

**Sustainable tourism and the influence of privatization in
protected area management. A case of Kinabalu Park,
Malaysia.**

Dissertation

zur

Erlangung des Doktorgrades (Dr. rer. nat)

der

Mathematisch-Naturwissenschaftlichen Fakultät

der

Rheinischen Friedrich-Wilhelms-Universität Bonn

vorgelegt von

Hong Ching Goh

aus

Kangar, Malaysia

Bonn 2007

Angefertigt mit Genehmigung der Mathematisch-Naturwissenschaftlichen
Fakultät der Rheinischen Friedrich-Wilhelms-Universität Bonn

1. Referent: Prof. Dr. Paul L G Vlek

2. Referent: Prof. Dr. Eckart Ehlers

Tag der Promotion: 18.12.2007

Erscheinungsjahr: 2008

Diese Dissertation ist auf dem Hochschulschriftenserver der ULB Bonn
http://hss.ulb.uni-bonn.de/diss_online elektronisch publiziert

ABSTRACT

The worldwide evolution of park management has revealed the dual roles of parks in meeting nature conservation and social objectives. Sustainable tourism is able to support these roles by providing financial support to nature conservation, benefiting local communities through providing employment opportunities and capacity building as well as by maintaining visitor satisfaction. Kinabalu Park in Malaysia is a World Natural Heritage Site and well known for its floral diversity and mountainous landscape. Tourism generates substantial financial income to the park, which is essential to support nature conservation and also provides job opportunities to the local communities. Nevertheless, the steady inflow of park visitors raises concern over sustainability of tourism in Kinabalu Park. A privatization program was introduced in 1998 to manage the tourism facilities so that the park authority (Sabah Parks) can focus on the nature conservation and tourism impact management. No study is known to exist that evaluates the park management in Kinabalu Park after privatization. Hence, this research evaluates the park management against the socio-economic principles of sustainable tourism. Specifically, it aims to determine how the privatization program assists the park authority in 1) enhancing conservation activities by channeling the tourism revenue into research activities, training programs and tourism impact management, 2) benefiting the local communities through job opportunities and capacity building, and 3) improving visitor satisfaction. A case study approach is adopted incorporating both quantitative and qualitative research methods. These include questionnaire survey, semi-structured and unstructured interviews and observations.

The findings reveal that the tourism revenue generated in the park does not significantly contribute to nature conservation, but rather supports tourism development such as upgrading and creating new tourism-related facilities and activities. No monitoring system exists for evaluating the human impact on flora and fauna despite the existence of tourism impact management and a large staff. Local communities have benefited through creation of jobs for mountain guides and porters, at Sabah Parks, the private operator (SSL), and KOKTAS (Multipurpose Cooperative of Sabah Parks Staff). However, the living standard of porters and the operation of KOKTAS have been negatively affected by the privatization program. The local staff of SSL expressed worries about job insecurity and income instability. In terms of visitor satisfaction, the overall rating on tourism facilities in the park is high. However, the guiding services provided by the mountain and nature guides need to be improved. This indicates not only the rising demand for knowledge-based experience by the visitors is not well understood by Sabah Parks, but also the training provided to mountain and nature guides is unable to meet the visitors' expectations.

The results of this study show that the privatization program has not been able to shift the focus of Sabah Parks to nature conservation, and that the private sector is unable to fulfil all objectives of sustainable tourism. The financial budget analysis and visitor satisfaction survey reveal that Sabah Parks has not showed strong support to nature conservation, i.e., staff training and human impacts monitoring, and to enhance the visitors' educational experience.

Nachhaltiger Tourismus und der Einfluss von Privatisierung auf Schutzgebietsmanagement am Beispiel von Kinabalu Park, Malaysia

ZUSAMMENFASSUNG

Die weltweite Entwicklung von Parkmanagement hat die Bedeutung der doppelten Rolle von Parks für die Erfüllung von Naturschutz- und gesellschaftlichen Aufgaben sichtbar gemacht. Nachhaltiger Tourismus unterstützt diese Aufgaben durch finanzielle Unterstützung für den Naturschutz, Arbeits- und Ausbildungsplätze für die lokale Bevölkerung. Die Zufriedenheit der Parkbesucher ist ein wichtiger Indikator für nachhaltigen Tourismus.. Kinabalu Park in Malaysia ist ein Weltkulturerbe und bekannt für seine Artenvielfalt und Berglandschaft. Der Tourismus generiert ein beträchtliches finanzielles Einkommen für den Park. Der stetige Besucherstrom führt jedoch zu Problemen hinsichtlich der Nachhaltigkeit des Tourismus. 1998 wurde ein Privatisierungsprogramm begonnen, um die touristischen Einrichtungen im Park zu bewirtschaften und damit die Parkbehörde zu entlasten. Gleichzeitig sollte sich die Parkbehörde (Sabah Parks) auf den Naturschutz und die Auswirkungen des Tourismus auf die Natur im Park konzentrieren. Es ist keine Studie bekannt, die die Effektivität des Managements in Kinabalu Park nach der Privatisierung untersucht hat. Diese Studie bewertet daher die Effektivität des Managements in Bezug auf die sozioökonomischen Prinzipien des nachhaltigen Tourismus. Insbesondere wird untersucht, erstens, inwieweit das Privatisierungsprogramm die Parkbehörde bei Naturschutz- und Forschungsaktivitäten unterstützt, zweitens welche Vorteile für die lokale Bevölkerung durch Arbeits- und Ausbildungsplätze entstehen, und drittens, inwieweit die Besucherzufriedenheit erhöht wird.

Die Ergebnisse zeigen, dass die Erträge aus dem Tourismus nicht signifikant zum Naturschutz im Park beitragen, sondern eher für touristische Entwicklung eingesetzt werden, zum Beispiel zur Sanierung bzw. Errichtung von neuen touristischen Einrichtungen und für neue touristische Angebote. Es gibt kein Monitoringsystem, um die Auswirkungen der Touristenströme auf Flora und Fauna zu bewerten. Die lokale Bevölkerung hat durch die Schaffung von Arbeitsplätzen für Bergführer und -träger profitiert. Seit der Privatisierung hat sich der Lebensstandard der Träger nicht verbessert. Angestellte des Parks, Bergführer und Träger haben aber keine Sicherheit über ihre Arbeitsplätze und ihre Löhne. Die allgemeine Besucherzufriedenheit über die touristischen Einrichtungen im Park ist jedoch hoch. Allerdings wünschen sich die Touristen eine bessere Ausbildung der Berg- und Naturführer. Von Seiten der Parkbehörde (Sabah Parks) wird der steigende Bedarf nach wissensbasierten Erfahrungen nicht erkannt. Entsprechend wird nicht in die Ausbildung der Mitarbeiter investiert.

Die Ergebnisse dieser Studie zeigen weiterhin, dass durch das Privatisierungsprogramm Sabah Parks nicht dazu in die Lage versetzt wurde, sich verstärkt im Naturschutz zu engagieren, und dass der private Sektor nicht in der Lage war, alle Ziele des nachhaltigen Tourismus zu erfüllen. Eine Analyse der Haushaltsausgaben und der Besucherzufriedenheit bestätigt, dass Sabah Parks die personellen und finanziellen Ressourcen nicht effektiv für den Naturschutz genutzt hat. So mangelt es z. B. bei der Ausbildung der Mitarbeiter, bei der Erfassung und Evaluation Tourismusauswirkungen auf die Natur und bei dem Wissensangebot für Besucher.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	The evolving roles of parks	1
1.2	Sustainable tourism.....	5
1.2.1	Supporting nature conservation	6
1.2.2	Benefiting local communities	9
1.2.3	Maintaining a high level of visitor satisfaction and experience	10
1.3	A privatization approach to tourism in protected areas.....	13
1.4	Tourism development in Malaysia	19
1.4.1	National tourism policy planning.....	20
1.4.2	Research site: Kinabalu Park	22
1.5	Problem statement, research objectives and questions.....	25
1.5.1	Problem statement.....	25
1.5.2	Research objectives and questions.....	27
2	METHODOLOGY	29
2.1	Conceptual framework	29
2.2	Research methodology	31
2.2.1	Primary data collection	31
2.2.2	Secondary data collection	34
2.2.3	Data analysis	34
2.2.4	Research limitations.....	36
3	SUPPORTING NATURE CONSERVATION	38
3.1	Kinabalu Park as a significant nature-based tourism destination.....	38
3.2	Financial support of conservation activities	44
3.2.1	Breakdown of expenses	44
3.2.2	Budget allocation for staff training.....	51
3.3	Tourism impact management	53
3.3.1	Types of tourism impact management in Kinabalu Park.....	53
3.3.2	Monitoring system	56
3.4	Conclusions	59
4	BENEFITING LOCAL COMMUNITIES	63
4.1	Kinabalu Park as a catalyst in local economy	63
4.2	Job opportunities in Kinabalu Park	64
4.2.1	Sabah Parks	64
4.2.2	Sutera Sanctuary Lodges.....	66
4.2.3	Mountain guides and porters.....	68
4.2.4	Other jobs.....	75
4.3	Capacity building.....	77
4.3.1	Sabah Parks staff.....	77
4.3.2	Staff of Sutera Sanctuary Lodges	78
4.3.3	Mountain guides.....	78
4.3.4	Porters	80
4.4	Conclusions	81

5	ENHANCING VISITOR SATISFACTION	85
5.1	Introduction	85
5.2	Visitor satisfaction with facilities	85
5.2.1	Facilities in Kinabalu Park.....	85
5.2.2	Level of visitor satisfaction with facilities.....	87
5.3	Visitor satisfaction with activities	90
5.3.1	Activities in Kinabalu Park.....	90
5.3.2	Level of visitor satisfaction with activities	99
5.3.3	Guiding services.....	106
5.4	Willingness to pay more	116
5.5	Tourism demand studies for Kinabalu Park	119
5.6	Conclusions	120
6	CONCLUSIONS AND RECOMMENDATIONS.....	124
6.1	Is Kinabalu Park sustainable?.....	124
6.2	Governance of public and private goods and services – a disclosure	129
6.3	Application-oriented recommendations	133
6.4	Relevance of research and concluding remarks	136
7	REFERENCES	139
8	APPENDICES.....	151

ACKNOWLEDGEMENTS

LIST OF ABBREVIATIONS

A&M	Administration and Management Division
AFTPS	Africa Private Sector Development
ANZECC	Australian and New Zealand Environment Conservation Council
DANCED	Danish Cooperation for Environment and Development
DWNP	Department of Wildlife and National Parks
GDP	Gross Domestic Products
HQ	Headquarter
IUCN	The World Conservation Union
KGR	Kinabalu Gold Resort
KNR	Kinabalu Nature Resort
KOKTAS	Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad
NGO	Non-Governmental Organization
PACOS TRUST	Partners of Community Organizations
PEK	Project Ethno Botany Kinabalu Park
R&E	Research and Education Division
RM	Ringgit Malaysia
SARS	Severe Acute Respiratory Syndrome
SPSS	Statistical Package for the Social Sciences
SSL	Sutera Sanctuary Lodges
WHC	World Heritage Center
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
USD	United States Dollar
WCMC	World Conservation Monitoring Center
WCPA	World Commission on Protected Areas
WTO	World Tourism Organization
WTP	Willingness to pay
WTTC	World Travel and Tourism Council
WWF	World Wildlife Fund

1 INTRODUCTION

This study investigates the influence of the privatization program implemented in 1998 in regulating tourism impacts in Kinabalu Park, Malaysia, based on the socio-economic principles of sustainable tourism. Within the framework of this objective, this dissertation is organized in six chapters. Chapter 1 provides a general outline, which includes the background of the research, problem statement, and research objectives and questions. Chapter 2 presents the conceptual framework and research methodology, which adopts the case study approach incorporating both quantitative and qualitative research methods for data collection and analysis. Limitations of the research are also discussed.

The analysis results of the empirical data are presented in chapters 3, 4 and 5. The analysis focuses on three areas: firstly, how financial revenue generated from tourism supports the nature conservation in Kinabalu Park, secondly, how tourism has benefited local communities in terms of job opportunities and capacity building, and finally, the current level of visitor satisfaction, which is fundamental to the socio-economic impact of tourism to Kinabalu Park. In the final Chapter 6, the key findings are summarized, application-oriented recommendations for improvement suggested and relevance of research provided.

1.1 The evolving roles of parks

Tourism development in natural areas has been a prominent segment of tourism worldwide. In 2004, this segment of tourism globally grew three times faster than the entire tourism industry as a whole (WTO 2004). Its significance also resulted from the growth in the number of the protected areas worldwide. According to the World Conservation Union (IUCN), a protected area is defined as ‘...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’ (IUCN and WCPA 2004, p.2). Based on the ecological theme and management structure of protected areas, IUCN developed the UN List of Protected Areas in 1994, better known as IUCN Category System for Protected Areas (Table 1.1) (IUCN 1994; IUCN and WCPA 2004).

Introduction

Table 1.1 IUCN Category System for Protected Areas

Category	Definition
I – Strict nature reserve/wilderness area: protected area managed mainly for science or wilderness protection	Area of land/sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/pr environmental monitoring.
Ia – Strict nature reserve: protected area managed mainly for science	
Ib – Wilderness area: protected area managed mainly for wilderness protection	Large area of unmodified or slightly modified land, and/or sea. Retaining its natural character and influence, without permanent or significant habitation, this is protected and managed so as to preserve its natural condition.
II – National Park: protected area managed mainly for ecosystem protection and recreation	Natural area of land and/or sea, designated to Protect the ecological integrity of one of more ecosystems for present and future generations, Exclude exploitation or occupation inimical to the purposes of designation of the area and, Provide a foundation for spiritual, scientific, educational, and recreational and tourist opportunities, all of which must be environmentally and culturally compatible.
III – Natural monument: protected area managed mainly for conservation of specific natural features	Area containing one or more specific natural or natural/cultural feature which is outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.
IV – Habitat/species management area: protected area managed mainly for conservation through management intervention	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.
V – Protected landscape/seascapes: protected area managed mainly for landscape/seascape conservation and recreation	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.
VI – Managed resource protected area: protected area managed mainly for the sustainable use of natural ecosystems	Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing a sustainable flow of natural products and services to meet community needs.

Source: IUCN (1994); IUCN & WCPA (2004)

In 2002, the number of protected areas worldwide had grown from 1,000 in 1960s to over 100,000, (IUCN and UNEP WCMC 2003). These five decades not only

witnessed a growth in the number of protected areas but also the evolution and diversification of the roles played by these.

In the 1960s, the concerns of park management worldwide were centered on the ecological aspects as well as on the practical problems faced especially in developing countries. These included human impacts on wildlife; species extinction and the role of national parks in scientific studies; park administration with regard to the international supervision of boundary parks and the practical problems faced in park management; religious significance and aesthetic meaning of certain parks and wilderness; and the economic benefits of tourism.

While the focus on ecological aspects was significantly influenced by environmental awareness and the conservation movement at the global level at that time, the focus on practical problems faced in developing countries was due to the fact that the roles of protected areas in developing countries were not well understood during the designation stage. At that time, many countries, especially in Africa, South America and Asia, had already obtained independence. Parks that had developed in these countries during the European colonization era became important because the financial revenue generated from tourism in these parks enabled these countries to improve their national economy after the exploitation they had experienced during the colonial era. However, the practical problems faced by the park managers were complicated. Apart from dealing with the ecological issues, they had to deal with the conflicts occurring with the indigenous peoples residing within the park lands or surrounding the park due to their long traditional practices, religious and spiritual beliefs and the use of these areas for livelihoods.

In the 1970s, the environmental impacts of tourism started to be felt in parks following the heavy inflow of visitors. This scenario was the result of the global economic boom in the 1960s, which saw an increase in people's purchasing power, improved accessibility to parks and the advancement of the automotive industry. During this era, substantial attention was paid to involving the general public in park management and also to enhance the capability of park personnel. There was little interest in linking protected areas with the surrounding areas and to local communities; in fact, local communities were perceived as a threat to protected areas (Phillips 2003; Phillips 2004).

Consolidation of the existing park network through cooperation mechanisms, a demand for more non-terrestrial areas, and establishment of a category system representing various types of protected areas worldwide were the focus during the 1980s. Park management capacity and ecological issues, as well as related issues such as the introduction of monitoring systems and identification of economic tools to promote the intrinsic value of protected areas, continued to receive attention. The linkage between protected areas and development, and the role of local communities in protected areas were acknowledged for the first time by the World Conservation Strategy in 1980, which responded to the call for sustainable use of resources and the influence of the society on resource management (IUCN, UNEP and WWF 1980).

The concept of sustainability, which was popularized during the United Nations General Assembly in 1987, significantly influenced the roles played by protected areas thereafter. In 1992, one of the conclusions of the Caracas World Park Congress was the recognition of the need for a change in conventional approaches to protected area management. 'The relationship between people and protected areas is too often ignored and the congress emphasized that social, cultural, economic and political issues are not peripheral to protected areas but are central to them and hence called for community participation and equality in the decision-making processes, together with the need for mutual respect among cultures' (IUCN and WCPA 1995). This recognition of human and social factors paved the road for the introduction of Category VI of the IUCN Category System in 1993. Expansion of international cooperation in the financing, development and management of protected areas, and a regional approach in land management to integrate protected areas into a larger planning framework due to the failure of the previous 'island' approach in protecting biodiversity were also among the important issues in the 1990s.

The new millennium opened a new chapter in the development of protected area management worldwide, revealing the dual emphases in protected areas management, i.e., meeting both conservation and social objectives (IUCN 2005). In order to meet conservation objectives, the management of protected areas must be enhanced to promote sustainable development and nature conservation, in particular to safeguard threatened species. Moreover, management effectiveness of protected areas must be strengthened by the introduction of innovative management approaches.

Emphases were also given to enhancing financial and human resources and to boosting financial investments for the protected areas. At the same time, local communities were encouraged to become involved in future planning and management of the protected areas.

To summarize, the last five decades have witnessed many changes in the roles played by protected areas that diversified from purely protecting the ecosystem within the areas protected during the early years, and recently into meeting the social objectives of the surrounding communities (Table 1.2).

Table 1.2 The evolving roles and management emphasis of national parks

Before and in the 1960s	In the 1990s and beyond
Conservation-based	Sustainable development
Quantity concerns – enlargement of the existing network	Quality concerns – effective management approach
Island approach – no linkage with surrounding areas, exclusive approach	Benefits beyond boundaries
Global approach – generalization	Site-specific approach
Perception of nature as wilderness	Blends of culture and nature
Local people are a threat	Alignment with local people
Colonial conservation and elitist interest	Human rights movement, participatory development approach
Run by central government	Run by many partners

On the other hand, tourism activities in protected areas remain important by providing a source of financial revenue for meeting the conservation and social objectives of protected areas (Healy 1992; Boyd and Butler 2000). Based on the socio-economic principles of sustainable tourism, tourism is able to support the roles played by protected areas.

1.2 Sustainable tourism

The concept of sustainable tourism was introduced after the Rio Earth Summit in 1992. It emerges as a more responsible form of tourism and seeks to minimize the negative impacts of tourism development while contributing to nature conservation and benefiting local communities (Christ et al. 2003). According to the World Tourism Organization (WTO 2004, p.7), ‘sustainable tourism development guidelines and practices are applicable to all forms of tourism in all types of destinations including

mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability.'

Specifically, the socio-economic principles require tourism to help in conserving natural heritages and biodiversity by channeling financial support into conservation areas. Sustainable tourism also makes optimal use of environmental resources that constitute a key element in its own development. Moreover, it ensures viable and long-term economic operations by fairly distributing socio-economic benefits to all stakeholders, including stable employment and income earning opportunities for local communities. At the same time, a high level of tourist satisfaction is maintained and a meaningful experience for tourists is ensured (WTO 2004).

1.2.1 Supporting nature conservation

Nature conservation refers to the activities and efforts undertaken by the park authority in fulfilling its ecological protection objectives. It covers the daily maintenance and management within the park to ensure that its ecosystem is protected from any disturbance, especially human interference, e.g., by protecting the park boundary from encroachment and minimizing poaching activities. Another key component of conservation is research activities that promote innovative studies of scientific interests. Human resource development is also an important component of nature conservation. With appropriate human resource development strategies such as training, park functions can be effectively maintained in the long term. Training will result in the development of the knowledge, skills and attitudes of personnel in a protected area. Training should cover all aspects of park management, such as financial planning and business skills, environmental education, conflict resolution, ecological research and monitoring, and patrolling and law enforcement.

Tourism in protected areas relies on the park ecosystem for its existence. While sustaining its survival, tourism also provides a financial income to support nature conservation when government support is difficult to obtain. In a study comparing the revenue sources of protected areas in developed and developing countries (Lindberg and Enriquez 1994), it was seen that the administrating agency was the financial source in

most developed ($\pm 85\%$) and developing countries ($\pm 78\%$), followed by the entrance fee, with approximately 55% in developing countries and 42% in developed countries (Figure 1.1).

Nevertheless, the funding allocated by governments for protected areas is generally low, particularly in developing countries. The average per km² funding in developed countries is estimated at US\$ 2,058 as compared to US\$ 157 in developing countries (James 1999; Lindberg 2001). The funding in developing countries is estimated to represent only 30% of the financial requirements for effective conservation (James, Green and Paine 1999).

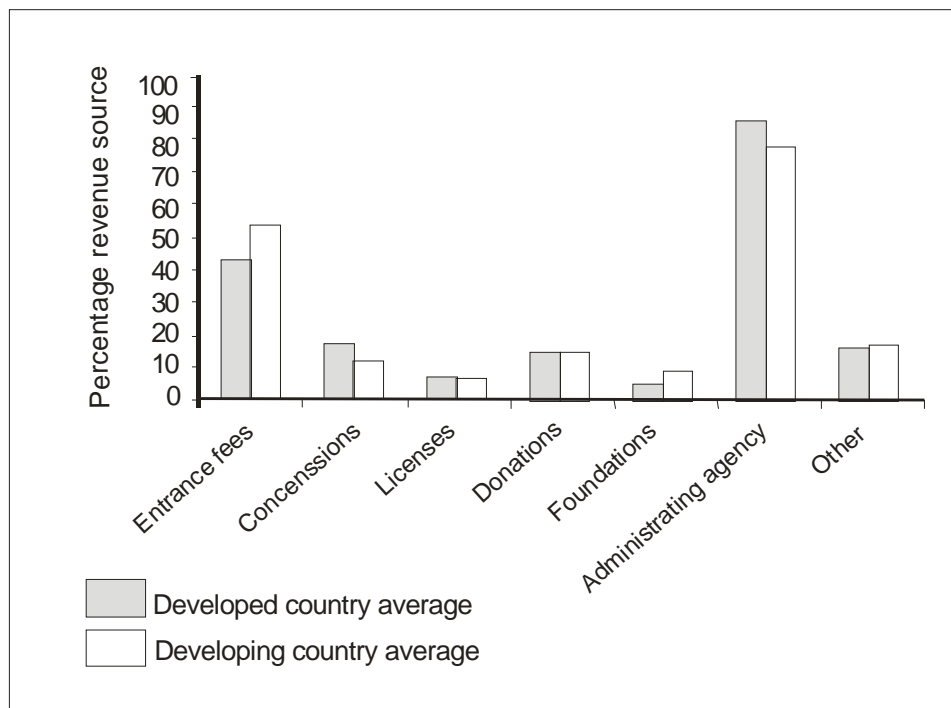


Figure 1.1 Revenue sources of protected areas in developed and developing countries. Source: Lindberg and Enriquez (1994)

It is important to note that the significance of the economic impacts of tourism varies (Font, Cochrane and Tapper 2004). On the Galapagos Islands, Ecuador, and the volcanoes in Rwanda, for instance, tourism income is sufficient to cover all costs of operation and maintenance of the parks. In contrast, there are parks where the income generated from admission fees does not even cover the maintenance costs. In the USA parks, fees are equivalent to only 5-6% of the expenditure of the National Parks Service (Laarman and Gregersen 1996).

National parks are areas protected to serve both nature conservation and recreation purposes. However, ‘a general concept underlying nature conservation is that of higher ecological integrity in the absence of human interference’ (Eagles and McCool 2002, p. 22). Hence, to ensure that the nature conservation in parks is not compromised with its recreational functions, it is important to implement tourism impact management.

In general, a higher number of visits indicates higher financial revenues. However, the park ecosystem and environment are potentially negatively affected by the number of visits. For instance, invasive alien species may be introduced and key species disturbed by humans. Therefore, the negative impacts of tourism activities in a park must be minimized and carefully monitored to ensure that the generated financial revenue is solely used to support conservation activities.

With regard to this, the World Commission for Protected Areas (WCPA 2000) identifies four types of strategic approaches for reducing the impacts of tourism in parks. These include managing the supply of tourism (e.g., by increasing the space or the time available to accommodate more use), managing the demand for visits (e.g., through restrictions on length of stay, the total number or type of use), managing the resource capabilities (e.g., through hardening the site or specific locations), and managing the impact of use (e.g., reducing the negative impact of use by modifying the type of use or dispersing or concentrating use (creating a honey pot)).

As tourism development in national parks has significant environmental and ecological impacts over time, monitoring becomes an essential component in tourism impact management. ‘Monitoring is the systematic and periodic measurement of key indicators of biophysical and social conditions. While management is an important element of decision making, the results of systematic monitoring provide a more defensible basis for management actions’ (Eagles, McCool and Haynes 2002, p. 151). Without monitoring, managers know nothing about the progress towards the nature conservation objectives they have been set or have set themselves. Nevertheless, monitoring requires sufficient funding and time, trained personnel as well as access to data to implement the programs. These factors are the key constraints in many parks on the implementation of monitoring systems.

1.2.2 Benefiting local communities

The tourism impacts in protected areas must not be solely measured in terms of its significance in supporting nature conservation, but also in how tourism has been integrated into the broader development goals of existing local communities (Kassioumis 1992; Brohman 1996). Providing job opportunities and capacity building in tourism-related business in national parks is one of the direct contributions.

In developing countries, local communities in rural areas are associated with the less prosperous strata of society. Their economic situation and living conditions can be enhanced by involving them in the tourism business in these parks (Ceballos-Lascurrain 1996; Nepal 2000). Tourism provides opportunities for economic diversification so that the local people will not be over-reliant on agricultural activities. It can offer optional job opportunities in both formal and informal off-farm employment, which can complement and supplement the agriculture sector.

There are various ways to involve local communities in the tourism business. Some African parks provide information so that park visitors can visit the nearby local villages and spend money on crafts, lodging, food and village entrance fees, thus enhancing the economic condition of the villages (Eagles and McCool 2002). Furthermore, there are parks that channel part of the visitor entrance fees to local villages apart from offering job opportunities within the park for the local community. In the Bwindi Impenetrable Forest and Mgahinga Gorilla national parks in Uganda, for instance, part of the visitor entrance fees goes to local villages (Litchfield 2001).

