAM SEMULAJADI

Kajian ini telah dijalankan di Rizab Hidupan Liar Tabin (TWR). TWR adalah merupakan rizab hidupan liar yang terbesar di Sabah dengan keluasan 120,521ha dan merangkumi hutan primer, hutan sekunder, hutan paya bakau dan hutan pinggir sungai. TWR dikelilingi oleh ladang kelapa sawit kecuali bahagian timur laut. Objektif kajian ini adalah (i) mengenal pasti produk pelancongan alam semulajadi yang terdapat di TWR (tarikan fizikal, fauna, flora dan cara hidup penduduk tempatan); (ii) menilai potensi TWR sebagai destinasi pelancongan alam semulajadi melalui soal selidik kepada pelancong dan pemandu pelancong serta kemudahan yang terdapat di TWR; dan (iii) menilai persepsi penduduk setempat (Kg. Tidong, Kg. Dagat dan Kg. Parit) dan pekerja ladang berkaitan aktiviti pelancongan alam semulajadi di TWR. Terdapat banyak tarikan di TWR; seperti aktiviti memerhati hidupan liar terutamanya disekitar gunung berapi lumpur dan semasa aktiviti menyuluh malam. Disamping itu, terdapat juga tumbuhan dipterokarp yang tinggi, tumbuhan berbunga dan pokok ara yang membekalkan sumber makanan kepada fauna serta berbagai jenis halia liar yang menarik di TWR. Bagi tarikan fizikal pula, TWR menawarkan gunung berapi lumpur yang jarang ditemui, air terjun dan jeram serta sungai. Kemudahan infrastruktur di TWR telah disediakan untuk penyelidikan dan aktiviti pelancongan oleh Jabatan Hidupan Liar Sabah (Stesen Tabin) dan Tabin Wildlife Sdn Bhd (TWSB). Namun begitu, beberapa aspek tambahan perlu diberi perhatian seperti keperluan asas dan kemudahan para pelancong serta pemuliharaan kawasan TWR. Daripada soal selidik yang telah dijalankan, secara keseluruhannya penduduk tempatan dan pekerja ladang menyokong aktiviti pemuliharaan dan pelancongan alam semulajadi yang dijalankan di TWR. TWR mempunyai potensi vang besar dalam menjadi sebuah destinasi pelancongan alam semulajadi secara khususnya di Sabah dan Malaysia amnya.

Kata kunci: flora dan fauna, rizab hidupan liar, destinasi pelancongan alam semulajadi, pemuliharaan, penduduk tempatan.



ABSTRACT

TABIN WILDLIFE RESERVE: A POTENTIAL NATURE TOURISM SITE

The study was conducted in Tabin Wildlife Reserve (TWR). TWR is the largest wildlife reserve in Sabah with an area of 120,521 ha which cover primary and secondary forests, manarove and riverine forests. The western, eastern and southern parts of the reserve were surrounded by oil palm plantations. Objectives of the study were (i) to identify and document potential nature tourism products existing in TWR (physical environment, fauna, flora and local lifestyle); (ii) to evaluate the potential of TWR as nature tourism site by questionnaire-based study of tourists and tour guides and facilities existing in TWR and (iii) to determine perception of local communities (Kg. Tidong, Kg. Parit and Kg. Dagat) and plantation officers regarding nature tourism in TWR. The attraction of TWR was studied based on accessibility of the area, and documenting the fauna, flora, physical environment and local lifestyle.TWR has lot to offer to visitors such as the wildlife viewing especially close to mud volcanoes and spot lighting activities. There are also towering dipterocarp trees, fruiting and horrifying fig trees and eye-catching gingers. For physical attractions, TWR offers mud volcanoes, waterfalls, rivers and streams. The local communities warmly welcome visitors to their villages. The facilities for study and tourism activities in TWR have been provided by Sabah Wildlife Department (Tabin Station) and Tabin Wildlife Resort (TWSB), although some enhancements should be added in such as basic needs and facilities for the tourist, and conservation of TWR. Local communities and planters agreed with conservation efforts and nature tourism activities in TWR. TWR has a great potential to be a new nature tourism site especially in Sabah and Malaysia in general.

Keywords: flora and fauna, wildlife reserve, nature tourism site, conservation, local communities.