However, the most significant form of participation is involvement of the members of local communities in the management of tourism-related business in the park. By doing so, the local communities are able to optimize the benefits gained from tourism activities. Local participation in the tourism business must be accompanied by capacity building in order to secure long-term employment and enhance income-earning opportunities. Capacity building involves a learning process in which the participants gain a greater understanding of the process by which goals are reached. Apart from gaining additional management capacities, involvement by local people will lead to their feeling self-confident and to a sense of belonging and ownership (Pinto de Silva 2002).

Park authorities must be supportive to ensure the successful participation of local communities in the tourism business. In most cases, local communities are not traditionally prepared or equipped with skills required for that purpose. Providing appropriate training is a key criterion for enhancing capacity building among the members of local communities (Joppe 1996). Local communities will then be able to improve their competency with non-local employees rather than only getting involved in non-skilled jobs. At the same time, training can improve the quality of services offered by a park to the visitors, thereby enhancing visitor satisfaction and experience. For instance, with appropriate training, local people can become excellent nature guides. This is because most of them have lived in the region for a long period of time and many have extensive and practical knowledge of the local natural environment and local traditions.

A challenge for capacity building is to ensure that it is taken up by local actors who can provide the services in the longer run (Rojas and Cohen 2004). There are cases where this can be done by tying up with conservation NGOs, universities and academic institutions, tourism community groups, the local and national government, the tourism promotion board or even private service providers. For instance, a study conducted by Goodwin et al. (1997) in the Keoladeo Park in India concluded that there was an incentive for introducing an on-going training program for guides and rickshaw pullers with the co-operation of the naturalist guide association in order to maintain high standards.

1.2.3 Maintaining a high level of visitor satisfaction and experience

Tourism is able to support nature conservation and benefit the local communities due to its socio-economic impacts. Fundamental is visitor satisfaction. Visitor satisfaction is central to whether visitors return, recommend the destination to others or conversely (WTO 2004). 'Visitor satisfaction usually contributes to increased rates of the retention of visitors' patronage, loyalty and acquisition, which in turn helps in realizing economic goals like increased number of visitors and revenues' (Akama and Kieti 2003, p.75). Therefore, it is a leading indicator of the long-term sustainability of a nature-based tourism destination.

Visitor satisfaction normally depends on the expectations of visitors. If the quality of the tourism product as a whole exceeds their expectations, then they are satisfied (Halasz et al. 2002; Foster undated). Given the fact that park visitors are not homogeneous, understanding the typology of park visitors is important for the park authority. This can be done by identifying the different types of visitors to the park based on such criteria as personal characteristics, needs and expectations (Halasz et al. 2002). Personal characteristics include educational level, nationality, language, duration of stay, type of transportation mode, etc. Needs refer to the types of activity engaged in, level of services and special facilities. Expectations depend on the interpretation and the profile of a park. Expectations are also based on motives, previous experiences, personal preferences, knowledge, etc. These visitor profiles can be collected through the distribution of questionnaire surveys at strategic locations within the park, e.g., in the visitor or park reception centers, as well as at the accommodation, where the visitors can return the questionnaires at the end of their stay.

A few studies that have been conducted on the relationship between visitor satisfaction and turnover rate reveal that a high visitor turnover rate in a tourism destination is closely associated with dissatisfaction over the tourism product, e.g., with the type of visitor services or goods provided there (Parasuraman et al. 1990; Spreng and Mackoy 1996; Augustyn and Ho 1998). Therefore, the quality of the tourism services has a significant influence on overall visitor satisfaction. Price also has a significant influence on overall visitor satisfaction (Akama and Kieti 2002). In tourism, both price and product quality indicate the value of the product to the visitors, and the trade-off is between product quality and price (Chen et al. 1994).

In national parks, the natural resources include mountains, lakes, water falls, forests, etc. In order to make a park more appealing and diversified in a competitive nature-based tourism market, facilities and activities/attractions are often created in the park, aiming to enhance the experiences of park visitors during their stay. Depending on the scale of tourism development in a park, the facilities can range from catering facilities such as restaurants, snack bars, shopping facilities such as shops for souvenirs and local products, etc., accommodation facilities such as hotels, hostels, campsites, etc., leisure facilities such as libraries, sport facilities, etc., to information providers such as visitor centers, tourism information counters, etc. The satisfaction felt about

these facilities can be evaluated in terms of their quality as well as in the price to be paid to enjoy such facilities.

Ideally, the activities provided in national parks should complement and supplement the natural resources of the park. At the same time, they should provide educational information and not only entertaining themes. Additional criteria such as accessibility, attractiveness, cleanliness, information and educational value are also used to assess the level of visitor satisfaction. Staff hospitality is also an essential evaluative element in determining the quality of the tourism services provided in a park.

Another important component for enhancing the visitor satisfaction in a park is ensuring their safety during their stay. This is especially true for activities that involve high personal risk such as mountaineering, rock climbing, and water sports. The main instruments that can be used to secure visitors' safety include physical protection (barriers, fences, etc.), direct regulations (code of conduct, specific prohibitions and obligations), and instruments of interpretation (information tools, education, etc.) (Halasz et al. 2002).

Most of the tourism activities in national parks are information-intensive. Guiding has been introduced in national parks to channel information to the visitors (de Groot 1983; Paaby et al. 1991; Jacobson and Robles 1992; Heinen 1990; Forestry Tasmania 1994; Rahimatsah 1998).

In general, guides in national parks serve two primary functions. The first is to control visitor activity in order to achieve visitor management objectives, and the second is to inform visitors on the park's natural history and the conservation efforts being carried out (Moore 1981). Properly trained guides in national parks are able to increase the visitors' knowledge on the park ecology and management policies. Thus, guides contribute to minimum impact behavior (Roggerbuck et al. 1992) on the one hand and to visitor satisfaction through enhancing their educational experience on the other.

Responsibility, competency and communication are essential if guides are to carry out their duties effectively. Responsibility refers to the guides' attitude to their duties as a whole. This includes providing security and protecting the visitors from the environment and vice versa, and the willingness of the guides to provide such services to the visitors. Competency refers to possession of the required skills and knowledge

necessary to perform the task. Communication is related to keeping visitors informed in a language they can understand and to being friendly, respectful and polite.

Apart from conducting visitor satisfaction surveys in the park, the level of satisfaction over the service quality can also be measured by determining the willingness to pay (WTP) among the park visitors (Eagles, McCool and Hayness 2002, Damania and Hatch 2002). This method is employed to provide an indication of how the visits will be affected by fees (Lindberg 2001). Apart from reflecting the level of visitor satisfaction, WTP is also an indication that a park can increase revenues, i.e., through fee increments.

The New South Wales state park agency, for instance, undertook a market survey in the general community and among the park visitors on their willingness to pay an increased fee. The results showed a willingness to pay an increase of about 20%, based on the existing range of facilities and services. This then became a key factor for increasing the park fee by that amount (ANZECC 2000).

Some studies have found that visitors are willing to pay more than they need to pay especially people from developed countries visiting parks in developing countries (Lindberg and Aylward 1999; Stevens 2002). In Madagascar, for instance, a visitor survey conducted in national parks suggested that visitors would be willing to pay a daily entrance fee of US\$ 13-18 (compared to the existing US\$ 6 for foreigners and US\$ 0.50 for nationals for three days). Some 10% of the visitors indicated a willingness to pay a daily fee of up to US\$ 31 (AFTPS 2002).

1.3 A privatization approach to tourism in protected areas

A public good is differentiated from a private good based on two characteristics, namely excludability and divisibility. Excludability is the possibility to exclude people who have not paid for a good or service from consuming it. Divisibility refers to situation where consumption by one consumer prevents simultaneous consumption by other consumers. A public good is any good or service whose provision is non-excludable and non-divisible. This means that everyone can enjoy the good and once it is provided, it is still available to the general public. In contrast, a private good is excludable and divisible, meaning that one can be excluded from enjoying a good, and once it is provided to an individual, it is no longer available to others. This applies to the non-

renewable resources. As for renewable resources, it is unavailable to others at the same time once it is provided to an individual. Apart from public and private goods, there are goods known as toll goods and common pool goods (Table 1.3). Toll goods are considered as private goods which are excludable but not divisible. Similar to a private good, individuals can be excluded from accessing a toll good. However, it is still available to others although it is provided to an individual. The fourth possibility is common pool goods which are not excludable but divisible. This means once they are used, no one else can use them, although access to them is not restricted.

Table 1.3 The nature of goods and services

	Non-divisible	Divisible
Non-excludable	Public	Common pool
Excludable	Toll goods	private

Source: WCPA 2000

Protected areas play important roles in conserving nature and benefiting the local communities. Many of them accommodate outstanding natural and cultural landscapes, too. Very often, these outstanding features become the essential resources for tourism development. Subsequently, protected areas provide a wide range of goods and services to cater for many groups of beneficiaries such as scientists, educators and the community at large to meet their various needs. Watershed protection, climate stabilization and habitat protection are some examples of public goods offered in protected area. Examples of private goods include fishing, camping and non-timber forest products.

Traditionally, protected areas have been managed primarily for public goods by the government. As these public goods are generally not traded in markets and show no evident market value, they usually require government allocation. On the other hand, tourism goods and services have a ‘private’ nature – either as private goods or toll goods, which have high potential to be commercialized. For instance, many protected areas charge visitors for using the tourism facilities or participating in tourism activities; some examples are entrance fees to the protected area, user fees to nature trails, canopy walkway, charges for accommodation and camping ground, food and beverages. Therefore, the presence of tourism provides the economic justification of protected areas to meet nature conservation and social objectives.

Nevertheless, there was a rising concern that tourism was unable to deliver the expected benefits under public governance, e.g., satisfactory tourism services to meet the tourist demand, which in turn stimulates job creation and regional development in a larger context. As tourism is an international industry which is subject to international demands and standards, market sensitivity is crucial to ensure its survival (Jenkins undated). The human resource and financial constraints, as well as its complex bureaucratic structure have limited the ability of public sector to respond quickly to market demand. These shortcomings in tourism performances have then paved the road for privatization program to take place in protected areas.

Privatization can be broadly defined as ‘the process of change, in which the private sector takes responsibility for activities that were formerly controlled exclusively by the public sector. This may include the transfer of ownership of productive assets from the public to the private sector or may simply imply that ‘space’ is created in which the private sector can operate’ (Carney and Farrington 1998, p.3). The rationale behind the introduction of privatization in protected area management is centered on the profit-driven nature of private sector. According to the property right theory, the market generates demand to prevent corporate management from dissipating value through wage rewards or slack attention. The capacity of the organization must be sufficient to produce a residual reward for the owners - a profit - in order to survive in the market. If return from the enterprise is low, shareholders will sell their stock and the price will be depressed. In the worst case, the firm may be acquired by others and the manager may lose their jobs. Given these restraints, managers of private firms are forced to be more efficient than public managers (Starr 1989).

Ideally, foreseeing the high potential of tourism services in generating profit provides the ‘incentives’ for the private sector to offer high standard tourism services to meet the market demand- expectation of tourists. Besides, the private sector also has to provide quality services at an acceptable price in order to survive. Therefore, these incentives and restraints stimulate an improved quality of tourism services and subsequently a series of tourism benefits can be expected. The introduction of privatization has seen some economic benefits to protected areas. The private sector often involves itself as provider of tourism services such as accommodation, restaurants, tour operations, waste collection, site maintenance and information provision, in the

form of concessionaires. In South Africa, for instance, the South African National Parks (SANParks) increasingly outsource commercial services, thereby increasing the funds available for management so that it can focus on conservation activities. The tourism concessions in SANParks are expected to generate profits of USD35-53 million over the next 20 years together with the creation of 700-800 new jobs. In the USA, lodges in some 25 of a total of 378 national parks are owned by the government but operated by private concessionaires. Despite the insignificant number, the revenue generated from these lodges is around 16% of the total park revenues (Font, Cochrane and Tapper 2004).

On the other hand, the von Benda-Beckmanns' (1999) study of property, criticizes the approach of privatization advocates which implicitly condemns the role of the public sector, based on their belief that the fundamental function of property is purely economic efficiency. According to the von Benda-Beckmanns, social functions of property are equally important, e.g. concerning religious identity, the social security of group members, and the long-term continuity of the group. Hann (2000), in his article, which he claimed echoes Hardin's title from 1968, 'the tragedy of the privates', also focused attention on understanding the connection between social relationships and property practices by demonstrating the negative effects of privatization in the post-socialist society of Eastern Germany. Similarly, sustainable tourism also recognizes that the sustainability of tourism is not solely measured through economic criteria, but also through the welfare of local communities and the protection of natural heritage and biodiversity which constitute the primary resource of tourism development in protected areas.

Unlike tourism services, the welfare of local communities and the protection of natural heritage and biodiversity are the public services provided in protected areas. 'While the pursuit of self-interest promotes the common interest in dealing with private goods, extending the approach on public goods is not workable' (Felkins 2006, p. 3). It is increasingly recognized that private and public goods and services require different governance arrangements (James et al. 2000; Gatzweiler 2005). While markets are said to be better equipped for the allocation of private goods than for public goods, government intervention is justified where market failures are observed (Bikers and

Williams 2001)¹. By introducing privatization into its management, the protected area will not only improve the quality of its tourism services, the program also enables the public sector to utilize its available human and financial resources to provide public services. Therefore, a protected area is able to provide both public and private goods and services while receiving a financial return to support its long term viability, which conforms to the socio-economic principles of sustainable tourism.

It is important to realize that privatization is also a political practice and inspiration. As Starr (1989, p.1) mentioned, ‘privatization covers a great range of ideas and policies.... Yet however varied and at times unclear in its meaning, privatization has unambiguous political origins and objectives’. Rather in a conflicting manner, the political uses of privatization are said to compromise efficiency objectives and satisfy the big interest groups - politicians and bureaucrats, their allies and supporters, instead of using it as a mechanism to enhance efficiency. It is common that governments offer assets and enterprises up for sale to their political allies. Subsequently, privatization is unable to escape being influenced by the interest group, resulting in the use of natural resource for political purpose. In protected areas, despite the favorable features of introducing privatization, the park management is urged to pay attention to the involvement of the private sector since the choice of concession company can be highly political. The political influence may lead to ‘incomplete privatization’ where a desired company has been pre-selected due to strong political support instead of going through the competitive selection process.

Eagles, McCool and Hayness (2002) raised a further concern associated with the management of concessions in protected areas: that private operators might ignore contractual requirements by going directly to higher level government officials or influential politicians. There is also a tendency for private operators to show little interest in supporting park services such as providing accurate information or helping in emergency situations. Therefore, it is important to ensure that the selection procedure is fair to all parties, open, transparent and neutral. Adopting a competitive tendering procedure or bidding is an example of a fair selection procedure.

¹ Market mechanism is the situation in which businesses are allowed to compete on the basis of the prices and quality of their products; whereas the situation in which a market mechanism economy does not produce results that are efficient for the economy as a whole results in market failure.

The economic models which portray privatization are also criticized to be principally concerned with efficiency and have little emphasis on the effects of organizational design on other values (Starr 1989). Private enterprises might try to maximize profits by employing lower wage workers, often on a part-time basis. Moreover, despite the fact that privatizing state-owned firms is said to secure some fiscal relief, it is important to bear in mind that it is only the profitable sectors that the private sector is interested in. Ironically the evidence is that, the fiscal relief here does not apply to unprofitable sectors which have been heavily subsidized by the national treasury.

Another concern is ‘paradigm blindness’ in the public sector that may emerge following the introduction of privatization. For privatization to take place, a change in institutional arrangement is necessary, where a shift of function from the public to the private sector take place. The shift of function requires a change in perception or a new paradigm. Paradigm blindness describes the situation where an existing organization is unable to conceive a new way of doing things or perceive the new role of the organization (DELIVERI undated). In protected areas, the park authority might not be able to overcome paradigm blindness. It may have difficulty in conceptualizing and implementing a new range of goods and services in the protected area, suitable to nature conservation (e.g., establishing a key species monitoring system, staff training, developing environmental education for the public) and also benefiting the local communities through capacity building (e.g., management and communication skills, park ecosystem and historical knowledge and language proficiency to enhance the local residents’ job function if they are also given employment opportunities in the park).

In short, protected areas cater for the needs of nature conservation and the local communities through providing a wide range of goods and services. Tourism is able to support these roles based on the socio-economic principles of sustainable tourism. As public and private goods and services require different governance systems, privatization to protected areas aims to diversify the management structure so that the wide range of goods and services provided in the protected areas are placed under appropriate management. Operating on the basis of ‘maximizing profits’, the private sector is said to be better in managing private goods and services, whereas public goods and services are better provided by public sector. Nevertheless, the tendency of the

public sector to fail to adjust to the changes in its roles and responsibilities after privatization exists. Thus, strategies must be formulated by the public sector to overcome paradigm blindness. It is also important to ensure a fair company selection process for privatization to avoid incomplete privatization. The concession company should be selected base on its competitiveness shown in economic and organizational resources in managing tourism facilities. By so doing, a protected area is only then able to provide both public and private goods and services while receiving a financial return to support its long term sustainability.

1.4 Tourism development in Malaysia

Malaysia is one of the fastest growing tourism destinations in the Asia Pacific Region, ranking third with a market share of 10% after China and Hong Kong (WTO 2004). The World Travel and Tourism Council (WTTC) expects Malaysia to be on the top-ten list of the countries with the fastest growth of the GDP and employment in the travel and tourism industry (WTTC 2004). At the national level, the tourism industry is currently the second largest contributor to the country's GDP after manufacturing. The share of tourism revenue in total earnings of the services account of the balance of payments increased from 32.7% to 43.0% in the period 2000-2005 (Government of Malaysia 2006). The net contribution by tourism increased from USD 3.2 billion to USD 5.17 billion in the same period.

A total of 451,000 were employed in the tourism industry² in 2005, of which 91,156 were employed in the hotel industry and 13,028 in tour and travel agencies. In terms of tourist arrival statistics, the total number of tourist arrivals was 16.43 millions. The period 2000-2005 saw a significant increase of 60.76% despite a drop in 2003 due to the Iraq war and the outbreak of SARS (Ministry of Tourism Malaysia 2006).

Malaysia is one of the most biodiversity-rich areas in the world (WWF 2005). Concurrently, tourism to natural areas is an important sector of tourism in the country. Despite the fact that Malaysian tourism products are a combination of the natural environment, people, heritage and culture, tourism facilities, and events, nature-based

² Tourism industry is defined as 'The set of establishment type productive units which principal activity is a tourism characteristic activity' (WTO 1998). It encompasses accommodation, transport, catering, recreation and services for visitors (WTTC 2004).

tourism destinations are more important than other tourism products in promoting the tourist destinations (Hamzah 1997).

The significance of nature-based tourism products in Malaysia is also recognized by the WTTC (2002, p. 43): 'Malaysia boasts several examples of world class natural and cultural resources that are worthy of World Heritage designation. Its unique landscape, including the world's oldest rainforests and a wealth of other natural attractions, is one of its greatest assets. The declaration of Mulu National Park in Sarawak and Kinabalu National Park in Sabah as World Heritage sites has added to the image of these two states as the wild, unexplored frontiers of Malaysia. Other attractions could be proposed as candidates for international designation'. This sector of the tourism industry is estimated to increase by 35% a year in terms of number of tourist arrivals, and in 2002, made up 10% of the country's tourism revenue (WTTC 2002).

1.4.1 National tourism policy planning

Tourism is a federal matter in Malaysia. Tourism policy planning at the national level started in 1992 with the formulation of the National Tourism Policy (MOCAT 1992). Policies for the nature-based tourism segment were formulated in 1995 and are known as the Malaysian Ecotourism Plan (WWF 1996). The plan was prepared for three main reasons. Firstly, the importance of nature-based tourism industry to the country. Secondly, recognition of the role of the tourism industry in enabling the national economy to conform to the principles of sustainable development, and thirdly, nature-based tourism serves as an effective tool for conservation of the country's natural and cultural heritage. The plan has put substantial emphasis on encouraging the socio-economic participation of local communities, focusing on manpower training, and creating mechanisms for monitoring and evolution of progress in ecotourism development.

Apart from the National Tourism Policy, the Malaysia 5-year national plans have put considerable emphasis on the importance of tourism development in the country, and provide guidelines for tourism planning at federal and state levels (Government of Malaysia 2006).

The potential that the tourism industry has in contributing to economic growth was recognized in the early 1980s when the later part of the Fourth Malaysia Plan

(1981-1985) emphasized and recognized the role of tourism in the generation of foreign exchange. Subsequently, the contribution of tourism was further identified in the Fifth Malaysia Plan, which focused on the contribution of tourism to employment creation, regional development and foreign exchange. Furthermore, for the first time, tourism was discussed in a separate chapter, reflecting its significance in contributing to national development. Emphasis on local participation in tourism projects was concretely raised in the Sixth Plan (1991-1995).

Sustainable tourism development was first introduced in the Eighth Malaysia Plan 2001-2005, and highlighted as the key strategy to provide a balance in terms of economic, social, cultural and environmental needs and to be applied in all tourism planning and implementation. This emphasis is continued in the latest Ninth Malaysia Plan 2006-2010.

During the implementation of the Eighth Malaysia Plan, guiding documents known as the Guidelines Series for Protected Area Management Volumes I, II and III³ were prepared for the Department of Wildlife and National Parks by DANCED (Danish Cooperation for Environment and Development) in 2001. These documents aimed to provide input to the strategic planning for conservation management of protected areas in Peninsular Malaysia, identifying problems and suggesting means to strengthen the Malaysian protected areas system. In relation to the development of nature-based tourism in protected areas and benefit sharing, the guidelines also emphasize that the revenues generated in protected areas must be used in the following three areas: in community development programs, in incentives development by involving the local communities in nature-based tourism projects in the protected areas, and finally in constant monitoring to ensure the protected areas are not damaged by inappropriate use (DWNP/DANCED 2002).

As part of its goal to meet national sustainable development goals, the Malaysian government has committed itself to comply with the Plan of Work (POW) for Protected Areas during the Seventh Conference of Parties (COP7) to the Convention

³ These guideline series were prepared following the development of the Conservation Strategy for Malaysia in the 1990s, which formed the basis for strengthening the environment in the Seventh Malaysia Plan (1996-2000) and subsequently led to the development of a National Policy on Biological Diversity, which identified a series of actions for the conservation and management of biological resources.

of Biological Diversity in 2004, in which stakeholders' interests and management effectiveness were among the key concerns (WWF 2005).

1.4.2 Research site: Kinabalu Park

Kinabalu Park is located in the state of Sabah on Borneo Island. The park is situated at the northern tip of the Crocker Range, which forms the backbone of mainland Sabah (Figure 1.2). Established in 1964, Kinabalu Park covers an area of 75,370 ha. The park is managed by the Sabah Parks Board of Trustees (or Sabah Parks for short) in leasehold for a period of 999 years free from all liabilities and encumbrances under the Parks Enactment, 1984 (Ali et al. 1990). It is graded as a Type II protected area according to the IUCN category system. The most significant feature of the park is the majestic Mount Kinabalu, which soars up to a height of 4,095.2 m.



Figure 1.2 Location of Kinabalu Park, Malaysia. Source: WHOA! Adventures (2006)

The mountain is the highest peak between the Himalayas and the high mountains of New Guinea, as well as a prominent peak in the South East Asia region. The park is located at Mile 35 on Ranau Road, which is easily accessible by road from other parts of Sabah, as a good sealed road links the park headquarters to the Sabah state capital Kota Kinabalu, an approximately 2-hour drive (ca. 90 km). There are seven stations within the park namely Park Headquarters (Park HQ), Poring Hot Spring, Mesilau Nature Resort, Serinsim, Monggis, Sayap, and Nalapak. Of all the stations,

Park HQ, Poring Hot Spring and Mesilau Nature Resort are open to visitors, while Serinsim, Monggis, Sayap and Nalapak serve as sub-stations, and are primarily the bases for regulation enforcement and research purposes (Figure 1.3).

In terms of climate, Kinabalu Park is characterized by a dry period from February to May as a result of the southwest monsoons and wet period from October to January due to the northeast monsoons. The local climatic features bright early mornings followed by clouding at mid-morning, which covers the mountain by mid-day and usually brings showers to the upper slopes in the afternoon. Nights are generally clear.

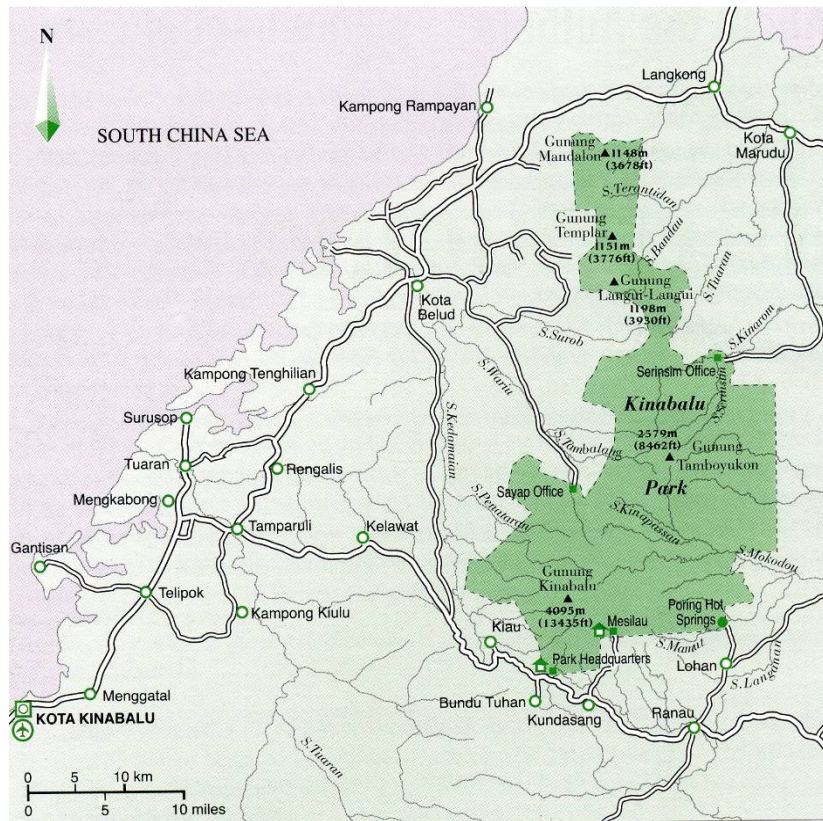


Figure 1.3 Location of the stations in Kinabalu Park, Malaysia. Source: Phillipps and Liew (2000)

The average annual rainfall is around 4,000 mm and the average daily temperature around 20°C at the Park HQ at an altitude of 1,560 m a.s.l. and 15-18°C at Mesilau Nature Resort 2,000 m a.s.l. At Panar Laban / Laban Rata (3,344 m a.s.l.), the average temperature ranges from 2°C to 10°C and can drop to below freezing at night.

Occasionally, ice forms on the summit plateau. At Poring Hot Spring (500 m a.s.l.), annual rainfall is around 2,500 mm with lowland temperatures of 25°-30°C.

Geologically, Mount Kinabalu is considered young. The geological processes involved in the formation of the mountain began about 9 million years ago and the current height was reached about 1.5 million years ago. The mountain continues to rise by about 5 mm per year. The whole of the summit plateau was overlaid with glaciers until about 10,000 years ago, which can be seen by the numerous cirques, moraines and deep gullies.

Kinabalu Park is managed by Sabah Parks. The accommodation, restaurants and souvenir shops are managed by a private operator, Sutera Sanctuary Lodges (SSL), and transportation facilities by a cooperative organization, KOKTAS. KOKTAS has been managing the transportation services, which transfer climbers from the reception office to Timpohon Gate (the starting point of the Park HQ summit trail) since 1987. The accommodation, restaurants and souvenir shops were outsourced to the private sector in 1998, when a privatization program was first introduced to the Sabah Parks system. Mountain guiding service is provided by the members of local communities, who are licensed and under the management of Sabah Parks. Porters providing services to climbers are also from the local communities. They also provide services to SSL and help to carry goods to Laban Rata (3,314 m a.s.l.), the last stop on summit trail which is equipped with restaurants and accommodation facilities.

Kinabalu Park is a meeting place for the continental Asian (mainly Himalayan and Chinese elements) and the Australian (southern hemisphere mainly Australian and New Zealand elements) genera of plants. A total of 5,000 to 6,000 vascular species (about 1,999 genera and 210 species) are to be found in the park. Of these, no less than 140 families of flowering plants (e.g., 1,200 wild orchid species) and a large number of ferns (612 species), mosses, liverworts and fungi (450 species) occur. Orchids, pitcher plants, rhododendrons and *Rafflesia* are among the most significant plants found in Kinabalu Park (see Woods et al. 1993; Wong and Phillipps 1996, Beaman and Beaman 1998; Phillipps and Liew 2000; Beaman et al. 2001; Beaman and Anderson 2004). The park's high biodiversity and high percentage of local endemics, especially flora, is closely associated with its wide altitudinal ranges from around 150 m to over 4,000 m.

Kinabalu Park has been identified as one of Malaysia's centers of plant diversity and designated as a Center of Plant Diversity for Southeast Asia (UNESCO WHC 2007). It is described as 'a unique morphology that is different from other elevated plateaus in the wet tropics' (Komoo 1997). It is also one of the world's 13 hotspots for biodiversity and one of the 234 sites that have been designated as the primary centers of plant diversity in the world. An analysis of the global distribution of species diversity of vascular plants has further recognized the significance of Kinabalu Park in terms of the diversity of its flora by declaring it as one of the six highest diversity centers in the world (Barthlott et al. 1996; Martin et al. 2002).

The biodiversity richness and conservation efforts in Kinabalu Park have gained significant international recognition. In 1999, the director of Sabah Parks was awarded the Fred M. Packard WCPA-IUCN award in recognition of his contribution to nature conservation and the protected area movement in Malaysia. One year later, Kinabalu Park was declared by the UNESCO World Heritage Committee as a World Natural Heritage site after meeting selection criteria ii and iv (Sabah Parks 1998; UNESCO WHC 2006). Criterion ii concerns outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals, while Criterion iv concerns the most important and significant natural habitats for in-site conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation. In the same year, the journal 'Asia Week' named Kinabalu Park one of Asia's best managed forest reserves.

1.5 Problem statement, research objectives and questions

1.5.1 Problem statement

In 1995, the Privatization Unit under the Chief Minister Department of Sabah proposed the privatization of the tourism facilities in Sabah Parks. Sabah Parks had taken a firm stand against a privatization program in the early days. This was because it believed that it was capable of providing a wide range of services and facilities that would attract different segments of visitors. Apart from this, Sabah Parks was confident that it could maintain the conservation priority as well as to its roles in relation to the surrounding

communities (Ali and Nais 1996). It feared that such efforts and responsibilities would not be upheld by the private sector. Nevertheless, the privatization program was eventually installed in 1998.

‘Privatization, whether in total or in part, may work in other nature parks, but the Sabah Parks has to date, stood firm against such an option’ (Ali and Nais 1996, p.7); ‘The issue of privatization of visitor facilities and services in the Parks surfaced in May 1995, when the State Cabinet decided to include the Parks’ chalets and restaurants in the State Privatization program. Since the decision comes from the highest authority of the state, Sabah Parks respects the move’ (Ali and Basintal 1997, p.41).

There was no open bidding involved during the selection of the management company; rather, a steering committee was formed, chaired by the Chief Minister, attended by the Ministry of Finance and the directors of Sabah Parks (personal conversation with Sabah Parks officer 2006). Subsequently, Sabah Parks adjusted its approach guided by a new principle in management in order to cope with its new position. This new approach came with the expectation that the privatization of visitor facilities and services would relieve Sabah Parks from financial and administrative burdens and, at the same time, would also increase efficiency and productivity. But most significantly, this move would shift the obligation of Sabah Parks to solely focus on conservation of the parks’ resources (Ali and Basintal 1997).

The concession came with a lease of assets for 30 years starting 1998. The objectives of introducing a privatization program were the following. Firstly, to improve the quality of tourism facilities in protected areas; secondly, to reduce the administrative, manpower and financial burden of Sabah Parks and hence to enable Sabah Parks to focus on its conservation efforts; and thirdly, to provide job opportunities for local communities in a tourism-related business (Ernst and Young 1997). These objectives to support the socio-economic principles of sustainable tourism development have been promoted in national 5-year plans since 2001.

Although the privatization program in Kinabalu Park has been implemented since 1998, so far there is no known study that has been carried out to evaluate the impacts of privatization on the management of Kinabalu Park with respect to meeting the socio-economic principles of sustainable tourism.

1.5.2 Research objectives and questions

The primary objective of this research is to evaluate the influence of privatization on the management of Kinabalu Park based on the socio-economic principles of sustainable tourism.

Specifically, this research is focused on evaluating how the existing management structure has served as a facilitating and limiting factor in regulating tourism impacts in Kinabalu Park to support nature conservation, benefit local communities and enhance visitor satisfaction.

The central question of the research is: How does the privatization program assist the park management in meeting the socio-economic principles of sustainable tourism in Kinabalu Park?

Within the framework of this central question, further sub-questions are as follows:

1. Is the present state of tourism development supporting nature conservation in Kinabalu Park?

In order to determine how tourism has supported the conservation activities in Kinabalu Park, a breakdown of financial expenses is obtained to identify the proportionate allocation of the budget to conservation-related activities such as management and maintenance, research and staff training. Furthermore, since this research is carried out to study the influence of the privatization program, any changes in the allocation of expenses before and after privatization are also analyzed to understand whether the introduction of privatization has shifted Sabah Parks' focus on conservation. The monitoring and tourism impact management system are also identified.

2. How does tourism development in Kinabalu Park benefit the local communities?

Sustainable tourism benefits the local community through providing stable jobs and earning opportunities, which are accompanied by training for long-term benefits. In order to determine how tourism development in Kinabalu Park benefits the local communities, the number of tourism-related jobs offered to local communities and their income level are identified. This is followed by obtaining a feedback on job satisfaction in financial and job security terms.

Training provided by the park management to local communities is also determined.

3. What is the current level of visitor satisfaction?

To answer this question, the level of visitor satisfaction in various facilities and activities in the park is evaluated. The level of satisfaction in the guiding services and the willingness to pay among visitors are also identified. In addition, the existing practice of segmenting the types of visitors visiting Kinabalu Park is assessed.

2 METHODOLOGY

Data collection includes both primary and secondary data. While primary data were collected mainly to answer research questions on how tourism development in Kinabalu Park has benefited local communities and on the existing level of visitor satisfaction in the park, secondary data were collected to find out the extent to which tourism in Kinabalu Park is supporting nature conservation activities. Data were analyzed using SPSS (Statistical Package for Social Sciences).

2.1 Conceptual framework

According to the socio-economic principles of sustainable tourism, tourism activities must support the nature conservation activities in the parks, benefit local communities, and maintain a high level of visitor satisfaction (Figure 2.1).

In supporting conservation activities, the financial revenue generated from tourism activities in parks must be channeled into areas of conservation, which include the daily maintenance and management related to the protection of parks, research activities and staff training. This is important because the financial revenue generated from tourism activities is sometimes used to maintain and develop visitor facilities in order to enhance tourism experience rather than to support conservation efforts. On the other hand, while tourism is able to make a noteworthy economic contribution to supporting conservation, the pressure on the parks due to a large number of visitor arrivals also becomes more significant. Therefore, it is crucial that tourism impact management is practiced in the park. As the impacts of tourism on ecology may take years to surface, the existence of a monitoring system is of paramount important to detect changes in the habitats of key and rare species and the results of human disturbance. Subsequently, appropriate strategies are formulated to tackle the upcoming issues in the park.

Apart from financially supporting conservation activities in parks, tourism also offers job opportunities to local communities. Capacity building in the form of training is essential to sustain stable employment and earning opportunities among the local communities.

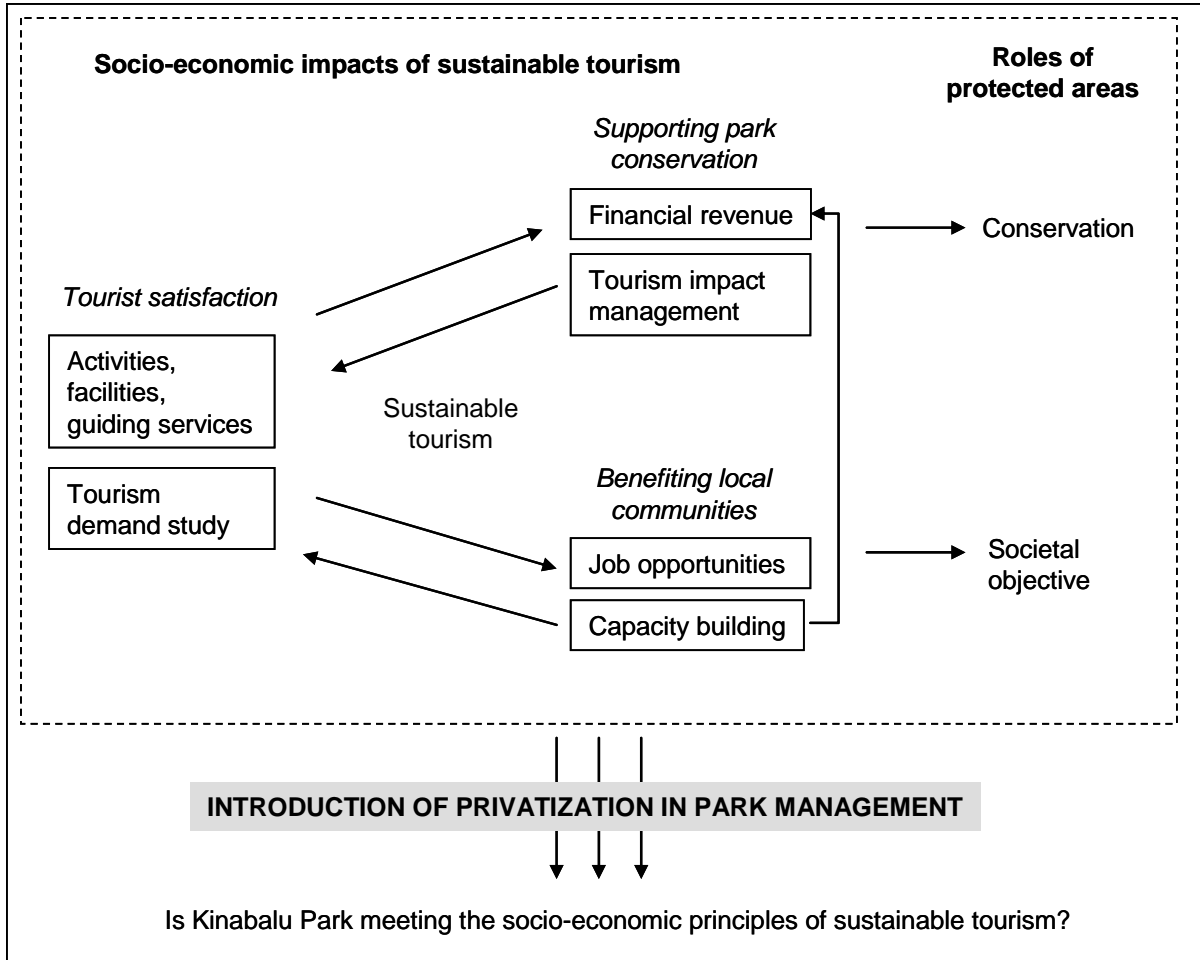


Figure 2.1 Conceptual framework of the research

To enhance the socio-economic impacts of tourism in national parks, high visitor satisfaction and experience must be maintained. Visitor satisfaction relies upon the qualities of activities, facilities and guiding services provided in a park. Besides, it depends on the socio-demographic and geographical background of the visitors. An appropriate study of tourism demand in a park is important, because it will enable the park management to understand the diversified needs of the visitors and thus to formulate adequate strategies to cater for these diverse needs.

Supporting conservation, benefiting local communities and maintaining visitor satisfaction are three interrelated criteria that can be seen as a triangle interaction. As tourism operates within the natural environment in the parks on which its survival depends, supporting conservation activities and establishing tourism impact management in the parks are necessary to sustain their existence. Meanwhile, tourism satisfaction must be maintained through providing a high quality of activities and

facilities as well as guiding services. Additionally, the educational element can support conservation efforts in the parks. Moreover, tourism in parks provides job opportunities and capacity building for the local communities. Training programs are essential both for enhancing visitor satisfaction and supporting capacity building among the local communities in the long term.

The introduction of a privatization program in 1998 in Kinabalu Park aimed to assist the park authority in enhancing its management capacity. Nevertheless, the program has also received criticism because the private sector is said to be profit oriented and that introducing privatization may not protect public welfare (Muzaffar 1984; Muzaffar 1987; Jomo 1994). To what extent has the involvement of the private sector in Kinabalu Park contributed to enabling the park management to meet the socio-economic principles of sustainable tourism? This question is the focus of this research.

2.2 Research methodology

Both primary data and secondary data were collected during the two-stage field work in Kinabalu Park from September 2005 to February 2006 and from June 2006 to July 2006. Primary data were collected using a questionnaire survey, semi-structured interviews, unstructured interviews and participant observation. Secondary data were collected through document review at government offices, universities and NGO offices.

2.2.1 Primary data collection

Visitor questionnaire survey

A tourist questionnaire survey was carried out to investigate the level of visitor satisfaction with tourism facilities and activities, especially the mountain and nature guiding services, and the willingness to pay more in Kinabalu Park. The level of satisfaction was determined using the Likert Scale (Eraqi 2006).

Based on the stratified random sampling approach (Yamane 1967), the sample size was determined as follows:

$$n = N/[1+N(e^2)]$$

where n = sample size, N = population size, e = error of estimation; confidence level is at 95% and error margin at 5%.

A total of 402 questionnaires were completed in the survey. Each 8-page questionnaire (Appendix 2.1) took about 15 minutes to complete. A pre-test, which counted for 5% of the sample size, was carried out prior to the actual survey. Five remunerators were trained to carry out the survey. Visitors were approached randomly at the strategic points within the park such as visitor center, restaurants, reception centers and hostels. At Park HQ and Mesilau Nature Resort, respondents were approached at the visitor center, hostel areas and restaurants. At Poring Hot Spring, respondents were approached at the food stalls located outside the park, hot sulphur bath tubs and picnic areas, visitor center, restaurant and sitting areas.

Taking into consideration the importance of Kinabalu Park as a popular visitor destination for foreign visitors and the significance of mountain climbing in the park, stratifications were made based on the proportionate statistic of foreign visitors and climbers. The respondents were approached in two ways depending on their preference. Respondents were either interviewed by the remunerators or they filled out the questionnaire while the remunerator provided them with clarification if necessary. Then the remunerator asked the respondents to explain their comments and additional notes were made. In order to avoid similar opinions given by members of one group, only one respondent was selected from each group of visitors. A 'group' here refers to couples, families, and friends walking together. Tour groups were excluded. Most of the respondents were approached in the afternoon and evening so that they could give their opinion after having participated in the activities in Kinabalu Park. The questionnaires were bilingual, i.e., Malay and English.

Local communities questionnaire survey

A questionnaire survey was carried out to obtain feedback from the people who were working in Kinabalu Park regarding the job opportunities and capacity building opportunities offered to them. The respondents included a total of 153 mountain guides, 42 porters and 52 staff members of SSL. All questionnaires were prepared in Malay (Appendices 2.2, 2.3 and 2.4).

The questionnaires for mountain guides and porters were distributed through the park staff. The park staff was briefed about the content of the 1-page questionnaire. The author was present at the operation office in case the respondents needed any clarification. Most of the respondents took the questionnaire with them and returned it to the park staff and author a few days later.

A remunerator was trained to interview the SSL staff. The 3-page questionnaires were given to the respondents and the questions were explained. Similarly, the respondents took the questionnaire home and returned it to the remunerator and author later. The main reason for this was that the staff of SSL were approached during day time. During day time, they were at work and it was not convenient to fill out the form directly. They preferred to take time to fill out the form in the evening instead of being interviewed. The constraint foreseen was that they wanted to avoid their superior becoming aware of their feedback on their job since they were living in the accommodation area provided by the SSL management.

Semi-structured and unstructured interviews

Semi-structured interviews regarding the role of Kinabalu Park in tourism development and the tourism impacts in Kinabalu Park were conducted with personnel from Sabah Parks HQ, Kinabalu Park, Sutera Sanctuary Lodges, Ranau District Council, World Wildlife Fund for Nature (WWF), PACOS TRUST (Partners of Community Organizations), Sabah Tourist Guide Association, University of Malaysia Sabah and University of Technology Malaysia.

Mountain guides, SSL staff and porters were approached through unstructured interviews to obtain their opinion on the problems they faced at work. Tourist guides were approached through unstructured interviews to obtain general complaints made by foreign visitors as well as the guides' perceptions on the guiding services offered in Kinabalu Park.

Observation through participation

Observation through participation was carried out by the author to evaluate the interaction between mountain guides and climbers along the summit trail as well as between the guide and participants during nature guiding. To observe the interaction

between mountain guides and climbers, the author went to the summit trail with park personnel as a researcher to examine the facilities provided along the summit trail and to participate in the climbing activities. The climbers and mountain guides were not informed about the author's intention to observe their interaction during the climb. Short casual conversations were also held with the climbers along the summit trail.

As for nature guiding, the author participated in the guided nature walks organized by both Sabah Parks and tourist guides from tour agencies in Sabah. The aim was to observe the interaction between the guides and participants and to compare the quality of guiding provided by the park personnel and private tour guides. For the guided walks provided by the park personnel, the participants were not aware that the author was a researcher. However, since the author was staying in the park for the field research, the park personnel were aware of the author's intention.

Nevertheless, the author had to introduce herself and brief the tourist guide and the visitors about the purpose of participating in the guided walks provided by the tourist guides from tour agencies. Since those were private tours, the tourist guides also had to obtain verbal permission from their clients/tourists before allowing the author to join the guided walk.

2.2.2 Secondary data collection

Secondary data on tourism development in Kinabalu Park and its significance at the state and national level were collected. The main data sources were newspaper cuttings, dissertations, annual reports, journal articles, policies, legal documents and statistics. Data were also collected from Sabah Parks HQ, Ranau District Council and District Office, PACOS TRUST, Sabah State Town and Regional Planning Department, Sabah state library HQ and branches, Sabah State Environmental Conservation Department, Institute of Development Studies Sabah, University of Technology Malaysia, University of Malaysia Sabah and the Sabah Branch of WWF.

2.2.3 Data analysis

The analysis of the tourism impacts in Kinabalu Park is based on the socio-economic principles of sustainable tourism. The criteria used for analysis were conservation support, local participation and visitor satisfaction. A set of indicators was developed

for these criteria in order to answer the research questions (Table 2.1). This set of socio-economic indicators was adapted from ‘Indicators of sustainable development for tourism destinations’ (WTO 2004). They are a set of measurements on a consistent basis to monitor the effects of tourism and the progress towards achieving more sustainable tourism policies and programs.

Table 2.1 Measurable socio-economic indicators for sustainable tourism evaluation in Kinabalu Park, Malaysia

Conservation support	<ul style="list-style-type: none"> ▪ Breakdown of expenses ▪ Budget allocation for conservation and tourism activities ▪ Budget allocation for staff training ▪ Budget allocation for research activities ▪ Existence of tourism impact management ▪ Existence of a monitoring system
Local participation	<ul style="list-style-type: none"> ▪ Total number employed ▪ Income level ▪ Training provided
Visitor satisfaction	<ul style="list-style-type: none"> ▪ Level of satisfaction with tourism facilities and activities ▪ Level of satisfaction with quality of guiding service ▪ Level of willingness to pay more ▪ Existence of visitor database and tourism demand studies

The indicators include quantitative (raw data, ratios and percentage) and qualitative measurements (category indices, normative indicators, nominal indicators and opinion-based indicators). Both quantitative and qualitative measurements were utilized to analyze the indicators. For the ‘conservation support’ criterion, the quantitative indicators included: expenses breakdown, budget allocation for conservation and tourism activities, staff training and research activities. These indicators were portrayed through raw data, ratios and percentages. The qualitative or normative indicators included: existence of a monitoring system and tourism impact management. As for the ‘local participation’ criterion, total number employed and income level were revealed through raw data, ratios, and percentages, whereas training provided was described using opinion-based indicators and normative indicators.

Visitor satisfaction was mainly measured using opinion-based indicators, normative indicators and percentages. These included: level of satisfaction with tourism facilities, activities and guiding quality as well as the level of willingness to pay a higher fee. The existence of a visitor database and tourism demand studies was measured using normative indicators.

SPSS was employed to carry out the descriptive analysis. Frequency distribution and cross tabulation were used for describing the variables. Frequency analysis provided a profile of those who participated in the research. Cross tabulation was used to investigate the relationship of two variables. The chi-square statistic was performed to determine whether the results of a cross tabulation were statistically meaningful. The results of the reliability test in interpreting the data are discussed where appropriate.

2.2.4 Research limitations

It is also important that the following empirical and theoretical limitations are taken into consideration when interpreting the findings of this research. Empirically, this research was limited to the socio-economic impacts of tourism experienced within the park boundary due to the time constraint. Besides, only limited data on business performance were made available by Sutera Sanctuary Lodges despite continuous attempts by the author throughout the 10-month field research in Kinabalu Park to obtain such data, which would have been very useful and significant in evaluating how tourism has benefited the company (Sutera Sanctuary Lodges) and its staff (members of local communities).

Due to the voluntary nature of the participation of visitors as respondents in the visitor satisfaction survey, the sample of respondents who participated in the survey may not reflect the real composition of the visitors to Kinabalu Park. In addition, the socio-economic principles of tourism are generally evaluated on a wide range of criteria and indicators, not all of which were covered by this research. Nevertheless, an extensive literature review ensured that the key and relevant criteria and indicators were included in assessing the socio-economic impacts of tourism in Kinabalu Park. The instrument for evaluating visitor satisfaction used the 5-point Likert scale, where the respondents were asked to indicate their degree of satisfaction with the quality of the activities and facilities provided in Kinabalu Park. It is possible that different respondents had a different interpretation of satisfaction, which would have affected the general rating of the satisfaction level.

Theoretically, the research only provides a brief literature review on the rationales behind privatization by linking it with the nature of goods. The techniques of privatization, the distinction between provision and production of goods and the transaction costs involved to enhance management efficiency were not investigated. Local institutions that may have an influence on the park management were also not taken into consideration. Further study on these issues would complement the findings of this research.

3 SUPPORTING NATURE CONSERVATION

The socio-economic principle of sustainable tourism requires tourism to protected areas to support nature conservation through income generation and tourism impact management. This chapter presents the results of the data analysis concerning the extent to which tourism supports conservation activities in Kinabalu Park by providing financial support and establishing tourism impact management. This includes the sources and the significance of tourism income, the breakdown of expenses and the tourism impact management practice in Kinabalu Park.

3.1 Kinabalu Park as a significant nature-based tourism destination

Kinabalu Park is one of the most frequently visited national parks in the country. Within a time span of 40 years, the number of visitor arrivals increased from 829 in 1965 to 434,903 in 2005 (Figure 3.1). The statistic of visitor arrivals to the park is based on the sales of ticket that are stratified into domestic and foreign visitors. There was no differentiation between foreign and domestic visitors until 1989. In 1990, a total of 25,501 foreign visitors was recorded (made up 7% of the total visitor arrivals), an increase of about 66% since 1989. This is believed to be the result of the “Visit Malaysia Year” campaign in 1990.

The proportion of foreign visitors to Kinabalu Park saw a very significant increase only after 1998, where it rose from 13% of total arrivals in 1997 to 19% in 1998. Since then, the proportion has remained above 20%. Factors contributing to the boost of foreign visitor arrivals are believed to be closely associated with the depreciated Malaysian currency (Ringgit) during the economic downturn in 1998, the heavy promotion of tourism by the federal government as part of the national economic recovery plan in the same year, and that Kinabalu Park was identified by the Malaysia Tourism Promotion Board as one of the 12 destinations⁴ in the country to be promoted internationally. Kinabalu Park was promoted as the park where the highest mountain in the country is located and as a nature lovers’ and adventurers’ destination. The number of visitor arrivals to the park peaked in 2000, concurrent with the events of its

declaration as a World Natural Heritage Site and the promotion of ‘Visit Malaysia Year 2000’. In 2005, foreign visitors made up 22% of the total number of visitor arrivals (Figure 3.2).