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LIST OF ABBREVIATIONS

>	means	more than
<	means	less than
%	means	percentage
asl	means	above sea level
km	means	kilometer
m	means	meter
mm	means	milimeter
ha	means	hectar
°C	means	degree Celsius
n.d.	means	no date
sp.	means	species
Sg.	means	river (sungai)
Kg.	means	village (kampung)
VJR	means	Virgin Jungle Reserve (Class VI)
MV	means	Mud Volcano
SWD	means	Sabah Wildlife Department
TWR	means	Tabin Wildlife Reserve
TWSB	means	Tabin Wildlife Sdn. Bhd.
TWS	means	Tabin Wildlife Station (Sabah Wildlife Department)
NGO	means	Non Government Organization
NTFP's	means	Non-timber forest products
MOCAT	means	Ministry of Culture, Arts and Tourism (now known as
		Ministry of Tourism)
MOSTE	means	Ministry of Science, Technology and the Environment
MTDEST	means	Ministry of Tourism, Development, Environment,
		Science & Technology
NT	means	Nature Tourism
KK	means	Kota Kinabalu
LDU	means	Lahad Datu



CHAPTER 1

INTRODUCTION

1.1. Introduction

Concern over human's overexploitation of natural resources has grown world wide in recent years. The rapid destruction of natural habitats leads to the erosion of biodiversity at all levels, from the genetic variability within population to species extinctions and entire ecosystem losses in all continents.

Natural resources are those products and features of the earth that permit it to support life and fulfill people's need. Natural resources are water; air and land including living and non-living things. Biological resources are the most important natural resources (The World Book, 1992; Nais *et al.*, 2000) and dependent on other natural resources such as water, soil, air and sunshine.

Sabah, with an area of approximately 73,660 km² occupies the northern tip of Borneo in South East Asia (Hutton, 2001). Tropical rain forest covers not less than 60% of Sabah and it harbors a rich biodiversity of plants and animal species but also variety of ecosystems which include lowland, hill and montane forest as well as wetland areas (Bernard, 1998).

Sabah is one of the twelve mega-biodiversity hotspots of the world. Without effective conservation, Sabah may soon lose its status as mega-diversity area (WWF-IUCN, 1995). The rural people of Sabah still live in close association with their environment; particularly the forest while the economy of Sabah is also heavily dependent on its forest and coastal habitats to provide commodities and to support the growing tourist market. Degradation of natural resources may significantly reduce the income generating from tourism activities, as well as threaten the ecological



functions that is provided by forest in moderating the climate, retaining soils and nutrients, and stabilizing hydrological regimes. (Borchsenius, 1998; Nais *et al.*, 2000).

Currently, scientists are far off from understanding the dynamics and structure of the complex ecosystems sufficiently, as well as precisely able to forecast or make at least well-founded guesses on the consequences of certain forms and dimensions of man-made impacts on biodiversity. The industry still lacks the necessary knowledge to quickly develop and implement locally adapted, ecologically sound, sustainable and economically viable usage systems (Ceballos-Lascurain, 1996; Swarbrooke, 1999; Peters, 1999). Scientists do not yet have the scientific basis to design best conservation strategies to efficiently preserve certain endangered species, entire communities and landscapes under different environmental conditions.

Scientists often know too little about any long-term effects of our management measures to find optimal compromises when economic needs and conservation requirements are imminent to contrasting. Scientist cannot even tell how many species any of the species-rich systems contains, let alone how many already lost by the hitherto suffered local, regional or worldwide destruction (Nais *et al.*, 2000).

Tourism is a word that can explain a thousand different things. Nature tourism is a large and growing global industry. It is travel that depends on the attributes of the natural environment especially in national parks and protected areas (Lingham, 1994).

Nature tourism in Sabah is practised in many nature-based sites. Sabah Tourism Promotion Corporation (STPC) is responsible to promote Sabah all over the world with the theme '*Eco-treasures from mountain high to ocean deep*'.

Nature tourism in Sabah is a sunrise industry. This growing industry may cause environmental degradation if not well managed from the very beginning. One of the stresses exerted by this activity onto the environment is human pressure



(Maryati *et al.*, 2000). To ease this stress, one has to look for more nature tourism sites.

Lingham (1994) noted that the Ministry of Tourism and Environmental Development (MTED) was suggested the needs to explore new nature tourism sites to an alternative way to ease the stress of the current nature tourism sites. There are many significant nature tourism participation opportunities spreading throughout Sabah, and most of these sites are in protected areas, particularly in the lowlands of the east coast region (Lingham, 1994; NST, 8 November 2000). There are a lot of nature tourism sites existing in the east coast such as Danum Valley, Maliau Basin, Lower Kinabatangan, Sipadan Island, Lankayan Island, Tawau Hills Park (NST, 8 November 2000; Khairol, 2000), Tabin Wildlife Reserve (TWR), and Sepilok Orang Utan Rehabilition Centre.