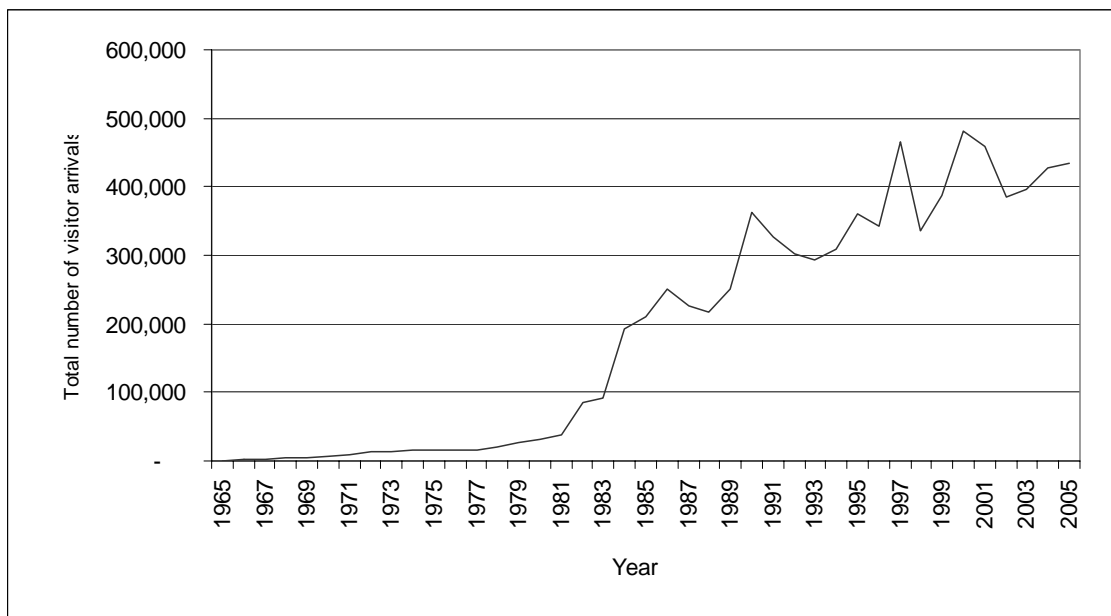


Figure 3.1 Growth in number of visitor arrivals in the period 1965-2005 in Kinabalu Park. Source: Sabah Parks (2006)

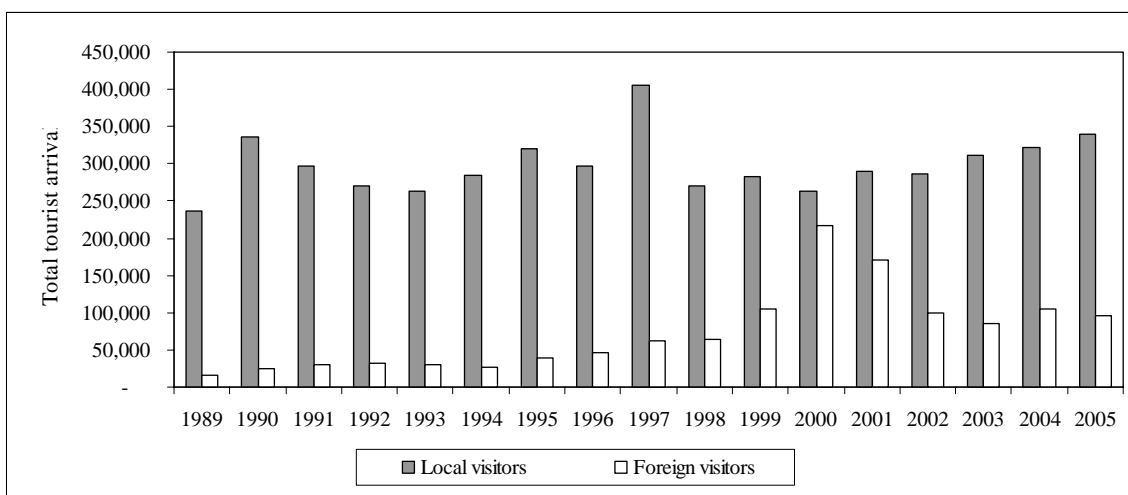


Figure 3.2 Breakdown of domestic and foreign visitors in the period 1989-2005 in Kinabalu Park. Source: Sabah Parks (2006)

⁴ The 12 destinations identified by MTPB were Bera Lake, Danum Valley, Johor Bahru, Kenyir Lake, Kinabalu Park, Melaka, Pangkor Island, Penang, Sarawak, Langkawi Island, Kuala Lumpur and Taman Negara (MTPB 1999).

Mountain climbing is one of the main activities participated in by visitors to Kinabalu Park and has become increasingly significant. In the period 1989-2005, an average of 9% of the annual visitor arrivals took part in mountain climbing. The proportion increased to 22% (46,084 trips) in 2005. Of this, 50% were foreign climbers (Figure 3.3).

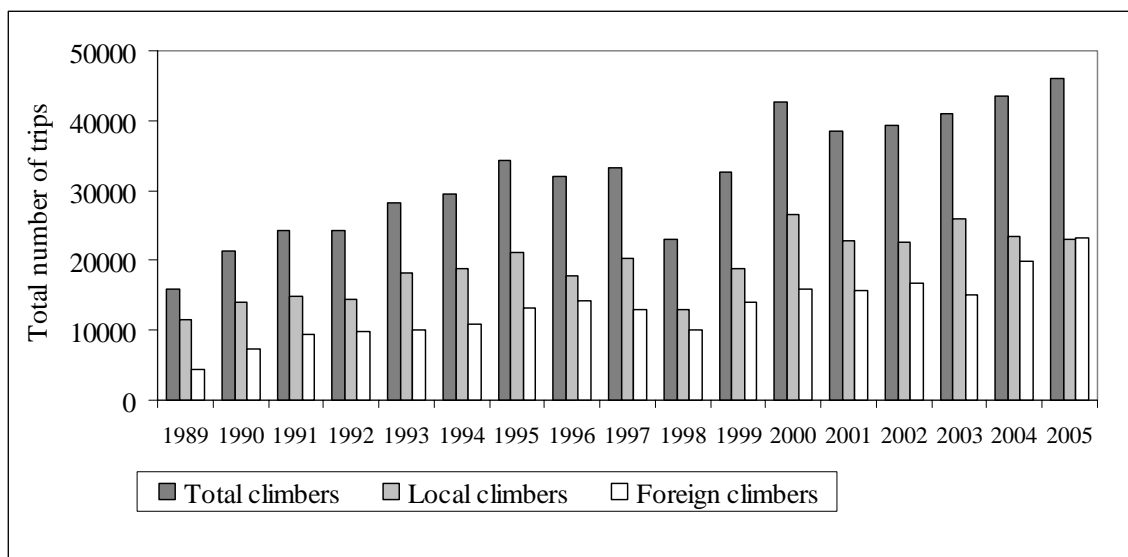


Figure 3.3 Breakdown of domestic and foreign climbers in the period 1989-2005 in Kinabalu Park. Source: Sabah Parks (2006)

Parallel with the significant increase in number of visitor arrivals, the tourism income generated in Kinabalu Park is substantial. The total generated revenue increased from RM 22,000⁵ in 1970 to RM 5,475,421.90 in 2005. The average rate of growth in the period 1996-2005 was 18.3% (Figure 3.4). This amount accounted for 53% of the total income generated within the Sabah Parks system, making Kinabalu Park the most significant income generator in the system.

⁵ RM 1= USD 0.29

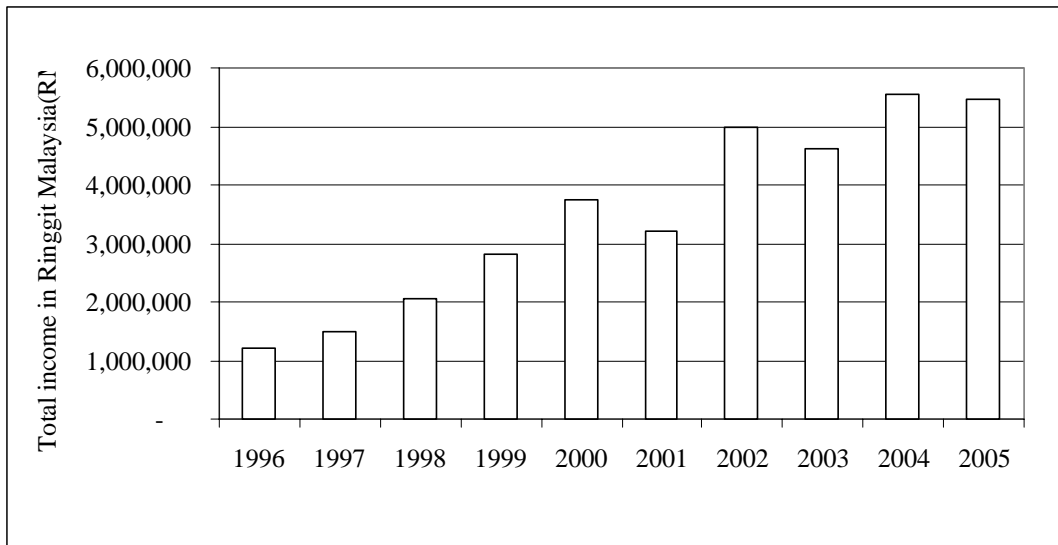


Figure 3.4 Tourism income generated in the period 1996-2005 in Kinabalu Park. Source: Sabah Parks (2006)

The income generated from tourism is channeled to Sabah Parks at two levels. Firstly, at state level, where SSL and KOKTAS pay the concession and lease to Sabah Parks HQ based on their operations within the entire park system in Sabah, and secondly, in the form of entry fees and user fees at site level.

During the early years, the tourism revenue in Kinabalu Park was collected in the form of user fees, e.g., the sale of souvenirs and the use of accommodation facilities. Entrance fees were first introduced in 1991 to generate further income. Sabah Parks directly collects the entry fee, which is known as ‘conservation fee’.

User fees are the fees levied on visitors for using the services in the park. There are two types of user fees in Kinabalu Park, namely fees for facilities and fees for activities (Figure 3.5). Facilities fees include accommodation, restaurants, souvenir shops and transportation. These fees are collected by the respective parties (e.g., accommodation, restaurants and souvenir shops revenues are collected by SSL, and transportation fee by KOKTAS). Activity fees include levies on the visits to the mountain garden, slide shows, canopy walkway, guided walks, mountain climbing permit, etc. These fees are collected by Sabah Parks. As for mountain climbing, apart from the climbing permit, the hiring fee for the mountain guides is passed on to the climbers. This fee is collected by Sabah Parks on behalf of the mountain guide prior to the climbing. A multi-tiered pricing system is practiced, stratifying the domestic and foreign visitors as well as youth under 18 years.

Mountain climbing is the most significant income source in Kinabalu Park. In 2005, climbing permits made up 43% of the tourism revenue in the park. Together with climbers' certificates (5.6%), mountain climbing contributed 48.6% of the total income generated. This was followed by conservation fees, at nearly 35%, and the entrance fee to the canopy walkway at 6% (Figure 3.6). Other sources of tourism revenue consisted of charges for cameras and videos used on the canopy walkway, and fees for slide shows, butterfly farm, mountain garden, bathtub, orchid conservation center entrance fee, sales of parks VCD and publications, etc.

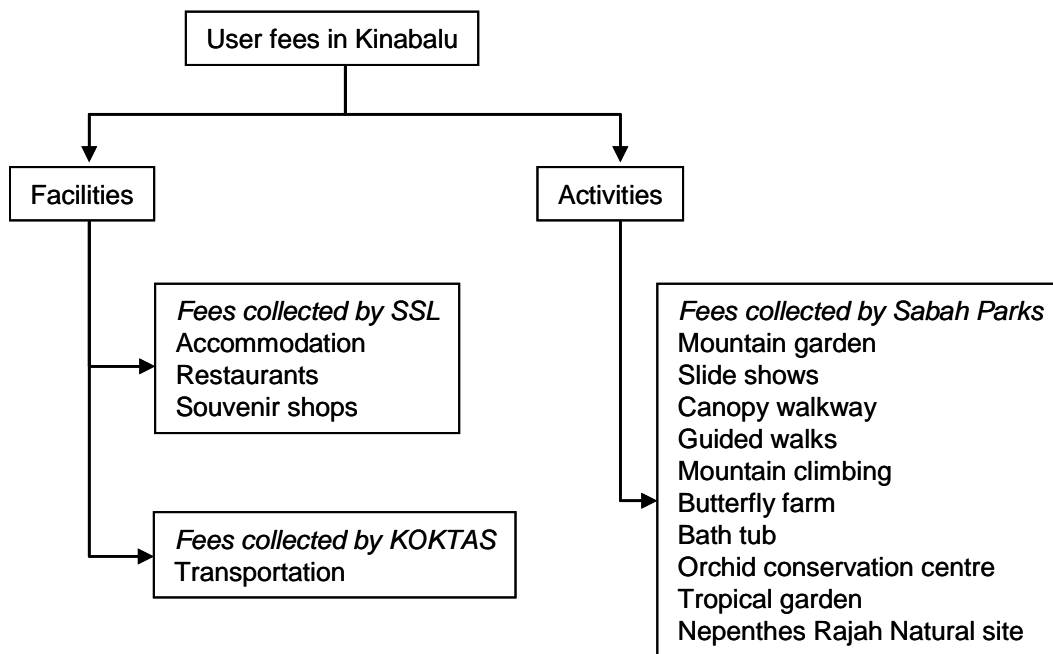


Figure 3.5 Types of user fees in Kinabalu Park. Source: Sabah Parks (2006)

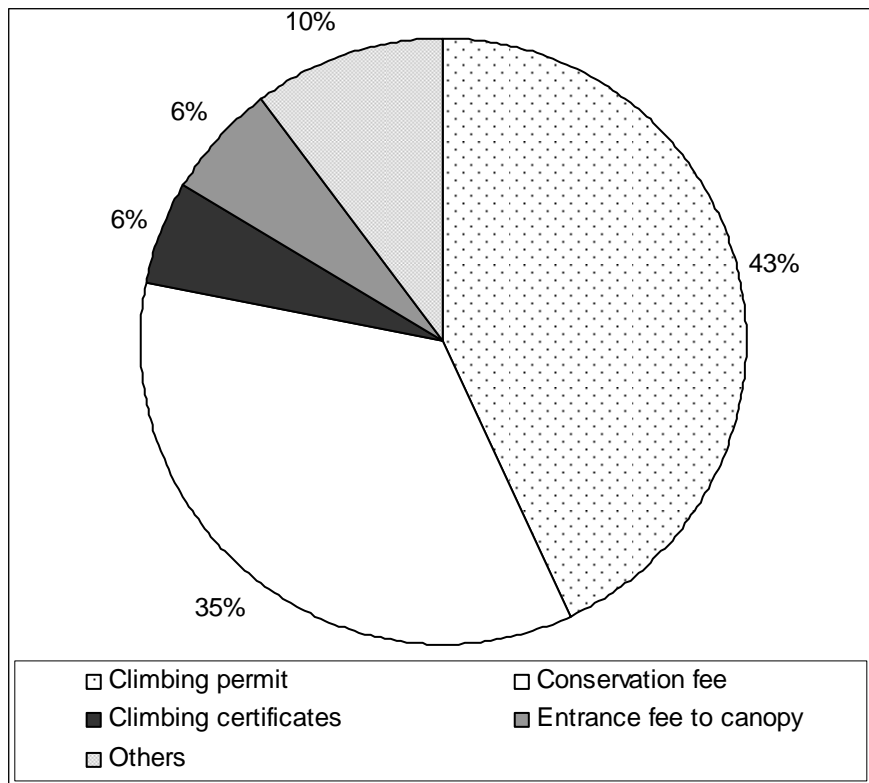


Figure 3.6 Sources of tourism revenue generated in 2005 in Kinabalu Park. Source: Sabah Parks (2006)

The significant contribution of the climbing permit to tourism income in Kinabalu Park apparently resulted from the multi-tiered pricing system for the foreign climbers, who had to pay a much higher fee, i.e., RM 100 per climbing permit compared to RM 30 for domestic climbers. This rate took effect in 2002. Before 2002, RM 50 was levied on foreign climbers and RM 25 on domestic climbers (Berita Harian 2001b; Daily Express 2001e).

Apart from climbing permits, the conservation fee was also increased in 2002, from RM 3 to RM 15 for foreign visitors, RM10 for foreign visitors under 18 years, and from RM 2 to RM 10 for domestic visitors. The increased fees also explain the sharp rise in tourism income in 2002 (Figure 3.4). Interviews with the key personnel of Sabah Parks HQ disclosed the fact that one of the reasons for the increase in fees in 2002 was the result of the introduction of the privatization program. The author was told that the private operator had been facing problems regarding financial turnover since the introduction of the program, and the operator was incapable of paying the lease to Sabah Parks as agreed under the concession agreement. Thus, the increase in entrance

and user fees within the Sabah Parks system in 2002 enabled Sabah Parks to sustain its financial status.

3.2 Financial support of conservation activities

3.2.1 Breakdown of expenses

The previous section revealed the significance of tourism in generating financial revenue in Kinabalu Park. According to the socio-economic principles of sustainable tourism, these revenues must support conservation activities in the park. This section presents the breakdown of expenses in Kinabalu Park corresponding to its divisional administration structure namely Administration and Management Division (A&M) and Research and Education Division (R&E), and whether the financial revenue generated supports conservation activities or merely tourism development.

The breakdown of expenses covers the period 1996-2005 of the A&M in Kinabalu Park (Table 3.1). The expenses are split into six key areas known as personal emoluments, management, operation, maintenance, special expenditure and development. Until 2005, the income generated from tourism in the park did not fully offset total expenses. Nevertheless, the financial revenue generated in 2005, for instance, covered 67.7% of the total expenses of the Kinabalu A&M, which could sufficiently pay off its expenses on personal emoluments, operation, management and maintenance.

In the period 1996-2005, the annual average expenses in the Kinabalu A&M were RM 5,851,084.17 (USD 2,220.10 per km²)⁶. The budget allocated in 1996 was RM 10,581,117.73 (USD 4,014.8 per km²) and RM 8,163,590.91 (USD 3,097.55 per km²) in 2005. These figures are considerably high compared to the global mean (Figure 3.7). In 1996, the global mean budget for protected areas was USD 893 per km², where the mean for developed countries was USD 2,058 per km² and USD 157 per km² for developing countries (James, Green and Paine, 1999). It was also estimated that USD 530 was required for effective conservation across developing countries (James, Green and Paine 1999).

⁶ Conversion rate was based on USD 1 = RM 3.50.

Supporting nature conservation

Table 3.1 Breakdown of expenses of the Administration and Management Division for the period 1996-2005 in Kinabalu Park

No	Area	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	Personal emoluments	1,388,002	1,271,598	1,364,275	1,588,110	1,660,681	1,715,079	2,108,804	1,970,038	2,096,598	2,173,841
2	Management	184,896	134,319	105,424	168,452	191,602	146,114	303,649	504,419	523,896	427,796
	<i>Staff training</i>	<i>6,353</i>	<i>3,964</i>	<i>9,711</i>	<i>6,203</i>	<i>6,517</i>	<i>2,975</i>	<i>8,818</i>	<i>12,766</i>	<i>34,493</i>	<i>16,852</i>
3	Operation	553,129	629,280	418,411	227,579	374,825	340,164	359,411	396,971	520,206	490,558
4	Maintenance	823,216	963,007	523,491	391,402	469,678	391,979	478,975	590,419	663,812	866,526
	<i>Temporary staff wages</i>	<i>230,620</i>	<i>309,684</i>	<i>242,615</i>	<i>121,214</i>	<i>162,296</i>	<i>134,628</i>	<i>185,092</i>	<i>212,022</i>	<i>258,631</i>	<i>339,648</i>
5	Special expenditure	516,232	19,535	33,824	43,972	75,411	78,558	249,828	70,326	323,124	2,647,093
	<i>Park general development</i>	<i>620</i>	<i>-</i>	<i>6,484</i>	<i>6,664</i>	<i>-</i>	<i>-</i>	<i>39,284</i>	<i>42,499</i>	<i>72,531</i>	<i>2,305,394</i>
6	Development	7,115,644	9,208,201	3,185,792	1,090,125	358,254	22,259	37,621	527,390	849,245	1,557,778
Total		10,581,118	12,225,940	5,631,217	3,509,640	3,130,451	2,694,153	3,538,288	4,059,563	4,976,881	8,163,591

Source: Sabah Parks (1996-2005)

Supporting nature conservation

Budget allocation in USD

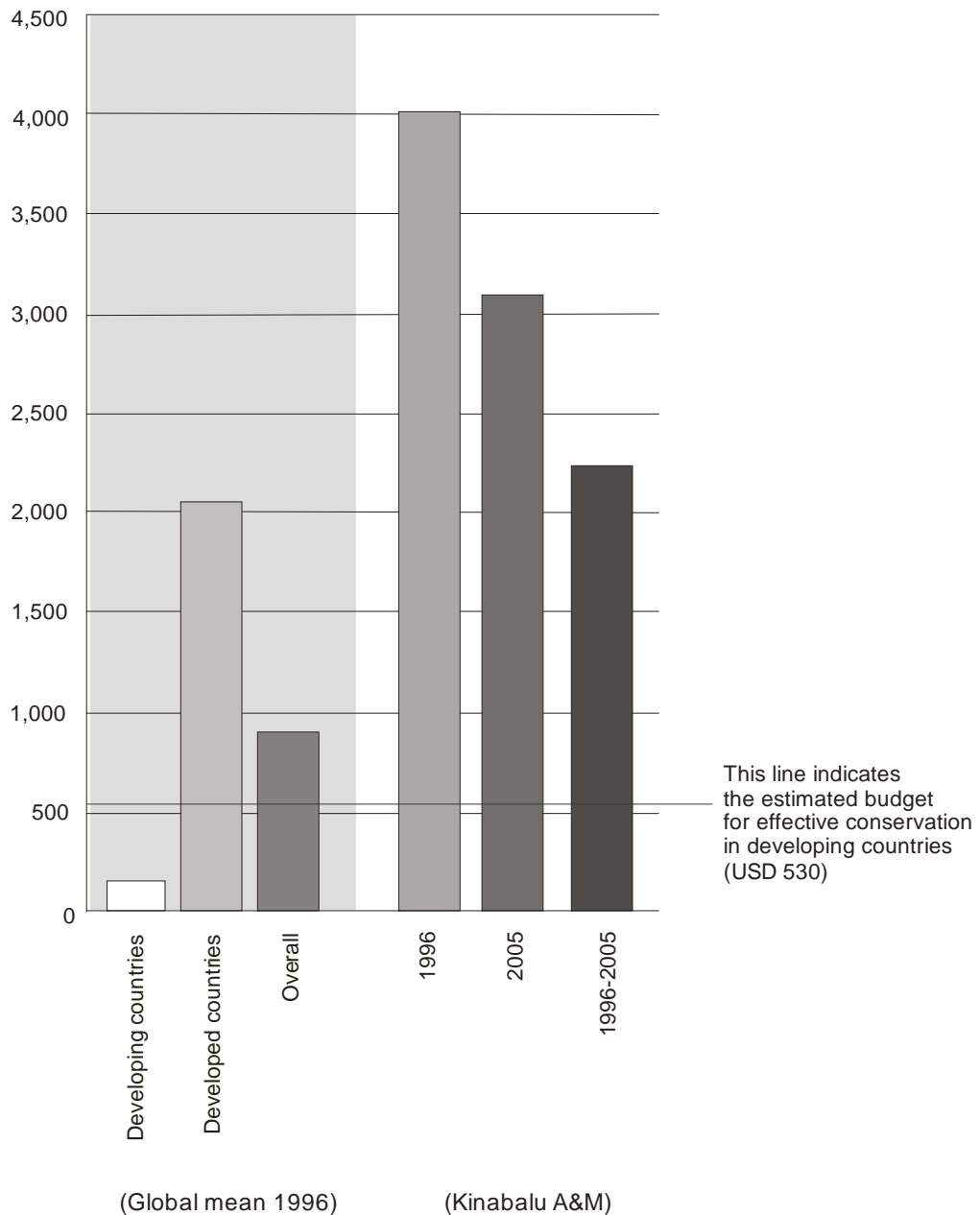


Figure 3.7 Budget allocation of Kinabalu A&M compared to global mean. Source: Sabah Parks (2006)

Based on this comparison, the author assumes that the budget allocation to the division is sufficient to carry out conservation activities effectively. Nevertheless, the breakdown of expenses of the division indicates that the major part of the financial budget was used to support tourism-related development instead of conservation in the period 1996-2005.

Looking at the annual average expenses in the period 1996-2005, 41% were spent on development. This was followed by personal emoluments (30%), maintenance (11%), special expenditure (7%), management (7%) and operation (5%). ‘Development’ is the budget allocated by the federal government to upgrade the tourism-related infrastructure in Kinabalu Park. In Malaysia, tourism is a federal affair, whereas land matters, e.g., protected areas, are under state jurisdiction (Legal Research Board 2005). Funding to support tourism development in the park has been substantially channeled by the federal government concurrent with the promotion of tourism at the federal level (Hamzah undated).

In 2005, the largest proportion of expenses was on special expenditure (32%) (Figure 3.8). Most of the money in the special expenditure category were spent on general park development, which alone made up 28% of the total expenses in the division. General park development is concerned with the construction of new facilities or upgrade of existing facilities, mainly associated with visitor facilities such as toilets, pathways and shelters. In short, 47% of the expenses in 2005 were spent on tourism-related activities as compared to the 26% spent on management, operation and maintenance of the park.

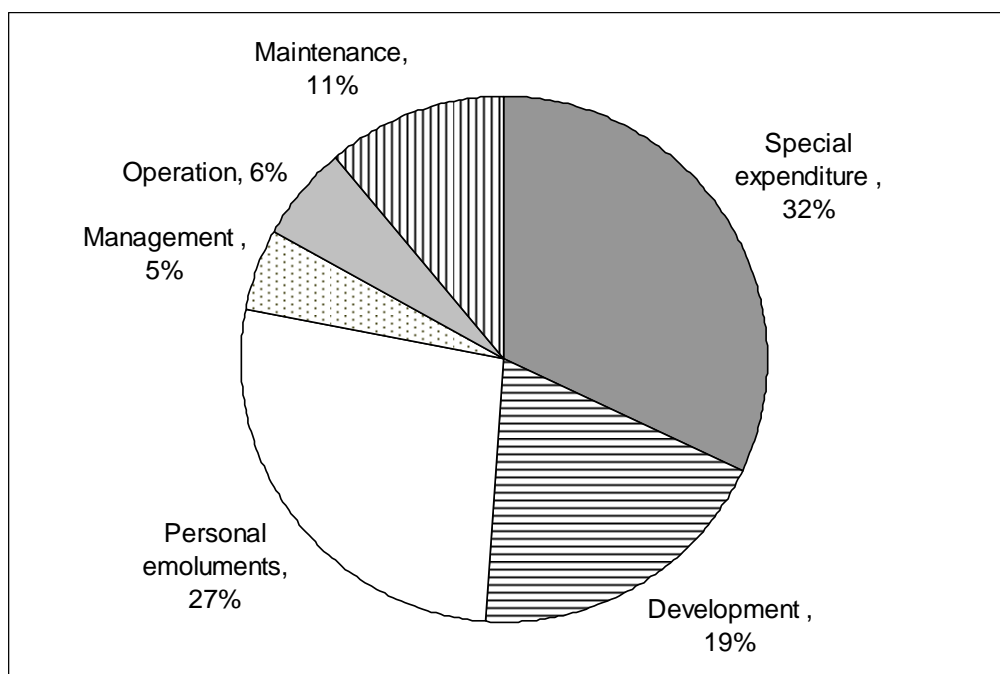


Figure 3.8 Breakdown of expenses in 2005 of the Kinabalu A&M Source: Sabah Parks (2006)

The third most important expenses in 2005 were for personal emolument, contributing 26.6% to the total expenses of the division. If the temporary staff wages are taken into consideration, the expenses for human resources (personal emoluments and temporary staff wages) made up 32.0% of total expenses. In 2005, there was a total staff of 131 in the division. This included 38 persons recruited on a temporary basis.

Based on a study conducted on the staff input in protected areas, the global mean staff input in 1996 was 27 per 1,000 km² protected area. The developed countries showed a slightly lower mean (26.9 per 1,000 km²) than developing countries (27.6 per 1,000 km²) (James, Green and Paine 1999). The staff input in A&M in Kinabalu Park is estimated at 174 staff per 1,000 km². Including the staff recruited under the R&E in the park, which totaled 71 (including 44 temporary staff), the staff per 1,000 km² in Kinabalu Park was 268 or 159 per 1,000 km² when excluding temporary staff. This comparison suggests the issue in human resource utilization and management in the park. In particular, with the implementation of the privatization program, Sabah Parks was released from managing the labor-intensive accommodation facilities. The high recruitment rate which directly contributes to high human resource expenses, has possibly negatively affected the financial budget distribution in the park. Otherwise, better distribution of the financial budget could have supported various conservation activities in the park.

Unlike that of A&M, the budget allocation for expenses of the R&E in Kinabalu Park is embedded in the budget allocation of the Sabah Parks R&E at state level (Figure 3.9). This is because research activities of the Sabah Parks system are mainly based in Kinabalu Park. Nevertheless, it is meaningful to look at the breakdown of expenses of the Sabah Parks R&E, which has a direct influence on Kinabalu Park, in order to find out whether the introduction of the privatization program in the Sabah Parks system has enhanced the organization's emphasis on research activities as part of the conservation efforts.

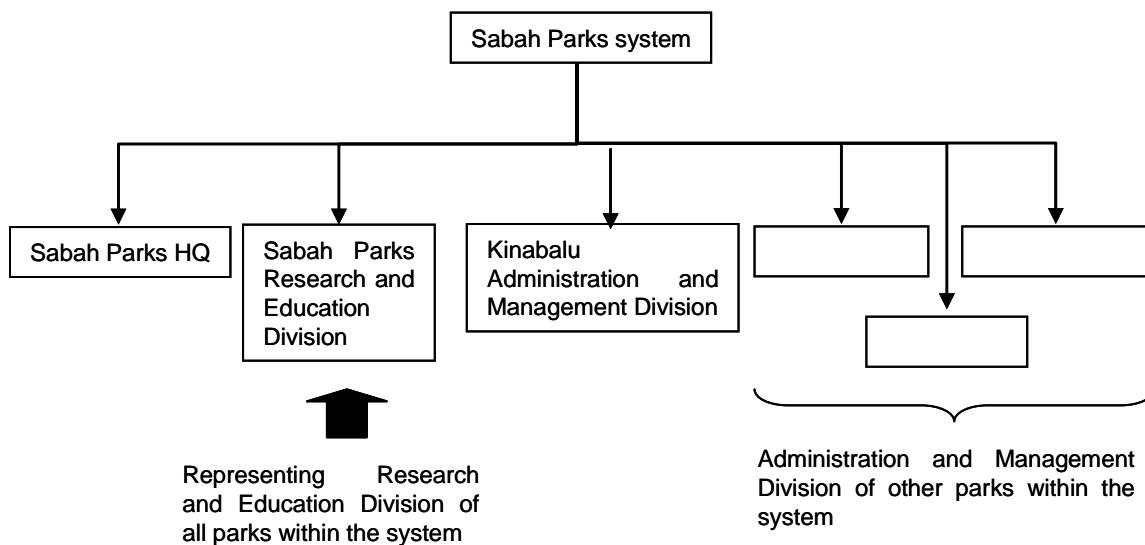


Figure 3.9: Budget allocation for expenses of Sabah Parks system. Source: Sabah Parks (2006)

There is an indication of increased investment to support research activities in the Sabah Parks system in the period 1996-2005. In 1996, total expenses in the division were RM 1.05 million, which made up 5.29% of the total expenses of the Sabah Parks system. The amount increased to RM 2.65 million (9.64%) in 2005 within a span of 10 years (Figure 3.10). Nevertheless, there is no clear indication that the increase resulted from the introduction of the privatization program. Moreover, there is no consistency in terms of budget allocated to the Sabah Parks R&E.

The total expenses of Sabah Parks R&E decreased from RM 1.34 million in 1997 to RM 1.29 million in 1998, following a sharp cut in expenses observed in the entire Sabah Parks system (from RM 23.43 million in 1997 to RM 15.34 million in 1998). The massive budget reduction was associated with the economic recession that hit the country in 1998. Despite the cut in 1998, the budget allocated to Sabah Parks R&E again increased in 1999 (RM 1.58 million) and 2000 (RM 1.81 million). The author suggests that the increase was closely related to the nomination of Kinabalu Park as a World Natural Heritage Site in 1999 and the declaration in 2000, because a cut of 20% can be observed for the following year. In terms of amount, the budget allocated to Sabah Parks R&E increased annually after 2000, in line with the increase in the budget allocated to the entire Sabah Parks system. However, the percentage decreased in 2000 from 13.52% to 9.64% in 2005, which is lower than the 10-year average, i.e., 10.22%.

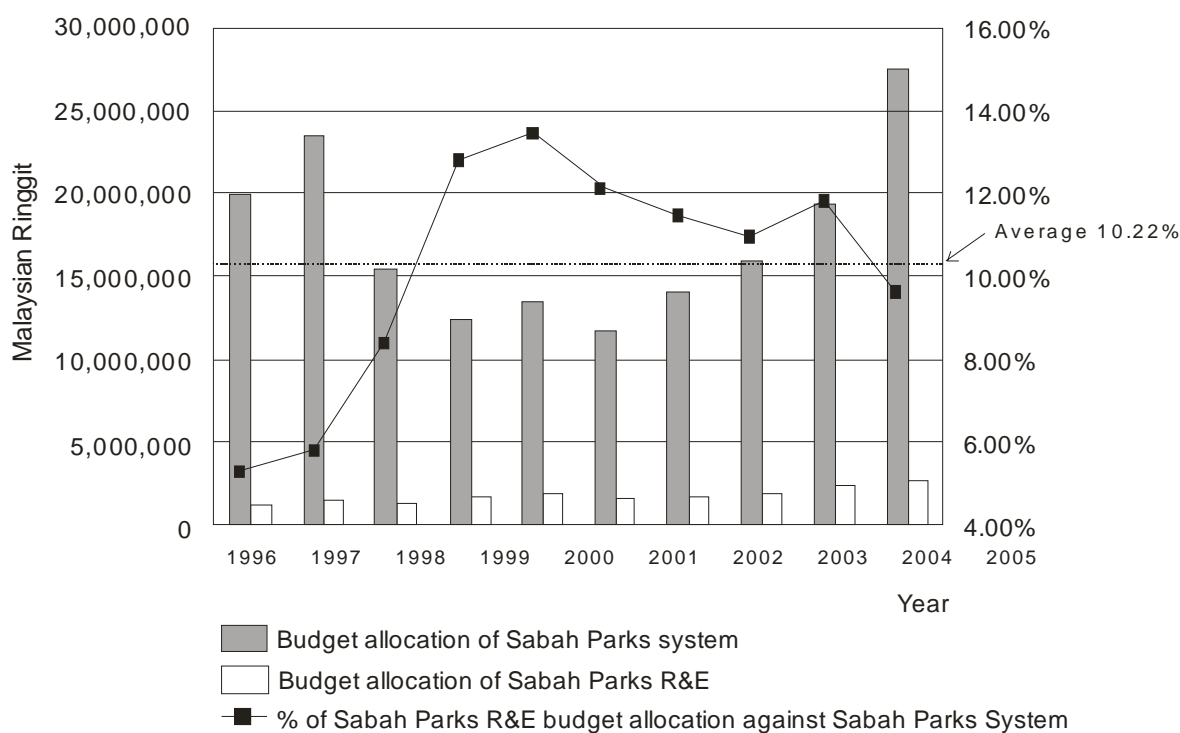


Figure 3.10 Budget allocation in the period 1996-2005 for the Sabah Parks R&E against Sabah Parks system. Source: Sabah Parks (2006)

The lack of emphasis on research activities is believed to be related to the late establishment of the R&E in Kinabalu Park and in the entire Sabah Parks system. Kinabalu Park was gazetted in 1964. Mount Kinabalu is a sacred mountain among the local indigenous peoples, the Dusuns. Due to reasons of respect, not many villagers lived close to the mountain. Nevertheless, the villagers relied on the forest products for their livelihood before the park was gazetted. Thus, the main task of Sabah Parks as a park authority in the early years after the establishment of Kinabalu Park was to protect the park from illegal poaching, hunting, logging and encroachment as well as to demarcate the park boundary. The interest in tourism development in the park due to its economic significance was also obvious. Infrastructure development took place in the early years and accommodation and restaurants facilities were provided to the visitors (Government of Sabah 1970).

The Ecology Section in the park was set up in 1980. In the early years of its establishment, the section mainly dealt with interpretation activities instead of conducting research activities. As reported in the Sabah Parks annual report 1982: ‘for

the year 1982, the Ecology Section was made up of the following staff: 1 park ecologist, 6 park naturalists, 1 driver, 2 laborers and 1 amah.... a new uniform of orange and dark brown was designed for the park naturalists to distinguish them from the ranger staff and to make them more noticeable to the public' (Government of Sabah 1982, p.13). In 1984, the section started a mobile unit for visiting the villages surrounding the park boundary. The objective of the unit was to hold dialogues with the villagers explaining the importance of conservation and the role of Sabah Parks and national parks, and also to help to solve the disputes due to encroachment and prohibition of illegal activities within the park boundary. It was not until 1994 that the division R&E in Kinabalu Park was set up as an extension of the Ecology Section.

The limited financial allocation to the Sabah Parks R&E restrained the division's ability to carry out research activities, and as a result, most of the research activities were initiated by external researchers. As commented on in the Sabah Parks Management and Development Master Plan for Sabah Parks (Coopers and Lybrand Management Consultant and Sun Chong and Wong 1992:v) 'the park is over-dependent on external researchers and inputs. This can be a disadvantage in its effort to obtain relevant scientific information'.

3.2.2 Budget allocation for staff training

Offering training to the staff in protected areas is important to ensure that the daily operation, management and maintenance duties are effectively handled by them. Moreover, staff training enhances the park management capacity and efficiency in the long term. The efforts to support conservation in a protected area become meaningless if they are not accompanied by appropriate staff training programs.

In Kinabalu Park, staff training has not been given adequate emphasis. A small part of the budget is allocated to enhance the staff capacity. Only 0.21% of the total budget in 2005 of the Kinabalu A&M was allocated to staff training, and the average in the period 1996-2005 was 0.19%. As for the Sabah Parks R&E, 1.09% of its total budget in 2005 was spent on staff training, compared to the 0.64% average in the period 1996-2005. Despite this relatively higher and increased proportion of the budget in this division compared to the A&M decision, the emphasis in the division is still mainly on hardware (infrastructure) instead of human resource development. Furthermore, there

was neither consistent emphasis on staff training in the period 1996-2005 (Figure 3.11) nor any indication showing that the implementation of the privatization program in the Sabah Parks system in 1998 has helped the organization to enhance staff training through better budget allocation to this area. In fact, in the period 1996-2005, the budget allocation to staff training within the entire Sabah Parks system never went beyond 0.7% of the total budget.

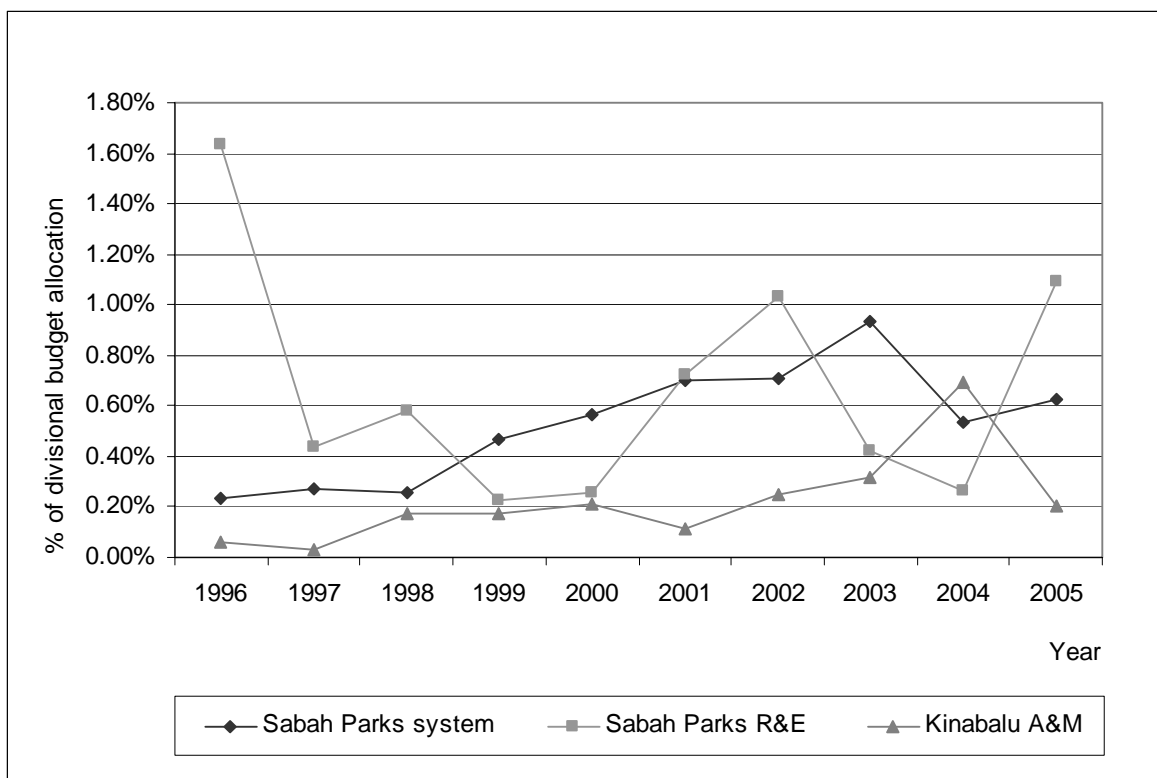


Figure 3.11 Divisional budget allocations for staff training in the period 1996-2005. Source: Sabah Parks (2006)

It is also revealed that the major part of the staff training budget within the entire Sabah Parks system was spent on the staff of the Sabah Parks HQ instead of on staff at site level, who are involved directly in the operation and management of the parks. In 2005, a total of RM 172,527 (0.63% of total budget) was allocated to staff training within the system. Of this amount, 47% was spent on the Sabah Parks HQ staff (RM 80,994.65), which is 4.8 times of that for the Kinabalu A&M (RM 16,852,27.00) and 2.8 times the sum allocated to Sabah Parks R&E (RM 29,010.67). A similar trend can be observed for the period 1996-2005 (Figure 3.12). At least 35% of the total annual budget for staff training within the entire system was spent on the staff of Sabah Parks

HQ throughout the 10-year period except in 1996 and 1998. In average, 50.4% of this budget was allocated to the staff of the Sabah Parks HQ.

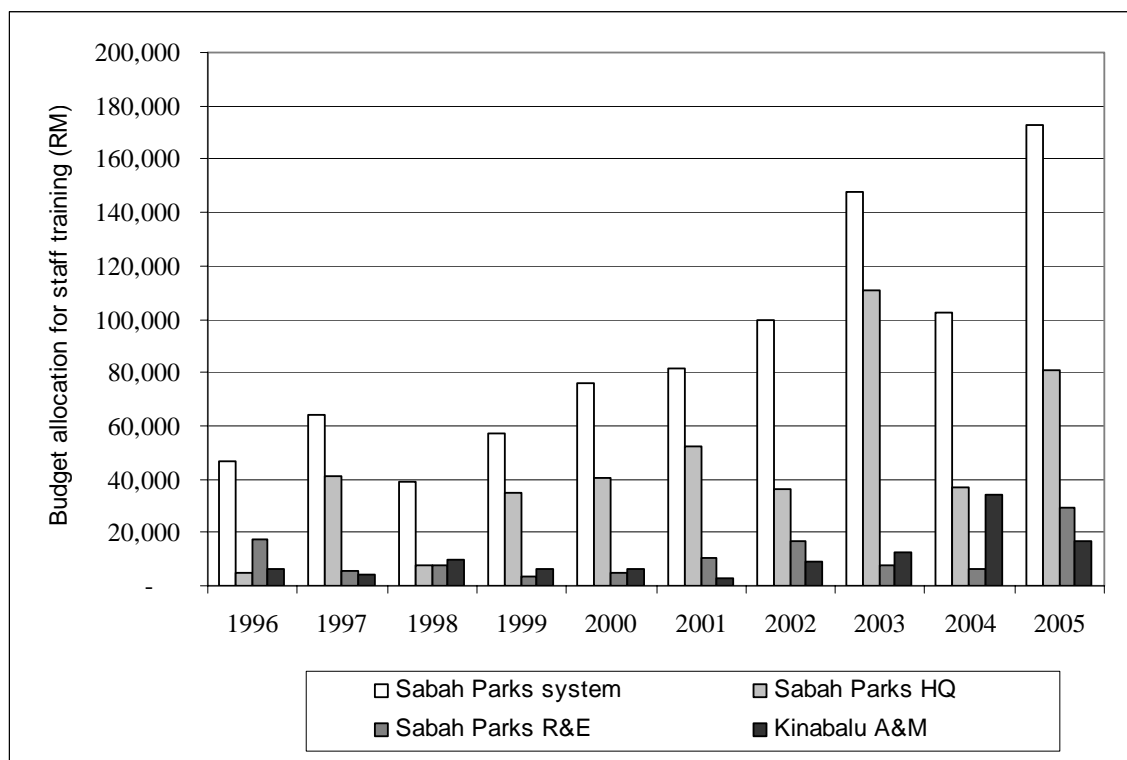


Figure 3.12 Budget allocations for staff training in the period 1996-2005 within Sabah Parks system. Source: Sabah Parks (2006)

3.3 Tourism impact management

3.3.1 Types of tourism impact management in Kinabalu Park

As stated by Page and Dowling (2002), the management of visitors constitutes the major part of natural resource management. The biodiversity richness in Kinabalu Park makes the management of tourism impacts in the park of paramount importance to ensure that the human disturbance to the fragile ecosystem is kept at a minimum. The management of tourism impacts in Kinabalu Park is based on three approaches, namely ‘managing the demand for visitation’, ‘managing the resources capabilities’ and ‘managing the use impact’ (Figure 3.13), focusing mainly on managing the tourism impact along the summit trail.

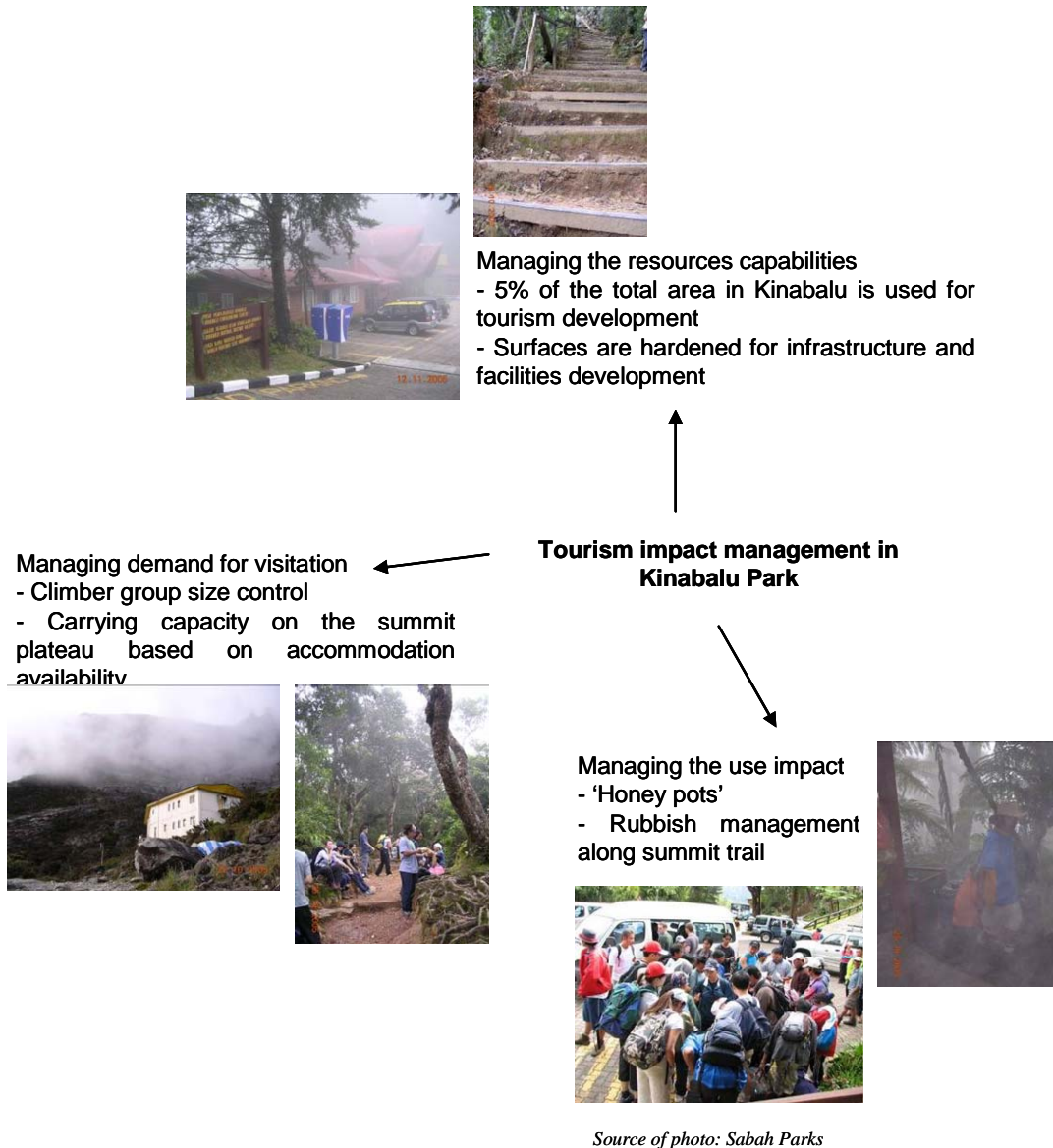


Figure 3.13 Tourism impact management in Kinabalu Park

In ‘managing demand for visitation’, the concept of carrying capacity is introduced in mountain climbing. The carrying capacity is limited to 138 climbers per day based on the accommodation space made available at Laban Rata. The carrying capacity was imposed following the recommendation made in the Management and Development Master Plan for Sabah Parks 1992. By limiting the number of climbers, the park management aims to keep the level of human disturbance of the ecosystem due to over crowding under control. At the same time, the group size is limited to a maximum of eight climbers per mountain guide. This is to allow each mountain guide to effectively observe and control the behavior of the climbers.

Based on the ‘managing the resources capabilities’ approach, less than 5% of the total area within the park is utilized for recreational and visitor development (Nais 1996). These areas have been provided with infrastructure and some areas have been hardened off for vehicular and pedestrian access to cater for the tourism activities.

In ‘managing the impact of use’, there are three ‘honey pots’ in Kinabalu Park, namely Park HQ, Mesilau Nature Resort and Poring Hot Spring. All activities and facilities are concentrated at these ‘honey pots’. In coping with the increasing inflow of park visitors, the Mesilau Nature Resort was developed and opened to the public in 1998 as an attempt to disperse the use in the park. Previously, tourism development was concentrated at only two ‘honey pots’. Concurrently, the Mesilau nature trail was created and opened for climbers to reduce the pressure on the Park HQ summit trail (Figure 3.14).

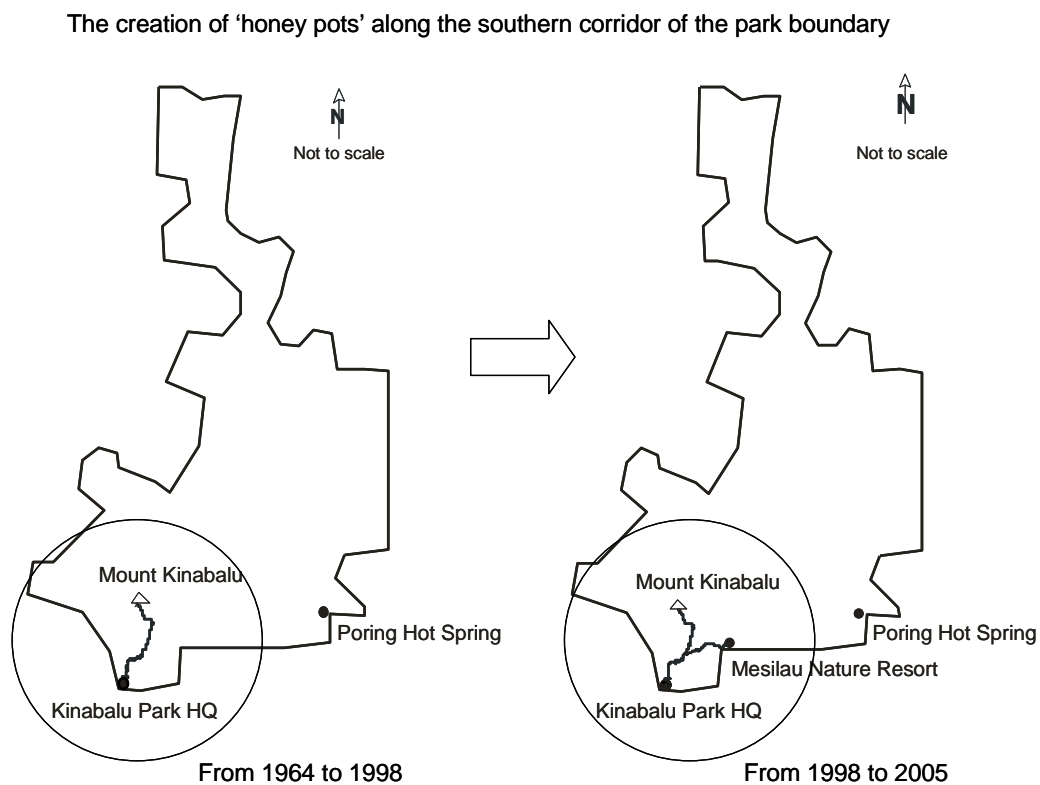


Figure 3.14 Evolution of tourism development in Kinabalu Park, 1964-2005

In addition, based on the ‘managing use impact’ approach, mountain guides were assigned to collect the rubbish from the rubbish bins along the summit trail during their mountain descent on a scheduled-routine basis. Based on a report written by Smith

(1978) on the request of the park manager, littering appeared to be a serious problem along the summit trail due to the increased number of climbers. As stated in the report: ‘rubbish tips near huts are unsightly and sometimes malodorous or overflowing and bits of litter line the track from the power station to the summit’ (Smith 1978, p.10). It was then that Sabah Parks obtained the cooperation of the mountain guides, who helped to collect the rubbish in return for the arrangement of the guides’ schedules by Sabah Parks. This strategy aimed to reduce the rubbish along the summit trail and the manpower required by the park management to remove it.