Other nature sites are Ulu Padas (NST, 6 December 2000; Daily Express, 20 May 2001), Crocker Range Park, Tenom Agriculture Park, Tunku Abdul Rahman Park, Kinabalu Park, Poring Hotspring, Pulau Tiga Park, Kudat, Long Pasia and Kiulu (NST, 8 November 2000; NST, 6 December 2000; NST, 28 December 2000; Khairol, 2000; Berita Harian, 2000, Mingguan Malaysia, 2000)

There are lots of potential natural attractions in TWR that can be highlighted such as mud volcanoes, limestone outcrops, waterfalls, big and endangered mammals, rare and endemic birds, varieties and abundance of insects, etc. However, TWR is surrounded by oil palm plantations and hence the reserve is isolated, being an island with animals inhabiting within the forested region. Sustainable management will ensure the conservation of the area. The study aims to further encourage conservation of TWR as well as promote its potential as a good nature tourism site.



1.2. Aims of the study

The study will provide baseline data and information needed for development of TWR as a nature tourism site. Information gathered for products (flora, fauna, physical attraction and local lifestyle) would promote TWR as a nature tourism site.

The study will reveal the perception of local people or stakeholders towards nature tourism, which are important for conservation planning in TWR. Planning the nature tourism in TWR shall involve local communities and stakeholders. Results of this study hopefully could be part of conservation plans in TWR.

1.3. Objectives

The study will explore the potential of TWR as new site for nature tourism site in Sabah. There are several criteria that need to be taken into account before the area can be considered as a good nature tourism site.

In the study, nature tourism resources and conservation values of TWR are being inter-related. Objectives of the study are as follows:

- 1. To identify and document potential nature tourism products existing in TWR such as physical environment, fauna, flora and local lifestyle.
- To evaluate the potential of TWR as a nature tourism site using questionnaire-based surveys on tourists, tour guides and facilities existed in TWR.
- To determine the perception of local communities of Kg. Tidong, Kg. Parit and Kg. Dagat, and plantation officers regarding nature tourism in TWR.

1.4. Justification

There were few studies being done in TWR. Most of the studies concentrate on the biological diversity. Even the studies based on the biology and ecology factors, the result can be related in this study especially in nature attractions. The studies such as those on big mammals, birds, mud volcanoes, limestone hill, caves, waterfalls,

insects, flowering plants, dipterocarp trees, and etc had being done in TWR and being published in some publications such as Sale, 1994; Anon, 1999; Maryati *et al.*, 1999; Ting, 2001; and Maryati *et al.*, 2003.



CHAPTER 2

LITERATURE REVIEW

2.1. Tourism

Tourism is known as distinctly a twentieth-century phenomenon. Historians suggest that the event of mass tourism began in England during the industrial revolution with the rise of the middle class and relatively inexpensive transportation (Lundberg & Lundberg, 1993).

Tourism today has grown significantly in both economic and social importance, as stated by McCool & Moisey (2001).

'The travel and tourism is the largest industry in the world. It has become a global financial power, achieving a planetary presence unequalled by many other economic sectors. Tourism is no longer the benign economic development tool.'

In 1992, the tourism industry gross output was estimated amounting to USD3.5 trillion over 12 percent of all consumer expenses. The travel and tourism industry is the world's largest employer, with almost 130 million jobs, or almost seven percent of all employees. This industry is the world's leading industrial contributor, producing over six percent of the world gross national product, and accounting for capital investment in excess of USD422 billion in new facilities and equipment. In addition, it contributes almost USD400 billion in direct, indirect and personal taxes each year (Lundberg & Lundberg, 1993).



2.1.1 Definition of Nature Tourism

It is difficult to define precisely the word *tourist* and *tourism* since these terms have different meanings to different people, and no universal definition has yet been published. For example, Webster's New University Dictionary (Soulchanov & Ellis, 1984) defines tourism as '*traveling for pleasure*; the business of providing tours and services for tourist' and a tourist as 'one who travels for pleasure'. These terms are inadequate synonyms for travel, and their use as such adds further confusion when the field of travel is variously referred to as the travel industry, the tourism industry, the hospitality industry and most recently, the visitor industry (Swarbrooke, 1999).

The term 'ecotourism' has been defined in many ways, and is generally used to describe tourism activities which are conducted in harmony with nature, as opposed to more traditional 'mass' tourism activities (Goodwin, 1996). The terms 'nature tourism' and ecotourism have been used interchangeably. Goodwin (1996) defined that nature tourism encompasses all forms of tourism – mass tourism, adventure tourism, low-impact tourism and ecotourism – that use natural resources in the wild or undeveloped form – including species, habitat, landscape, scenery and salt or fresh water features.