3.3.2 Monitoring system

Although several methods have been applied for managing the tourism impacts, no monitoring system exists in Kinabalu Park to evaluate the effectiveness of these methods in minimizing the human impacts on the park ecosystem. An interview held with a park officer from R&E revealed that the staff of the division are mostly engaged in research activities related to discovering new species and in conducting scientific expeditions in other parks in the Sabah Parks system. Inventories on flora species were carried out, but the existing manpower and funding resources do not allow the division to set up a time-series monitoring system to investigate the human impacts on the ecosystem. Interviews with personnel from the local research institutions and universities reveal the interest of these institutions in establishing long-term collaboration to conduct various research activities with Sabah Parks. Unfortunately, this potentiality is not explored by Sabah Parks.

A study conducted on the flora distribution on Fraser Hill, Malaysia, where the highland area experienced tourism development as early as the 1920s revealed that 13 species (1.6%) of the 834 plant species have become extinct, and 103 species (12.4%) were said to have a lower distribution and were categorized as threatened species (Kiew 1996). Relatively, the Park HQ summit trail in Kinabalu Park was opened to climbers as early as the 1960s, and within 40 years, the number of climbers increased from 829 in 1965 to 46,084 in 2005. As described by one of the staff from a NGO (2006): ‘there is no other mountain in the world that has received such a number of climbers at such a height’ than Kinabalu Park. Furthermore, the mountainous area of Kinabalu Park is home to many endemic flora species, which include a slipper orchid species, 4

Nepenthes species, 14 Ficus species, 5 varieties of other Ficus species (Wong and Phillipps 1996) and 9 Rhododendron species (Argent et al 1988). The human impacts on its mountain ecosystem will be devastating without effective control. Without a monitoring system, the park management is unable to determine the factors influencing the changes in the distribution of various flora species. Subsequently, no strategic solutions can be formulated to tackle the arising issues.

Based on a one-time study conducted on the distribution of the endemic *Nepenthes villosa* (pitcher plant) on the summit trails in Kinabalu Park, it was found that the species has an at least two-fold higher density and higher distribution on the Mesilau nature trail than on the Park HQ summit trail (Chang 2002). *Nepenthes villosa* belongs to the Nepenthes family and grows at an altitude of 2,400 m to 3,200 m (Clarke 1997) (Figure 3.15). Nepenthes are carnivorous plants known for their oddly shaped pitchers growing at the ends of their leaves. They are normally found in extreme-poor habitats such as peat swamps, mountain rainforests or degraded sites. Pitchers are developed as a method of trapping insects to dissolve them and digest their proteins, sugars, and nutrients into the plant. One of the assumptions made based on the findings of the study was closely related to the habitat disturbance due to the climbing activities, and the time factor is among the key aspects contributing to the difference in the distribution of *N. villosa* on these two trails. It is explained that the main human impact is the change of the ecosystem especially in terms of soil structure and soil density as well as the movement of insects, which are the main nutrient source for *N. villosa* (Chang 2002).

Without monitoring the human impacts, it is not certain that the lower distribution of *N. villosa* along Park HQ summit trail than along the Mesilau nature trail results mainly from climbing activities or from other factors. It is not known whether this species is threatened by extinction, which was the case with *N. lowii* along the summit trail. Informal conversations held with the park personnel who first worked as porters and then as mountain guides before joining the park authority revealed that *N. lowii* (endemic to Borneo Island) were abundant along the summit trail at 1,828 to 2,133 m a.s.l. in the 1970s and 1980s but disappeared after that. They now only occur in the deep forest. Moreover, it is also questionable whether the practice of tourism impact

management on the summit trail, i.e., controlling carrying capacity and group size, is effective in minimizing the human disturbance on the endemic species.



Figure 3.15 *Nepenthes villosa*, endemic to Kinabalu Park (left), is one of the attractions along the summit trail at 2,743 to 3,139 m a.s.l. (right)

Tourism development in Kinabalu Park has also introduced exotic species to the park. Dandelion (*Taraxacum officinale* Weber) is among the most significant ones. It is believed that the dandelion was brought to the park from Europe and North America through seeds that were stuck to the shoes of climbers (Lai 2002). This species started to grow widely at 2,400 m - 3,300 m a.s.l. on the summit trail in the early 1990s and has since then become a competitor to native and endemic species (Daily Express 2001a & 2001d) (Figure 3.16).

During an expedition carried out by the Sabah Society 'In the footsteps of Sir Huger Low' in 2001, the botanist Dr. Liew Hiong Bang revealed the presence of the dandelion, which shared the habitat with the endemic species of Kinabalu Park such as Low's Buttercups (*Ranunculus lowii*) and Kinabalu Eyebright (*Euhrasis bornensis*) at Laban Rata until the native species were invaded and replaced (Daily Express 2001b). Subsequently, manual removal work was carried out from time to time by the park authority. Unfortunately, this has been proved to be ineffective and the dandelion has been seen growing abundantly at Laban Rata, surrounding the park administration building and entrance area. No study has been carried out to investigate the long-term impacts of dandelion on the native species in Kinabalu Park.



Figure 3.16 Dandelion (*Taraxaxum officinale* Weber) (right), probably introduced into the park through tourism activities, along the summit trail, Kinabalu Park (left)

3.4 Conclusions

Based on the ‘supporting nature conservation’ criterion of sustainable tourism, the financial income generated from tourism activities and the financial budget allocation to the protected area should benefit its conservation activities. This chapter first reveals the significance of tourism in generating financial revenue in Kinabalu Park, then the distribution of the revenue in various areas within the park. Literally, it demonstrates how the park management explored the potential of private and toll goods and services (tourism activities and facilities) to generate economic returns to the park and distributed the financial revenue to provide public goods and services (nature conservation) in meeting the sustainable tourism criterion after the introduction of privatization to the park.

Privatization was introduced to Kinabalu Park in 1998 to manage the accommodation, restaurant and souvenir shop facilities. The program was justified by its objectives to reduce the burden of the public sector in the administrative, manpower and financial areas and to provide the improved services needed to meet market demand. Sabah Park was then expected to focus on its core activity—nature conservation. The increasing number of visitors indicated a high demand for tourism activities and facilities in Kinabalu Park. The financial statistics also showed that tourism had generated a substantial income for Kinabalu Park. In addition, the budget

allocation for the park was relatively high as compared to the global mean. These factors strongly supported Sabah Parks' conservation efforts in the park. Nevertheless, the breakdown of expenses of the Kinabalu A&M, the budget allocated for research and education activities and for staff training, as well as the absence of a monitoring system in the park reveal that Sabah Parks did not shift its focus to nature conservation. Instead, the breakdown of expenses of the Kinabalu A&M reveal that, in the period 1996-2005, the main part of the funds was used for tourism-related development.

One of the main objectives of privatization in Kinabalu Park was to reduce the manpower burden of Sabah Parks. One would assume that this reduction would contribute to the reduction of human resources expenses. However, the breakdown of expenses does not indicate that the privatization program has helped to reduce the manpower burden of Sabah Parks. In 2005, personal emolument was proportionally the third largest expenditure in the Kinabalu A&M. These expenses were directly influenced by the number of staff recruited in the division. The staff per 1000 km² in Kinabalu Park was much higher than the global mean (174 compared to 27). This has possibly thwarted the better financial investment into nature conservation such as establishing a monitoring system for key flora species and conducting various research activities in the park.

Research and education activities are a key component of conservation efforts. The budget allocated to the Sabah Parks R&E is still low, and in 2005 there was no indication of an increase in budget allocation. The central control of budget allocation of the division also indicates a lack of divisional integration in Kinabalu Park. This has not only negatively affected the financial distribution but also staff distribution within the park. This can be assumed because while the R&E in Kinabalu Park claimed that lack of manpower was the main reason for the absence of a monitoring system, the Kinabalu A&M had a staff much larger than the global mean. On the other hand, the possibility of long-term collaboration with the local research institutions has also not been fully explored by Sabah Parks.

The budget allocated to staff training in 2005 was low in both the Kinabalu A&M and the Sabah Parks R&E. Furthermore, of the total budget allocated to staff training in the period 1996-2005 in the Sabah Parks system, an average of more than 50% benefited the staff based at the head office rather than that at the site level. It was

also revealed that the R&E division focused mainly on infrastructural instead of human resource development. There was also no consistency in budget allocation for staff training and no clear indication of an increased budget to support staff training after the implementation of the privatization program.

As for tourism impact management, although Sabah Parks has introduced several tools— e.g., creating honey pots, dispersing use, managing carrying capacity—to control the human impacts in the park, there is no monitoring system to evaluate the long-term impacts of tourism on the ecosystem. Without a monitoring system, the effectiveness of the existing tools in managing tourism impacts will remain unknown.

In practice, the financial distribution in Kinabalu Park indicates two possible implications, for the Sabah Parks system in general and Kinabalu Park in particular. As Sabah Parks manages all parks in the state of Sabah, its emphasis on tourism-related development in Kinabalu Park means that there is less financial support for conservation activities in less popular parks within the system. Besides, since the main part of the budget of Kinabalu A&M was allocated to tourism development, funding for other areas was limited, e.g., no increased budget for staff training, and inconsistency in budget allocation for research activities and the establishment of a monitoring system for key flora species in Kinabalu Park, as this was claimed to be one of the key reasons for the absence of such a system.

Tourism activities and facilities such as mountain climbing, slide show, canopy walkway, accommodation and restaurants are some of the private goods and services offered in Kinabalu Park. They are provided to the park visitors at a fee (excludable) and once they are provided to an individual, they are no longer available to others at the same time (divisible). Visits to gardens and the park itself are examples of toll goods in Kinabalu Park. While the individuals who do not pay can be excluded from visiting the gardens or entering to the park, the gardens or park are still available to others once it has been provided to an individual since there is no limit to the number of visitors visiting the gardens or entering the park. The private and toll goods and services generate direct financial income for the park. In contrast, the nature conservation efforts, which include staff training, research activities and species monitoring system, are public goods and services in the park and require long-term investments. In Kinabalu Park, Sabah Parks did not indicate better financial emphasis into areas that

support nature conservation, and is still more interested in investing in private goods and services, i.e., tourism development, for which demand is expressed in terms of money: park visitors who are willing to pay or ‘profitable areas’.

Meanwhile, the introduction of privatization in Kinabalu Park also demonstrates how the program has created new burdens on the public sector rather than helping to reduce them. The inability of the private operator to pay the concession in the beginning of the privatization program had led to a high financial burden on Sabah Parks, which is also one of the justifications for the increase in park fees in 2002.

Linking these pieces of evidence with the theoretical implications of the research, Kinabalu Park demonstrates a case of ‘paradigm blindness’ where Sabah Parks was unable to adjust itself to the changing duties and responsibilities after privatization, i.e., to focus on the long-term investment in nature conservation activities to meet the principles of sustainable tourism.

In addition, the inability of the concession company to pay the fees to Sabah Parks reveals that the private operator was not capable of making a ‘profit’ from managing and operating the tourism facilities in Kinabalu Park during the early stages of privatization. This means that not the most competitive company in terms of economic and organizational resources in managing tourism facilities was selected. In light of the fact that there had been no open bidding during the selection of the concession company, one can say that ‘incomplete privatization’ has occurred in the case of Kinabalu Park. As political influence may lead to incomplete privatization, one may assume that the privatization of Kinabalu Park was also for political reasons, rather than for the purely economic reason of administrative efficiency.

4 BENEFITING LOCAL COMMUNITIES

Tourism development in protected areas provides job opportunities for the members of local communities. This must be accompanied by capacity building. Due to the nature of tourism, most of the tourism-related employment is services-oriented. Therefore, capacity building will improve the quality of services provided in a park, thereby sustaining stable employment and enhancing income among the members of local communities. This chapter first looks at the significance of Kinabalu Park in providing job opportunities to the local communities surrounding the park. It analyzes the role of tourism in providing stable employment and enhancing income among the members of the local communities. Capacity building, particularly types of training, is described.

4.1 Kinabalu Park as a catalyst in local economy

Kinabalu Park spans three districts in the state of Sabah, namely Kota Belud and Kota Marudu and Ranau. Due to the tourism development in Kinabalu Park, mainly at Park HQ, Poring Hot Spring and Mesilau Nature Resort, which are located along the southern boundary of the park, the socio-economic significance of tourism development lies in the Ranau district, especially in the Kundasang sub-district (Figure 4.1). The main sources of income of the population in Ranau are agriculture (75%), tourism (5%), government staff (5%) and business (20%). An interview with the district officer of Ranau (2006) revealed that tourism has been an important sector in the district, and that Kinabalu Park has been the catalyst for development in the district by diversifying the economic income of the local communities, so that they no longer solely rely on agricultural activities.

Although the statistics show that tourism accounted only for 5% of the sources of income within the district, business and agriculture activities in the district have significantly benefited by tourism development in Kinabalu Park (Arkitek Summaz 2001). For instance, in 2005, there were at least 21 accommodation operators, ranging from home stay, bed and breakfast to business hotels in the Kundasang area alone, depending on tourism development in Kinabalu Park (Sabah Tourism Promotion Board 2005). These have also contributed to the local economy through the restaurant business, souvenirs and agricultural products. Based on the 2000 census, the total

population in Ranau was 70,649, of which 52.4% was between 15 and 64 years old and considered as productive workforce. Nearly 2.0% of the productive workforce benefited from the jobs made available within Kinabalu Park (Arkitek Summaz 2001).

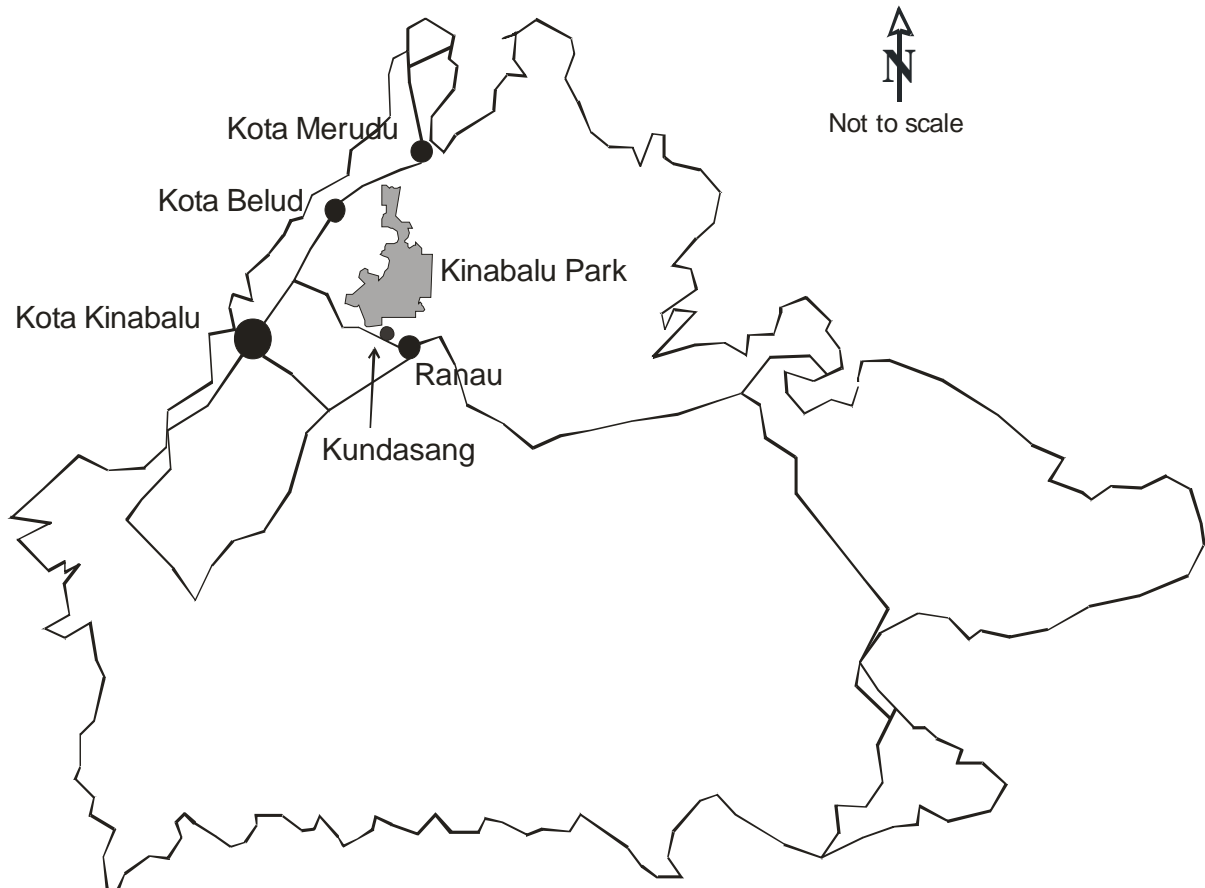


Figure 4.1 Location of Kinabalu Park in relation to the nearby district towns.
Source: Sabah Parks (2006)

4.2 Job opportunities in Kinabalu Park

The establishment of Kinabalu Park provides job opportunities for the local communities, both directly and indirectly related to tourism development. This section explores the significance of Kinabalu Park in providing job and income earning opportunities to local communities.

4.2.1 Sabah Parks

Sabah Parks is a statutory body established under the Sabah state Ministry of Tourism, Culture and Environment. After the National Parks Ordinance No. 5 came into force in 1962, Kinabalu Park was established in 1964. At the state level, the park is

administered by the Sabah Parks Board of Trustees, represented by 10 board members. The management is headed by the director, who is supported by assistant directors in four key areas of administration namely 1) administration, financial and development, 2) operational and enforcement, 3) research and education, and 4) public relation and private operation monitoring.

At the park level, Kinabalu Park is managed by a park warden assisted by park rangers and a number of field personnel. While the park warden is responsible for the general administration and management (A&M) of Kinabalu Park and reports to the operational and enforcement divisional head based at Sabah Parks HQ, the research officer of the research and education (R&E) division is responsible for all the research-related activities within the park and reports to the divisional head at Sabah Parks HQ. The R&E division in Kinabalu Park consists of four units namely the education and interpretation unit, botany unit, zoology unit and entomology unit.



Figure 4.2 Sabah Parks administration building in Kinabalu Park. The World Heritage Site citations are inscribed on the sandstone monument in front of the building.

In 2005, a total of 202 staff was recruited by Sabah Parks in Kinabalu Park, of which 131 persons were based in the A&M division while the remaining 71 reported to the R&E division. This included 38 daily paid staff (temporary staff) based in the A&M

and 44 in the R&E division. As Sabah Parks is the statutory body managing all parks within the state of Sabah, its staff is recruited on a transferable basis within the park system. Most of the vacancies in Sabah Parks are filled through ‘word of mouth’ among the staff that live in the villages surrounding the park, while managerial positions are advertised in major newspapers. Interviews are deemed necessary for most of the positions. In general, the confidence level about job security and income stability is high among the Sabah Parks’ staff, both permanent and daily paid. The daily paid staff is paid approximately RM 28 per day. This is the minimum wage paid by Sabah Parks.

4.2.2 Sutera Sanctuary Lodges

Sutera Sanctuary Lodges (SSL) is the private operator managing the accommodation facilities, restaurants and souvenir shops in Kinabalu Park. It is managed by the major property player in the state of Sabah, Sutera Harbor Resort based in Kota Kinabalu. Its operations within the Sabah Parks system cover Park HQ, Mesilau Nature Resort, Poring Hot Spring, Laban Rata and Pulau Manukan of Tunku Abdul Rahman Park. Staff is transferable within these stations. Starting its operation in 2002, SSL is the third company under the privatization program since 1998, after Kinabalu Gold Resort (KGR) (1998-1999) and Kinabalu Nature Resort (KNR) (2000-2002). When the privatization program was first established, the Sabah Parks staff formally working in the accommodation sector were offered options to keep their position under the new company set up (KGR) or to be reshuffled to other units within Sabah Parks. Approximately 50 staff members were working in the accommodation area before the privatization program. Of these, 20 were taken over by KGR while the others were reshuffled into various units within the Sabah Parks system.



Figure 4.3 Reception area of SSL at Park HQ, Kinabalu Park

In 2005, SSL employed a total of 261 staff in Kinabalu Park. In Park HQ, management staff comprised 12 persons, permanent staff 88 persons and daily paid staff 30 persons, making it the largest station. This was followed by Poring Hot Spring with 38 permanent staff and 11 daily paid staff. Mesilau Nature Resort had a management staff consisting of 2 persons, a permanent staff of 29, and a daily paid and part time staff of 13, while Laban Rata had 5 management staff and 33 permanent staff. Apart from the management staff, most of the staff originated from villages surrounding Kinabalu Park. Similar to the Sabah Parks' recruitment procedure, the recruitment of staff in SSL is carried out through newspaper advertisements as well as through recommendation by the employees, who live in the local communities.

The private operator provided a large number of jobs for the members of the local communities. However, based on the questionnaire survey, at least 74% of the staff expressed dissatisfaction with their job. The dissatisfaction was related to their concern over job security and income earning stability. At least 62.8% expressed low salary as the reason for dissatisfaction. Of this, 39% of the respondents had not received a wage increase since they joined the company (30% had joined in 2003). Of the respondents, 41.2% were of the opinion that their job was not stable and that they might lose their job anytime, as they did not get their salary on time. Most of the staff earned

around RM 300 - 400 monthly, which was much lower than the wage earned by the temporary/daily-paid staff working with Sabah Parks amounting to approximately RM 600-700 per month (including allowances). In general, for the same position, the salary earned in the private sector is much higher than that in the public sector. Given this, many staff members in SSL were checking with Sabah Parks' staff to get the latest news about jobs available in the organization.

4.2.3 Mountain guides and porters

Working as mountain guides and porters are the tourism-related jobs in Kinabalu Park that directly involve the local communities. According to the Park Enactment No. 10 of 2002, it is compulsory for all mountain climbers to be accompanied by a mountain guide. The history of hiring mountain guides can be traced back to the first recorded climb by Sir Hugh Low in 1851 where Gunting Lagadan, who originated from Bundu Tuhan and accompanied the climb, became the first recorded guide in the park. When Kinabalu Park was gazetted in 1964, there was an informal agreement between Sabah Parks and the local communities that the park would provide job opportunities to the local people, especially as mountain guides and porters, in view of the potential of Kinabalu Park in attracting climbers.

The involvement of local communities in the tourism sector helps to reduce possible conflicts and enhance the protection of parks (Sharma 1990; Jacobson and Robles 1992; WWF UK 1992; Harper 1997; Hall and McArthur 1998; Stoep 2000). As stated by Nais (1996), the relationship between the park and the local communities was genial and the differences about boundaries and encroachment solved through persuasion rather than confrontation. Informal interviews with members from local communities disclosed that the efforts made by Sabah Parks in creating job opportunities within the park have been well received and appreciated. Hence, it is believed that the provision of job opportunities in Kinabalu Park has, to a certain extent, smoothed the relationship between the park authority and the local communities.

In the early years, mountain guides and porters were recruited from the nearby villages, mainly from Kampung Kiau and Bundu Tuhan. In 2005, the mountain guides were also recruited from Kinasaraban, Kundasang and Mesilau due to an increasing demand (Figure 4.4). The number of guides saw a sharp increase after the establishment

of Kinabalu Park from 20 mountain guides in 1978 to 171 in 2005. Working as mountain guides in Kinabalu Park provides the local people with an alternative income. The guides working in the park often combine their guiding job with their traditional farming activities such as planting hill rice or temperate vegetables (Jacobson 1987b). The survey results reveal that 39.2% of the guides were not full-time.

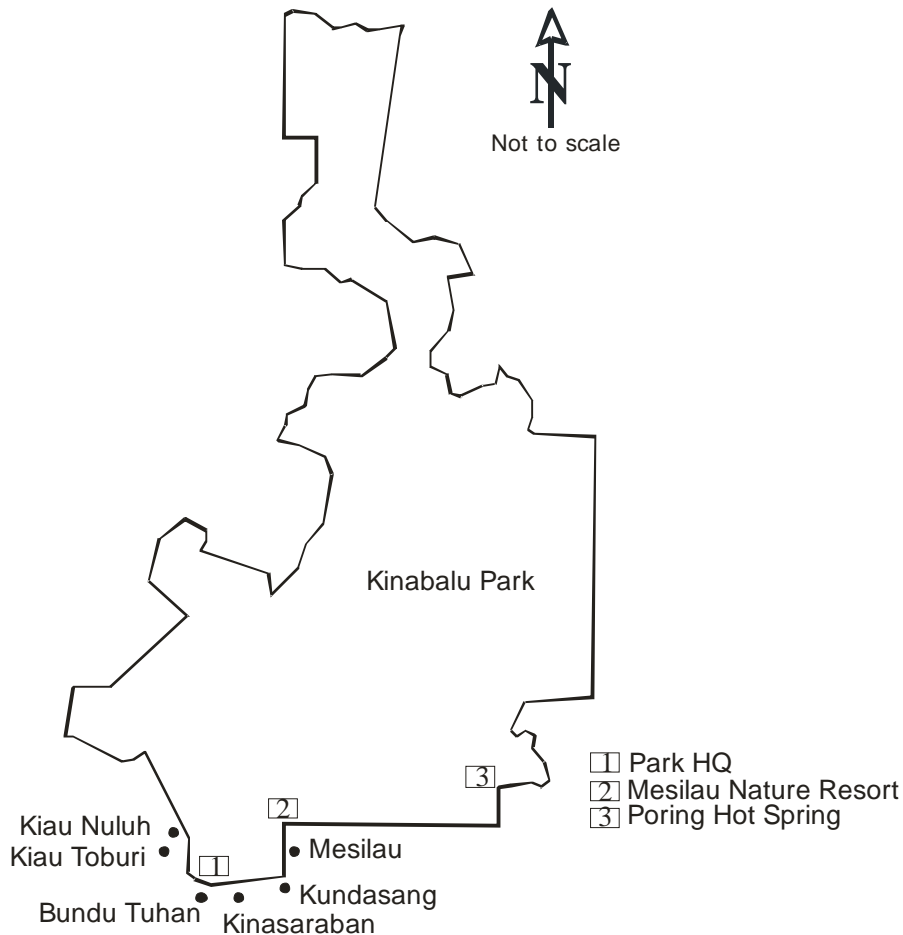


Figure 4.4 Villages from where mountain guides of Kinabalu Park are hired. Source: Sabah Parks (2006)

Recruitment of the mountain guides has been arranged by the Sabah Parks' mountain guide committee since 2002. This committee also arranges the guiding services for the climbers. In the 1990s, letters of appointment were issued by Sabah Parks to the mountain guides. Nevertheless, climbers could also hire mountain guides who were not registered with Sabah Parks.



Figure 4.5 Mountain guides in Kinabalu Park briefing the climbers before the ascent. Source: Sabah Parks (2006)

It was not until 2002 that the local people had to apply for the renewable license issued annually by Sabah Parks if they wanted to work as a mountain guide in the park. The local communities are informed by the annual application notice distributed by Sabah Parks to the villages and also through verbal communication. The qualification age is between 18 and 55 years old. The license is renewed at a charge of RM 20. Interviews are conducted with all new applicants, while both new applicants and existing guides seeking for license renewal have to take part in an examination. Until 2006, Sabah Parks accepted only male applicants. However, females were given consideration on a trial basis starting 2007. Applicants' knowledge about the mountain conditions and topography, their health condition and performance during previous services are among the key selection criteria. Applicants must also obtain a first aid certificate. First aid training, medical check up and fitness test were made compulsory in 2002, concurrent with the setting up of the mountain guide committee in Kinabalu Park.

The work schedule of mountain guides is arranged by the Sabah Parks' mountain guide committee. The schedule allocates a total of 45 mountain guides that are to be on duty every day. Sabah Parks also acts on behalf of the mountain guides to collect the fees from the climbers (Table 4.1).

Table 4.1 Mountain guide fee

Starting and ending points (Figure 4.6)	Charge per climber per trip
Timpohon Gate Park HQ / Peak / Timpohon Gate Park HQ	1-3 Climbers – RM 70.00 4-6 Climbers – RM 74.00 7-8 Climbers – RM 80.00
Timpohon Gate Park HQ / Peak / Tambang Gate Mesilau nature trail	1-3 Climbers – RM 80.00 4-6 Climbers – RM 86.00 7-8 Climbers – RM 92.00
Tambang Gate Mesilau nature trail / Peak / Tambang Gate Mesilau nature trail	1-3 Climbers – RM 84.00 4-6 Climbers – RM 90.00 7-8 Climbers – RM 100.00

Source: Sabah Parks (2006)

Based on the work schedule, each guide is estimated to carry out between 6 and 10 mountain ascents per month. Based on this estimation, each guide earns an average wages of RM 500 - 800 per month. This excludes tips received from the climbers. Informal conversations with several experienced guides in the park revealed that most of the guides earned more than RM 1,000 per month, especially during the high seasons from March to September.

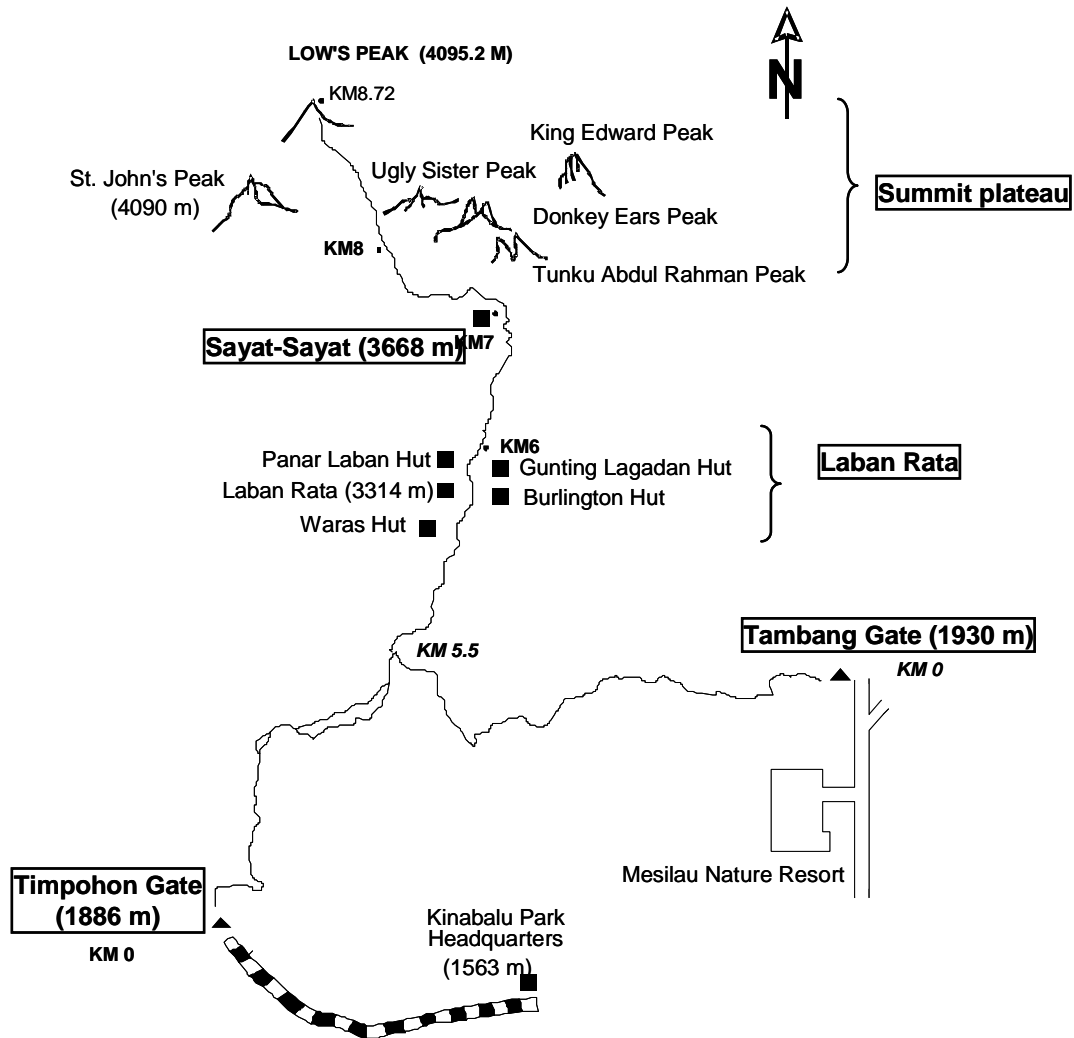
The results of the mountain guide questionnaire survey reveal that all guides recognized the significance of tourism in providing jobs, especially as mountain guides. In addition, the compulsory hire of mountain guides as provided under the Park Ordinance 2000 has also enhanced job stability and thus income despite the seasonal fluctuation in the number of visitor arrivals. Apart from meeting the growing demand for climbers, the increase in the number of mountain guides also aims to benefit more members of the local communities. Nevertheless, the number of guides in 2005 led to worries among the mountain guides that increases would eventually reduce their income level; 47.7% of the respondents were of the opinion that the number of guides was sufficient, while 47.7% said it was too high.

In terms of income, 90.8% of the respondents were not satisfied with their wages. Interviews with Sabah Parks' mountain guide committee revealed that several

requests had been made by the mountain guides for an increase in wages. However, these were rejected on the basis that the existing wage level was on par with the quality of the service offered by the mountain guides. It is understood that this rate took effect in 2001. The wage in the 1990s was RM 60 per 2-day/1-night trip, RM 50 in the 1980s and RM 30 in the 1970s. Dissatisfaction was also shown by the respondents in terms of climber group-size arrangement. At least 42% were of the opinion that the ideal group size per guide was 5 persons instead of the existing 8, because it was difficult for them to keep an eye on 8 climbers. Moreover, a smaller group size would increase the frequency of climbing trips, thereby indirectly increasing the monthly income.

Similar to the mountain guides, all porters originated from the villages surrounding Kinabalu Park. In 2005, there were approximately 50 porters working in the park. No recruitment procedure was applied to porters, and it was not compulsory for climbers to hire a porter. During school holidays, the number of porters increased, as many teenagers from the local communities worked as porters in the park. The porters provide services to the climbers and helped SSL to carry goods to the restaurant based at Laban Rata. Sabah Parks is not involved in the arrangement of porters for climbers, and porters approach SSL directly to offer their services on a daily 'first-come-first-serve' basis. However, a contract is given to a porter to carry the gas tank to Laban Rata.

In terms of wages, the porters charge the climbers a fixed rate of RM 33 / day for a maximum weight of 10 kg; larger weights are charged accordingly. This rate took effect in 2004 (Figure 4.6). The porters collect their wages directly from climbers without going through Sabah Parks.



Starting point	Destination			Ending point
	Laban Rata	Sayat-sayat	Summit	
Timpohon Gate	33 (30)	40 (36)	40 (40)	Timpohon Gate
Timpohon Gate	38 (35)	44 (40)	50 (45)	Tambang Gate
Tambang Gate	44 (-)	50 (-)	55 (-)	Tambang Gate
Tambang Gate	38 (35)	44 (40)	50 (45)	Timpohon Gate

Figure 4.6 Charges for porter services for climbers in Kinabalu Park. Source: Sabah Parks (2006)

On the other hand, SSL paid RM 2 per kg. According to the experienced porters, during the early days when the restaurant at Laban Rata was first opened, the porters were paid RM 3 per kg (1980s), before the restaurant was taken over by KOKTAS, who paid the porters RM 2.50 per kg (1988-1998).



Figure 4.7 Porters on the summit trail of Kinabalu Park

Results of the porter questionnaire survey reveal dissatisfactions among the porters both in terms of job stability and income. More than 57% were not working as full-time porters for two reasons. Firstly, most of them have agriculture land to work on, and secondly, the porter service in Kinabalu Park is not compulsory and not every climber wants to have this service, which incurs more costs. The porters stated that job inconsistency was one of the key reasons why they could not solely depend on this job for a living. Of the respondents, 62% felt that the number of porters was too high and uncontrollable and led to high competition among the porters, sometimes involving physical fights. The absence of a party responsible for the arrangement of porter services means that anyone can provide the service, which threatens the livelihood of the porters, especially those working on a full-time basis. Besides, the tendency of some mountain guides to secretly provide porter services to the climbers also has a negative effect on their income. Furthermore, the porters also experience unfair arrangements where some mountain guides choose porters based on personal preference and not on the ‘first-come-first-serve’ basis.

Despite job inconsistency, working for climbers was preferred by the porters, mainly due to the quick payment. In normal circumstances, the climbers pay the porter before ascending or right after descending from the mountain, while SSL delay the payment, sometimes up to three months. In 2005, 64% of the porters worked for

climbers and 12% for SSL, while 24% worked for both climbers and SSL. Moreover, the rate paid by the climbers (RM 33 / day for a maximum of 10 kg) was much higher than that paid by SSL (RM 2 per kg) and in most cases, climbers' bags are lighter than the goods of SSL, which normally exceed 20 kg.

In terms of wages, most of the porters (52.3%) earned approximately RM 300 - 400 with an average workload of 6.5 services a month. While 88% of the respondents were dissatisfied with the wages paid by the climbers, none (0%) of the respondents were satisfied with the rate paid by SSL. The main reason was that the payment did not tally with the hard physical work involved. In particular, the rate paid by the private sector decreased in 1998 and had not been increased since then.

4.2.4 Other jobs

Apart from providing jobs in Sabah Parks and SSL, tourism development in Kinabalu Park led to the establishment of KOKTAS in 1987, which also provides job opportunities for local communities. KOKTAS or Koperasi Serbaguna Kakitangan Taman-Taman Sabah (Multipurpose Cooperative of Sabah Parks staff) was set up towards the end of 1986. This was initiated by a few members of the staff of Sabah Parks based in the park, who had foreseen the potential of making profits in the restaurant business following the development of tourism in the park and at the same time of increasing the income among the park staff (KOKTAS 1994).



Figure 4.8 KOKTAS provides the transportation services in Kinabalu Park. Source: Sabah Parks (2006)

In 2005, KOKTAS had a total of 285 members; all were staff of the Sabah Parks system. KOKTAS employed 14 persons in Kinabalu Park, and its overall operation was supported by 45. KOKTAS was selected as the best cooperative body in the state of Sabah and among the best in Malaysia due to its reputation and success in business operation in the early 1990s. Its business performance peaked in 1991 (Figure 4.9). However, it stagnated and subsequently declined following the introduction of the privatization program in 1998, when a private operator took over the main profit-making section of KOKTAS, i.e., restaurants and souvenir shops.

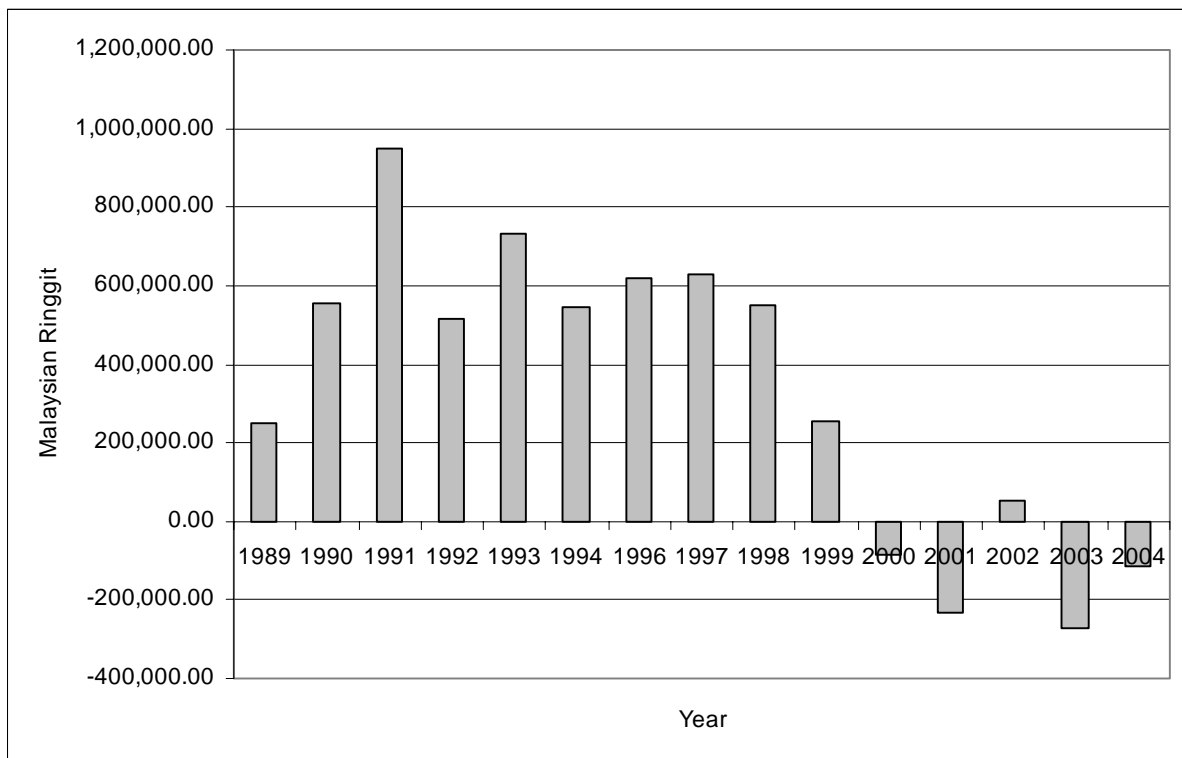


Figure 4.9 Profit and loss balance of KOKTAS in the period 1989-2004. Source: KOKTAS (1989-2004)

Apart from KOKTAS, in 2005 approximately 25 individual car operators provided transportation facilities between stations in Kinabalu Park as well as from the park reception to Timpohon Gate. Both the individual car operators and KOKTAS charged the same rate, i.e., RM 2.50 per climber. The individual operators were seen by KOKTAS as competitors. Sabah Parks did not impose a levy on their operation in the park.

4.3 Capacity building

Training is an important determinant in the process of capacity building. Capacity building is a continuous process and is time consuming in view of the fact that local communities are not trained in tourism-related businesses. In national parks, the training provided for members of the local communities must involve both technical and communication skills enhancement, especially in research-related areas and for staff that has direct contact with visitors for educational purposes. This section describes the training provided in Kinabalu Park and the factors influencing the provision of the training programs. Sabah Parks provides training programs for its staff as well as for mountain guides, while SSL provides in-house training for all new recruitments.

4.3.1 Sabah Parks staff

Generally, the staff training program for the staff of Sabah Parks based in Kinabalu Park is framed within the annual training plan of the Sabah Parks system and is based on the annual budget allocation. In a larger context, the training program is embedded within the staff recruitment framework at the federal level. A financial budget for training is only allocated for permanent and contracted staff. Daily paid/temporary staff are not eligible for training. The head of each division makes recommendations to the Sabah Parks HQ for training to be attended by selected staff in the division. The training officer will consider the recommendations subject to the annual budget allocation and obtain the approval from the management.

In 2005, 28% of the staff of the A&M division and 58% of the R&E division were daily paid (temporary) staff. They were not eligible for training. To overcome this problem, Sabah Parks initiated several in-house training courses for its daily paid staff. The greatest constraint is that Kinabalu Park is a pioneer park within the system. The in-house program has reached a bottle neck in terms of knowledge and skill transfer. This is especially true for the staff in the R&E division, because the research activities of the Sabah Parks system are mainly based at Kinabalu Park.

The high percentage of daily paid staff in the R&E division means that limited training is provided and thus, the research capacity in the division is low. Specifically, nearly 70% of the staff in the interpretative and education unit involved in guiding were daily paid staff. The staff in this unit plays a vital role as interpreters in the park and has

frequent contact with visitors during the daily guided nature walk. New staff participated in a two-week intensive training. The training is based on 'learning through participation' in the existing guiding program, which is attended by the senior staff of the unit. The new employees are expected to learn the trade as they go along. There is no English proficiency course for these nature guides despite the fact that the guided nature walk is conducted in English. Given this, some guides mentioned difficulties in communicating with the foreign visitors.

Apart from the external and in-house training, the collaborations between Sabah Parks and external research institutions, e.g., Natural History Museum of Chicago and the Borneo Biodiversity and Ecosystem Conservation (BBEC) program sponsored by Japan International Cooperation Agency (JICA), have provided some training opportunities for the staff in Kinabalu Park, mainly in the field of conservation (Mohamed and Kusano 2002; Mustafa and Kusano 2003).

4.3.2 Staff of Sutera Sanctuary Lodges

In-house training is provided by SSL to all new recruitments in the first three months, i.e., during the probation period. The training program is supported by the management company, Sutera Harbor Resorts, based in Kota Kinabalu. The program focuses mainly on enhancing the communication skills among the staff due to the nature of its business, especially in the case of the front desk staff. Technical training is provided for staff working in the housekeeping, catering, and laundry services.

4.3.3 Mountain guides

Sabah Parks organizes a training program for the mountain guides in the form of a workshop. This intensive in-house workshop is arranged by the mountain guide committee in the park and takes place once a year. It is compulsory for all mountain guides. Each guide is charged RM 30 for the workshop. The training covers a general introduction to the park and Sabah Parks, important rules and regulations, first aid training and practice, emergency rescue and injuries handling on the summit trail, and basic public relation skills. However, the emphasis of the training is mainly on safety procedures.



Figure 4.10 First aid as part of Sabah Parks annual training program for mountain guides

In the mid 1990s, classes were voluntarily conducted by senior staff of Sabah Parks to educate the mountain guides about the flora and fauna in the park. However, the response was poor and the program was eventually stopped after a few months.

In 1995, the Federal Ministry of Culture, Arts and Tourism (known as Ministry of Tourism since 2004) introduced a special training program for mountain guides in Kinabalu Park, known as the Localized Tourist Guide course. The program lasted less than two years and was terminated in 1996 due to financial constraints faced by the ministry. It was intended to improve the quality of services offered by the mountain guides, as the mountain guides in Kinabalu Park are not bound by the general qualification requirements imposed by the ministry on tourist guides as elsewhere in Malaysia.

Under the provision of Part IV Section 21 and 22 of the Tourism Industry Act 1992 (Act 482), the Ministry of Tourism issues tourist guide licenses to tourist guides (Legal Research Board 2003). The three types of license are yellow, blue and green. While those guides with a yellow badge can conduct tours all over the country, those with a blue badge are allowed to conduct city tours, and those with a green badge work at nature-based tourism destinations confined to specific regions. Sabah, for instance, is divided into west coast and east coast based on the tourism region specification. Depending on the type of badge, attending courses and examinations are a must where

communication skills and language proficiency are among the main requirements. In 1995, nearly 100 mountain guides registered with the Ministry of Tourism as licensed tourist guides trained in the courses conducted by the ministry in Kinabalu Park. However, the number then dropped. In 2005, there were about 45 registered guides. After the withdrawal of the Ministry of Tourism, Sabah Parks initiated the training for mountain guides through establishment of the mountain guide committee.

The questionnaire survey shows that more than 58% of the mountain guides could not speak English and more than 45% had communication problems with the climbers. Although a training program is provided by Sabah Parks, the survey results indicate that the existing training may not be sufficient for providing a high quality guiding service to the climbers, especially to foreign climbers, as communication involves a substantial information transfer.

Meanwhile, 64% of the respondents disagreed with the idea that their wage rate was to be based on experience and qualifications. Not only the less experienced guides and those who could not speak English were against this idea, but also the experienced guides. This was because they worried that many climbers would prefer to hire the less experienced/qualified guides when considering the cost involved, and that this would eventually reduce their job frequency and income.

The survey results also reveal the wish of the mountain guides to participate in the work schedule planning, which is solely managed by Sabah Parks; 90.1% of the respondents were satisfied with the schedule. Nevertheless, 48.4% felt that the combination of Sabah Parks and mountain guides was the best option for managing these schedules and all other matters related to guiding services in Kinabalu Park. Another 33.3% wished Sabah Parks to take the lead, while 13.7% preferred the schedule to be managed solely by mountain guides. This indicates that apart from guiding service training, further training is also required to increase the participation of the mountain guides in the management of their services, if Sabah Parks intends to strengthen capacity building among the members of the local communities.

4.3.4 Porters

As revealed by the respondents during the questionnaire survey, training is not necessary to become a porter but rather physical stamina. Thus, many school teenagers

work as porters during the school holidays, which had led to competition with the full-time porters working in the park. Moreover, the low wages paid by SSL and competition from mountain guides have led to an arising awareness among the porters that they should organize themselves and manage their services themselves to improve their situation. The survey results reveal that 93% of the respondents wished to set up a committee to arrange and manage their duties. It was understood that the idea was brought up several times by the porters, but not many porters attended the discussions, so the plan was aborted.

4.4 Conclusions

The socio-economic principles of sustainable tourism require tourism to benefit the local communities by providing both stable employment and income earning opportunities, which must be accompanied by capacity building. Besides, it must ensure the fair distribution of socio-economic benefits among the stakeholders.

In the case of Kinabalu Park, apart from acting as a catalyst to the local economy development in the Ranau district, especially in the Kundasang area, tourism has created substantial job opportunities within the park itself, i.e., working with Sabah Parks, KOKTAS and SSL. In particular, the introduction of the privatization program led to an increase in staff numbers from 50 to 261 persons within a time span of 7 years (1998-2005). Furthermore, the local communities have also directly benefited through the creation of jobs for mountain guides and porters.

Unfortunately, some of these jobs can only be positively measured in terms of number but not quality, i.e., job security and income stability. The feedback reveals that job satisfaction among the staff of Sabah Parks was much higher than among the staff of SSL (private sector), who were earning less than the staff of Sabah Parks (governmental agency). The fear of losing their job is the main worry of the staff working for SSL. Furthermore, the staff also faced problems of delayed salary payment and were not offered a wage increase. As for the mountain guides and porters, they were not satisfied with the wages earned. The mountain guides claimed that their hard work deserved higher pay, but Sabah Parks was of the opinion that the quality of the services provided did not deserve wage increases.

In terms of capacity building, the staff training program, which is bound within the federal staff recruitment framework, limits the opportunities of the staff of Sabah Parks to receive adequate training. In particular, the R&E division was negatively affected due to the large number of daily-paid staff in the division. The internal staff training program issue of Sabah Parks presents a case where the public sector was bogged down by its bureaucratic structure in its efforts to enhance the capacity building among the staff. In contrast, SSL staff received in-house training directly supported by the management company, which is a well-known player in the service business based in Kota Kinabalu.

Sabah Parks also arranged the training program for the mountain guides. However, the survey results reveal that the training was not sufficient to cater for the tourism demand in Kinabalu Park, especially in terms of communication ability and English proficiency. The misconception that wages should be based on experience and qualifications such as English proficiency also indicates a necessity for better arrangements, such as the presence of incentives for motivating the mountain guides to improve their guiding quality. Meanwhile, the rising awareness among the mountain guides and porters of the necessity for self-organization in Kinabalu Park also reveals the need to strengthen their capacity building.

The park management also failed to ensure a fair distribution of socio-economic benefits among its stakeholders. The porters' standard of living had suffered from a continuous decrease in wages since the 1980s, especially after the privatization program was introduced. Similarly, the operation of KOKTAS was also negatively affected by the privatization program. This example also reveals that Sabah Parks is unable to protect the stakeholders' interest at large.

The above empirical evidence discloses the issue of public sector in providing private and public services and illuminates the 'profit-driven' nature of the private sector in Kinabalu Park. Porter and mountain guiding services are some of the job opportunities offered in Kinabalu Park in fulfilling the park's society objective. They are the private services provided by the members of local communities. By providing services to SSL and also climbers at a fee, a porter or a mountain guide is no longer able to provide his or her service to others when he or she has already been hired.

Capacity building provided to the local communities such as training to enhance their communication skills, language proficiency, and management skills are regarded as public services. In order to ensure the mountain guides are competitive on the market, they need to be provided with adequate skills in communication and language proficiency so that they can communicate well and deliver their knowledge to the climbers. Equipped with these skills, a mountain guide is able to offer his service at the optimum level and can expect higher income. On the other hand, porters do not require such training to carry out their duty. Nevertheless, they must be equipped with management skills in order to organize themselves so that they are capable of protecting their interests in the market.