There were many definitions for interpreting nature tourism. All researchers have their own definition, depending on experiences, logics and mind. This study prefers to use 'nature tourism' instead of ecotourism, adopting from Goodwin (1996) as stated below;

Low impact tourism activities which contributes to the maintenance of species and habitats either directly through a contribution to conservation and/or indirectly by providing revenue to the local community sufficient for local people to value, and therefore protect, their wildlife heritage area as a source of income.



Nature tourism needs to be strictly defined to contribute and benefit on conservation of the area. Jenner & Smith (1992) defined environmentally sensitive tourism as mass-market travel that depends on the quality of the environment and 'ecotourism' as travel to unspoilt natural environments where the travel is for specific purpose of experiencing that natural environment.

Nature tourism is seen as a way of complementing and supporting the establishments of conservation of pristine areas without disturbing or destroying the natural heritage of mankind. On the other hand, nature tourism carries the flavor of academic interest in the ecology of the environment (MOSTE, 1997).

Australia's National Ecotourism Strategy defined ecotourism as 'nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecological sustainable' (Commonwealth Department of Tourism, 1994 cited by Goodwin, 1996). Comprehensively, the Ecotourism Society (1992) defined ecotourism as:

> 'Purposeful travel to nature areas to understand the cultural and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources financially beneficial to local citizens.'

2.1.2 Nature Tourism Industry

The number of tourists visiting natural areas has increased dramatically in the past several years. Unfortunately, this trend has overwhelmed the ability of the relevant and many responsible people or staffs, at the sites to adequately plan and manage for visitation in what are often ecologically and culturally fragile areas (Indran, 2002).

Many parks and forest reserves are facing rapidly growing levels of visitors. The vast majority of protected areas are not prepared for this consumer trend (Wildborneo, 1995). Many of these areas were not designated or designed as

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tourism sites and lack adequate funds and staff to meet the need of increasing numbers of nature travelers.

In response to rising nature tourism trends, the government needs to evaluate which level of tourism is best for each protected area and then devise a strategy to achieve that level. The strategy should guide the development and management of the ecotourism to ensure that the protected area is not overrun and destroyed by tourists. Moreover, it has to establish the mechanism to generate employment and revenue for the protected area and surrounding communities, and lastly to create opportunities for environmental education for visitors. With a strategy in place, parks and reserves can minimize the costs for nature tourism and maximize its benefits (Wildborneo, 1995).

There seems to be a general agreement that nature tourism involves minimum density, low impact activities which can take place where there are natural sites of sufficient biological, cultural and geographical interest to attract tourists. The major factor contributing to the boom in nature tourism is international awareness of global ecological realities. Secondly, the desire among the rapidly growing and relatively affluent segment of the industrialized world's tourists to have nature-based experiences, and lastly the developing world's conviction that natural resources are finite and must be conserved for future generations (Nais *et al.*, 2000).

Nature tourism as a sector of the tourism industry is still in its infancy, but an analysis of the market where it has made strong inroads indicates that developing countries, with their abundant variety of physical attractions, have most of the natural qualities necessary to position nature tourism as prime offering of their tourism industry (Lingham, 1994).

Stakeholders and local communities have their own roles in participating in the nature tourism. For example, at Sikkim, India, the local communities have become increasingly involved in the conservation and management of natural resources (Anon, 1997). In some cases, they have become shareholders in tourism enterprises. In others, the ownership of land has been returned to communities who had been removed after proclamation of parks/reserves. This land remains as part of the park or reserve.

Usually indigenous cultural benefits from being associated with the wildlife tourism products. The location of some cultural sites is in close proximity to, or is even inside protected natural areas, which puts them in the mainstream of tourist routes. Apart from the commercial benefits of nature conservation for culture, it also helps to safeguard a wealth of traditional knowledge, which would be lost if something were to happen to the biological resources on which it is based (Anon, 1997).

2.1.3 Forest Reserves as Nature Tourism Site

Natural areas that are not utilized do not have any economic value. An example of forest reserves that are developed to be a nature tourism site is Kedah Recreational Forest in Peninsula Malaysia (MOSTE, 1997). The area is then called 'hutan lipur' and has basic facilities, waterfall and clear clean river for visitors. Usually local visitors will come for picnics and recreational activities.

Bosi (2000) said that most of the forest reserves (protected areas) in Sabah had qualities as nature tourism sites because these areas had naturally existing products such as wildlife (flora and fauna) and physical attractions. Tabin as wildlife reserve also having a characteristic as nature tourism site. TWR has basic facilities for visitors and natural attraction.

2.2. Tourism: The Malaysian Perspective

In Malaysia, tourism started as early as the 1980s and has grown up to be one of the important sources of revenue to the country (Salleh & Wayakone, 1997; Peters, 1999). With high quality of tourism products such as many-races and cultures,

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