The literature review indicates the essential role played by the public sector to provide these public services to benefit the members of local communities. As the members of local communities are not traditionally equipped with these skills, the public sector must assist them to ensure they are competent to provide their service. Unfortunately, mountain guides in Kinabalu Park were not satisfied with their income level and felt that they were lacking in communication skills and foreign language proficiency. Besides, while the mountain guides were not satisfied with the wages earned, Sabah Parks was of the opinion that their service quality did not deserve higher pay. Porters were unable to negotiate with SSL in order to enhance their income level. Sabah Parks overlooked the rising awareness among the mountain guides and porters to get organized. This series of events that took place in Kinabalu Park do not provide convincing evidence to show that Sabah Parks has made a sufficient attempt to benefit the mountain guides and porters in capacity building. The events also indicate that Sabah Parks overlooked the symbiotic interaction between the public services (trainings) and private services (mountain guiding and porter services) where the mutual benefits must be initiated through enhancing the public services. Without this understanding, the effort to benefit the local communities was hampered.

As for SSL, the insecurity and dissatisfaction of jobs felt among its staff and the reduced living standard experienced by the porters are typical examples that demonstrate the private sector is less willing to provide public services. This is because providing job security and satisfaction among the staff is not producing a 'profit'. Instead, the private sector gains profit at the expense of the decreased income level

among the porters and the private workers' wages. The significant number of job opportunities provided to the local communities by the private sector is motivated by the 'profit-driven' nature of the private sector, instead of being a means to serve the public interest. In coping with the market demand (the increased number of park visitors which subsequently led to a high demand for accommodation and restaurant facilities in Kinabalu Park), the private sector needs manpower to provide the services to meet this demand. Besides, the private operator also emphasized staff in-house training in order to support its business operation, that is, to deliver quality services to the park visitors in order to maintain its competitiveness in the market.

To conclude, Sabah Parks did not show significant efforts to safeguard the public welfare (local communities) in terms of securing public services (training programs), thus the economic potential of the private services (mountain guiding and porter services) cannot be optimized. On the other hand, despite being initiated through different motives (i.e., profit-making), SSL's emphasis on providing staff training (public service) directly improved the quality of the private services it provided.

5 ENHANCING VISITOR SATISFACTION

Visitor satisfaction is a crucial performance indicator of tourism development in a destination. On the one hand, it evaluates the qualities of tourism products as a whole in the destination concerned and whether these qualities match visitor expectations; on the other, it indicates threats and potentials of future socio-economic impacts of tourism especially through the willingness of the visitors to pay more. This chapter presents firstly, the satisfaction level among the visitors to Kinabalu Park based on the supply of facilities and activities, the quality of guiding services in particular and secondly, the willingness of the visitors to pay more.

5.1 Introduction

Tourism development in Kinabalu Park took place as early as the establishment of the park in 1964 in concurrence with the basic purpose of the park ‘...for the benefit, education and enjoyment of the people’ (Ali and Basintal 1997, p.33). Subsequently, facilities and activities were created in the park to support this development.

Three stations in Kinabalu Park cater for the visitors namely Park HQ, Poring Hot Spring and Mesilau Nature Resort. Park HQ was opened to the public in 1964, followed by Poring Hot Spring a year later and Mesilau Nature Resort in 1998. The tourism activities at these three stations cater for different types of visitors, i.e., Park HQ caters mainly for mountain climbers, Poring Hot Spring serves as a recreational site, while Mesilau Nature Resort caters for visitors who are looking for nature ambiance and relaxation (Liew 1996).

5.2 Visitor satisfaction with facilities

5.2.1 Facilities in Kinabalu Park

Facilities provided for visitors in Kinabalu Park include accommodation, restaurants and souvenir shopping facilities, as well as walkways, toilets, sitting areas and shelters. There is also a sport complex in the park, which, however, is mainly used by Sabah Parks staff and the local population. There is also a library located at the R&E division of Sabah Parks administration building in Park HQ. The library is used by the park personnel and researchers and is not open to the public.

In Park HQ, in 2005 the accommodation facilities consisted of 2 blocks of hostels and 30 lodges. The room rates for lodges ranged from RM 92 to RM 1,150, while RM 12 per bed was charged in the hostel (Figure 5.1). These facilities accommodated up to 232 guests per night. In Poring Hot Spring, there were 4 units of lodges and 2 blocks of hostels with a total capacity of 82 guests per night. The room rates for the lodges ranged from RM 92 to RM 288 while a hostel bed cost RM 12. There was also a camping ground that accommodated up to 100 persons. Camping space cost RM 6 per person.



Figure 5.1 Accommodation facilities in Park HQ: lodge (left) and hostel (right)

In Mesilau Nature Resort, resort lodges and hostels catered for 220 persons a night, while at Laban Rata, there were 160 dormitory beds located in 3 huts and a rest house. In addition, 2 lodges accommodated 6 persons. While the lodges at Park HQ and Mesilau Nature Resort were heated, the facilities in the rest house/hostel were basic. At Laban Rata, the rest house with 76 beds and two lodges were heated. In Mesilau, the room rates ranged from RM 350 to RM 400, while the hostel beds cost RM 30 per bed, and in Laban Rata RM 17 per bed for a non-heated room and RM 34 per bed for a heated room. Lodges cost between RM 115 and RM 230 (SSL 2006).

A restaurant serving both western and local food was located at Laban Rata, Poring Hot Spring and Mesilau Nature Resort, and 2 restaurants at Park HQ. In addition, there was a souvenir shop at each station.

5.2.2 Level of visitor satisfaction with facilities

Accommodation facilities were evaluated in terms of pricing and quality. The survey results indicate that 72% of the respondents stayed in the park for one night or more. The main reason was convenience. Furthermore, the nearest accommodation available located 150 m outside the park was a bed and breakfast type.

Overall, the satisfaction level among the visitors to Kinabalu Park with the quality of the accommodation facilities was above average: 30.1% of the respondents rated the quality of accommodation as expected, 44.5% as satisfying and 16.8% as most satisfying. Only 8.6% of the respondents rated the quality of the accommodation facilities as below average. The results are similar to the resort guests' feedback provided by SSL, who provided feedback forms in each accommodation unit to obtain the comments from its guests for quality control. According to this feedback, at least 80% of the respondents rated their overall stay as satisfactory. The reasons for dissatisfaction included: water heater was not working, changing room and toilets were not clean and poorly maintained, etc. Despite these complaints, repeat visitors remarked on the significant improvements in the accommodation facilities after the privatization of accommodation facilities.

In terms of accommodation types, hostels were the top choices among the visitors who stayed overnight, mainly due to budget considerations: 13.8% stayed in lodges and 86.2% stayed in hostels. There was no significant difference in satisfaction level between lodges and hostels, but the level of satisfaction among the respondents in lodges was slightly higher (Figure 5.2).

Another reason why many visitors preferred to stay in the park was that the pricing was considered acceptable. The survey results show that the majority of the respondents stated that the pricing for the accommodation facilities in Kinabalu Park was reasonable: 41.6% rated the prices as satisfying, 13% were most satisfied, and 30.7% rated the prices as expected. Only 14.7% rated the accommodation pricing as

disappointing and most disappointing. There was also only a slight difference between the two accommodation types (Figure 5.3).

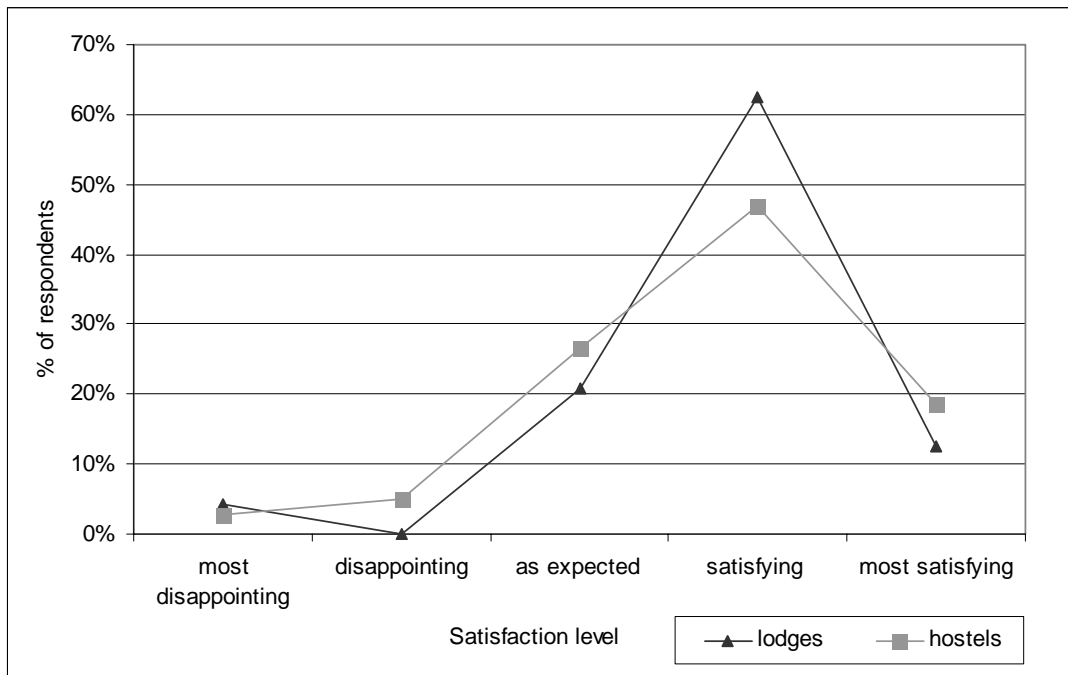


Figure 5.2 Satisfaction according to accommodation types in Kinabalu Park

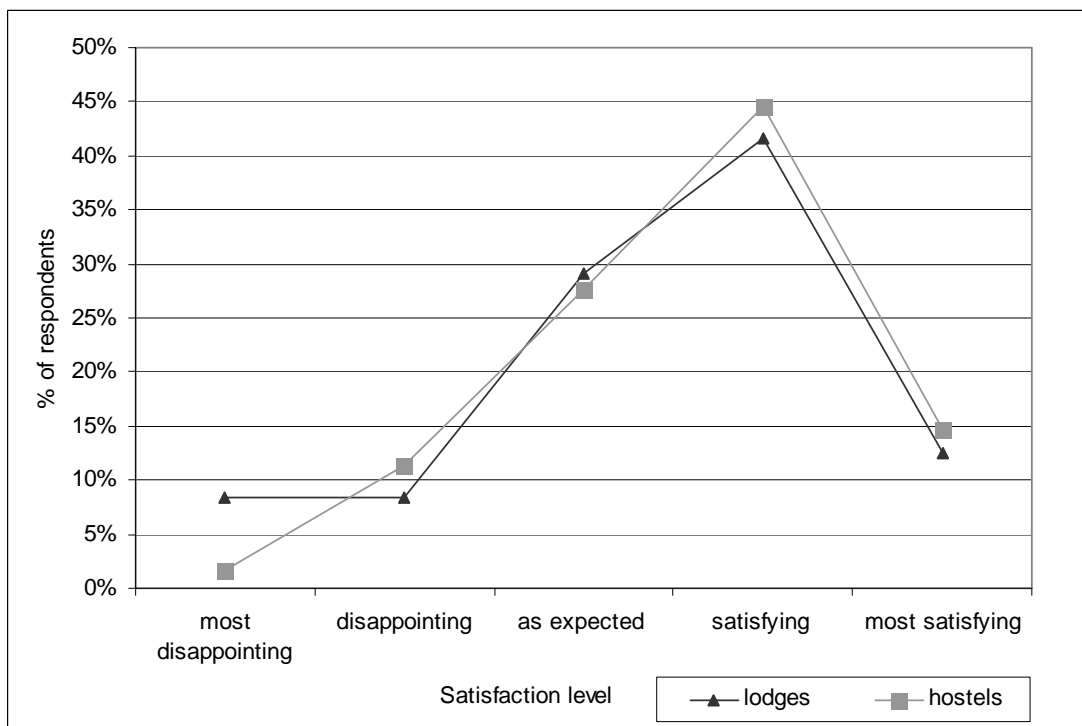


Figure 5.3 Satisfaction with pricing according to accommodation types in Kinabalu Park

The eating facilities in Kinabalu Park used by 61.4% of the visitors were evaluated in terms of meal quality and price. The survey results reveal that the quality of meals was generally rated as expected by the respondents (67.2%), while 21.9% were disappointed with the quality, and 10.9% rated it as satisfying. In terms of pricing, 44% of the respondents rated the meal prices as expected and 40.5% as disappointing and most disappointing, 14.4% as satisfying and 1% as most satisfying (Figure 5.4).



Figure 5.4 Satisfaction with meal quality and prices in Kinabalu Park

The comparison of meal prices in the park and outside the park was one of the main reasons that many of the respondents rated the meal prices in Kinabalu Park as relatively low. Unlike the accommodation facilities located outside the park, which are located at least 150 m away from the Park HQ entrance, there is restaurant right outside Park HQ, the Bayu Restaurant. Therefore, the factor of convenience and distance was not taken into consideration in the rating of meal prices. According to the respondents at Park HQ, the meal price in the park was much higher than that charged in Bayu Restaurant, i.e., at least two to three times higher. Similarly, respondents at Poring Hot Spring stated that the quality of the meal offered in the park was better than that

available outside the entrance of Poring Hot Spring, but that the prices were much too high, especially for the domestic visitors.

Three souvenir shops were operated by SSL in Kinabalu Park. The survey results reveal that the pricing of souvenirs was generally rated as expected (65.9%). Nevertheless, 20.1% of the respondents rated it as disappointing, while 13.9% as satisfying. The respondents who rated the pricing of souvenirs as expected, also stated that they had expected Kinabalu Park to sell souvenirs at a higher price than the shops or stalls outside the park or in the capital city due to its relatively remote location and also the fact that it is a famous tourist destination. Some visitors who rated prices as satisfying were also of the opinion that the prices were lower than they had expected. Nevertheless, others were disappointed with the souvenir prices, which were higher than they had expected. This was the case with the local visitors, where 31.9% rated pricing as disappointing compared to 3.6% of the foreign visitors. This is possibly related to low income level of these visitors. The majority of the foreign visitors (75%) earned USD 12,000-95,999, while the local visitors (72%) earned between USD 6,000 and USD 59,999.

Public facilities in the park, i.e., toilets, walkways, shelters and sitting areas, were rated by the majority of the respondents as expected (63.4%), 23.4% as disappointing and 13.2% as satisfying. Where the public facilities were rated as expected, the rating was based on the consideration that Kinabalu Park is located in a developing country and relatively remote. Therefore, the visitors only expected basic, practical and functional facilities, a sufficient number of facilities to cater for the demand, and a moderate hygiene level. Unfortunately, these expectations were not fully met in the park as revealed through the complaints made, which included inadequate number of shelters and sitting areas as well as cleanliness problems, poor up-keep of toilets, and water supply shortage in the toilets.

5.3 Visitor satisfaction with activities

5.3.1 Activities in Kinabalu Park

The key tourism resources in Kinabalu Park are its floral diversity and the magnificent mountainous landscape. These natural attractions form the basis of most activities in the

park. Nonetheless, the activities offered to visitors in Kinabalu Park differ from one station to another according to the characteristics of the station itself.

Park HQ, which houses the Sabah Parks administration building in Kinabalu Park, is the key destination of the mountain climbers. Beside mountain climbing, the key activities at Park HQ include visits to the natural history museum, exhibition hall, mountain garden, nature trails with a total of nine trails, and slide shows. These trails give visitors the opportunity to see the many different plants.

The Park HQ summit trail has a total length of 8.7 km. The ascent is done normally in two days (Phillipps and Liew 2000) and begins at Timpohon Gate, which is located 5.5 km away from the Park HQ reception building. Timpohon Gate is 1,800 m a.s.l. (KM 0) while the ending point Low's Peak is located at 4,095.2 m a.s.l. (KM 8.7). The horizontal distance is 8.7 km and the vertical distance is 2.3 km with an average slope of 14.8%. There are toilets and untreated water tanks located every 500 m along the trail.

The Natural History Gallery was established in 2001 and aims to educate the general public about the importance of conservation and the role of Sabah Parks in protecting the tropical rainforest ecosystems.

Formally known as Mountain Garden, the Botanical Garden is an example of ex-situ conservation efforts regarding rare and endangered species. Serving as a refuge for threatened species, new plants produced in the garden will be returned to their natural habitat. Approximately 3,200 plant specimens comprising 400 species grow in the garden. The garden was established in 1981 and covers an area of 2.02 ha. It plays a significant role as a nature education site for the public by bringing the plants to the visitors rather than bringing the visitors to the plants in locations that are often inaccessible, thus ensuring that the natural habitat of the plants remains undisturbed. A guided walk is conducted 3 times daily in English by Sabah Parks staff.



Figure 5.5 Climbers waiting in front of the Sabah Parks operation room for climbing permits and a mountain guide. Source: Sabah Parks (2006)



Figure 5.6 Exhibition hall where a private tour guide briefed a group of visitors from Germany about the park ecosystem



Figure 5.7 Entrance to the mountain garden before the guided nature walk into the garden

Apart from the key activities, which are available all year round, Mount Kinabalu International Climbathon is an annual event held in September/October in Park HQ. Originally initiated as a life-saving mission, the Climbathon began with a fun race among park staff in 1984 so that the park authority could identify capable mountain runners for its rapid reaction rescue squad. It was not until 1987 that outsiders were allowed to compete, and it became an international event in 1988. It is now acclaimed as the toughest mountain race in the world. The route involves a distance of 21 km and an ascent of 2,250 m with a qualifying time of 4 hours.

The station Poring Hot Spring is located on the south-eastern boundary of Kinabalu Park, approximately 43 km from Park HQ, in the foothills of Mount Kinabalu. The area consists of a tropical lowland forest type, also known as Lowland Dipterocarp forest. The forest is rich with bamboo, fruit trees, lianas and spiny rattan palms. Poring is associated with the giant bamboo species locally known as Poring (Gambakon 1983). Poring Hot Spring houses the ethno-botanical garden, butterfly farm, tropical garden, canopy walkway, orchid conservation center, hot sulphur water baths and tissue culture laboratory.

With the hot sulphur water with an average temperature of 50-60°C, hot sulphur water bathing is a famous recreational activity for the local people during weekends and school holidays. It is also popular among the climbers for releasing muscle fatigue after descending from the mountain. While the outdoor baths are provided free of charge, the indoor Jacuzzi-style bath tubs are available at a fee.



Figure 5.8 Hot sulphur bathing is popular among the local population and visitors to Poring Hot Spring, Kinabalu Park

The canopy walkway is another key attraction in Poring. Opened in 1990, the total length of the walkway is 373.6 m and consists of three circuits. The first circuit, with a length of 157.6 m, and height up to 41 m above the ground in a ‘Y’ shape, is established as a visitor walkway. The other two circuits with lengths of 133 m and 83 m are research walkways. At least 70% of the tropical forest activities take place in the higher strata of the forest. Thus, the canopy walkway provides one of the best options to observe the tropical animals.

Established in 1987, the Orchid Conservation Center in Poring houses orchids from all over Sabah with a special collection from the vicinity of Kinabalu Park. There are a total of 5,394 orchids from 585 species and 86 genera. The center focuses on education to promote appreciation of orchids and also serves conservation and research purposes. Within the center, a site has been allocated as an explants depository for orchid plantlets from the tissue culture laboratory. The laboratory is set up to micro-

propagate rare and threatened orchid species, as well as *Nepenthes* and *Rafflesia* species.

The tropical garden project in Poring was started in 1988 and opened to the public a year later; it covers an area of 2.43 ha. With its 'open zoo' concept, the garden was established to display a typical lowland tropical forest, which includes various species of wild animals such as deer, macaques and squirrels, as well as birds in a bird enclosure (aviary of 0.08 ha size and 5-10 m height) as part of ex-situ conservation efforts (captive breeding) and nature education programs, especially for school students. Food plants grow there as well as other supplemental foods for the animals. Reptiles and amphibian-friendly habitats have been constructed for keeping these animals.

The butterfly farm was established in 1989 for visitors, nature education, conservation as well as biological and ecological research on butterflies. The farm system is divided into four main components, namely exhibition gallery, butterfly enclosure, breeding room and nursery for food plants of the larvae. The former two are opened to the public, while the latter two are strictly for research purposes only. The research focuses on the life cycle, food-plant species, behavior and other aspects of butterflies and emphasis is on the endangered, rare and unique species in Sabah. Apart from the 20 butterfly species, this farm also exhibits dried specimens of various species of butterflies, moths and insects.

There is a nature trail of 3.3 km in Poring, which leads the visitors through a tropical lowland forest environment before reaching Langanan Waterfall (over 120 m height), which is a popular ground for bathing and picnics among the local population. There is also a bat cave 30 minutes away from the Poring main entrance along the nature trail leading to Langanan Waterfall. A smaller waterfall, Kipungit Waterfall (10 m height), is located about 1 km (15 minutes walk) from the main entrance.

A new garden opened in 2006 for park visitors is the Kinabalu Park Ethno Botanical Garden. This garden is the result of the ethno-botanical survey conducted in 1996 by the botany unit in collaboration with the Project Ethno Botany Kinabalu Park (PEK). It has an extensive collection of plants useful to the local communities, especially medical plants in the vicinity of Kinabalu Park. This project helps the park to identify culturally significant plant resources and to identify which species are most vulnerable to over-harvesting or habitat destruction (Martin et al. 2002; Martin 2004).

At 1,951 m a.s.l., Mesilau Nature Resort is located within the mossy cloud forest, approximately 17 km from the Park HQ. This relatively new complex is similar in size to the Park HQ complex. The key attractions include guided walks into the oak-chestnut forest, *Nepenthes rajah* trail and Mesilau nature trail. *Nepenthes rajah* is the largest pitcher plant in the world, and its large cups can hold up to 3.5 l of water.

The Mesilau nature trail is an alternative route for climbers who wish to reach the Kinabalu Park summit, and offers an abundance of *Nepenthes* along the trail. The length of the trail is 10.3 km, and it joins the Park HQ summit trail at KM 4 (Layang-Layang junction).

Visitors are charged for the activities in Kinabalu Park (Table 5.1).

Table 5.1 Charges for activities in Kinabalu Park

Station	Description	Charges per person	
		Domestic visitors	Foreign visitors
Park HQ	Conservation fee (entry fee)		
	Adult	RM3	RM15
	Below 18 years	RM1	RM10
	Mountain climbing permit fee		
	Adult	RM30	RM100
	Below 18 years	RM12	RM40
	Insurance	RM7	RM7
	1. Mount Kinabalu Botanical Garden	RM4	RM5
	2. Guided walk	RM3	
3. Audio visual show	RM2		
Kinabalu Natural History Gallery	RM2	RM3	
Package of 1-3	RM6	RM8	
Poring Hot Spring	Conservation fee (entry fee)		
	Adult	RM3	RM15
	Below 18 years	RM1	RM10
	Enclosed bath tub (per hour)		
	Standard	RM15	
	Deluxe	RM20	
	Camera (per unit)	RM5	
	Video (per unit)	RM30	
	1. Canopy walkway (with guide)	RM3	RM5
2. Butterfly farm	RM3	RM4	
Package 1 and 2	RM4	RM7	
Tropical Garden	RM2	RM3	
Orchid Center	RM5	RM10	
Mesilau Nature Resort	Conservation fee (entry fee)		
	Adult	RM3	RM15
	Below 18 years	RM1	RM10
	Guided nature walk		
Adult	RM5	RM10	
Below 18 years	RM2.50	RM5	

Source: Sabah Parks (2006)

In order to enhance climber satisfaction and in consideration of the fact that climbing activity involves a high level of risk, physical protection, direction regulation, information instruments and insurance were introduced (Berita Harian 2001a; Daily Express 2001c).

Physical protection includes barriers, fences, white ropes along the rock face up to Low Peak, and checkpoints along the summit trail. Barriers and fences were installed at risky spots along the summit trail. Besides, a thick white rope was put along the rock face in the late 1990s starting at Gunting Lagadan Hut and leading up to the Low's Peak to provide clear directions to the climbers. In the 1960s and 1970s, small stones were arranged along the rock surface leading to the summit, and in the early 1980s, rope was put at risky spots. There are also three checkpoints along the summit trail at Timpohon Gate, Laban Rata and Sayat-Sayat. Prior to the ascent, climbers are given an identity card that the climbers have to show at each checkpoint. The checkpoints were strictly enforced in 2002 following heavy criticism over the lax safety measurements during the 2001 incident where a British teenage climber lost her way during her descent from Low's Peak. Her body was found on the summit plateau six days later (Berita Harian 2001a; New Sabah Times 2001; New Straits Times 2001).

Direct regulations enforced in Kinabalu Park include obtaining climbing permit, purchasing climbing insurance and hiring mountain guide. Each climber must obtain a climbing permit to participate in mountain climbing. The issuance of climbing permits enables Sabah Parks to trace climbers easily and make sure that each climber arrives safely at each checkpoint, especially if they have lost track of the group they belong to. The insurance was made compulsory to all climbers in 1993. It includes repatriation, search and rescue operation, medical expenses, benefits for death and permanent disablement (death per accident RM 50,000 and permanent disablement as a result of an accident RM 30,000). Injuries or death associated with the diseases listed in the briefing are excluded from the insurance policy coverage.

The insurance coverage costs RM 7.00 per climber per climbing and RM 5.50 per mountain guide/porter per climbing. During unforeseen circumstances such as injuries and accidents along the summit trail, mountain guides become the key members of the rescue team and bring down the victim from the summit trail. In order to ensure

that mountain guides are capable for such incidents, each mountain guide must take a first aid examination.

Information instruments include mountain guide briefing and the list of do's and don'ts during mountain climbing and warning signboards. Each mountain guide must provide verbal briefing and information leaflets on the regulations to the climbers prior to the climbing. The regulations are available in five languages, namely Malay, Chinese, Korean, Japanese and English. In addition, a daily mountain climbing briefing is provided by SSL in the evening at Park HQ. It is understood that the briefing was initiated by SSL without the arrangement with Sabah Parks.



Figure 5.9 Mountain guides play a vital role in the rescue squad on the summit trail.
Source: Sabah Parks (2006)



Figure 5.10 Climbing briefing provided by SSL at Balsam Restaurant every evening

5.3.2 Level of visitor satisfaction with activities

The activities chosen by the visitors in Kinabalu Park were closely related to the purpose of their visit to the park, which subsequently influenced the stations they visited. The purpose of the visits among the domestic and the foreign visitors varied. Based on the survey results, 58.5% of the respondents were domestic visitors, while 41.5% were foreign visitors. Kinabalu Park is well-known internationally for its mountainous landscape and biodiversity. This is revealed in the survey results showing that climbing was the most important reason for a visit among the foreign visitors followed by status as a world heritage site and the diverse biodiversity. As for the domestic visitors, the natural landscape was the key attraction followed by world heritage status and climbing (Figure 5.11).

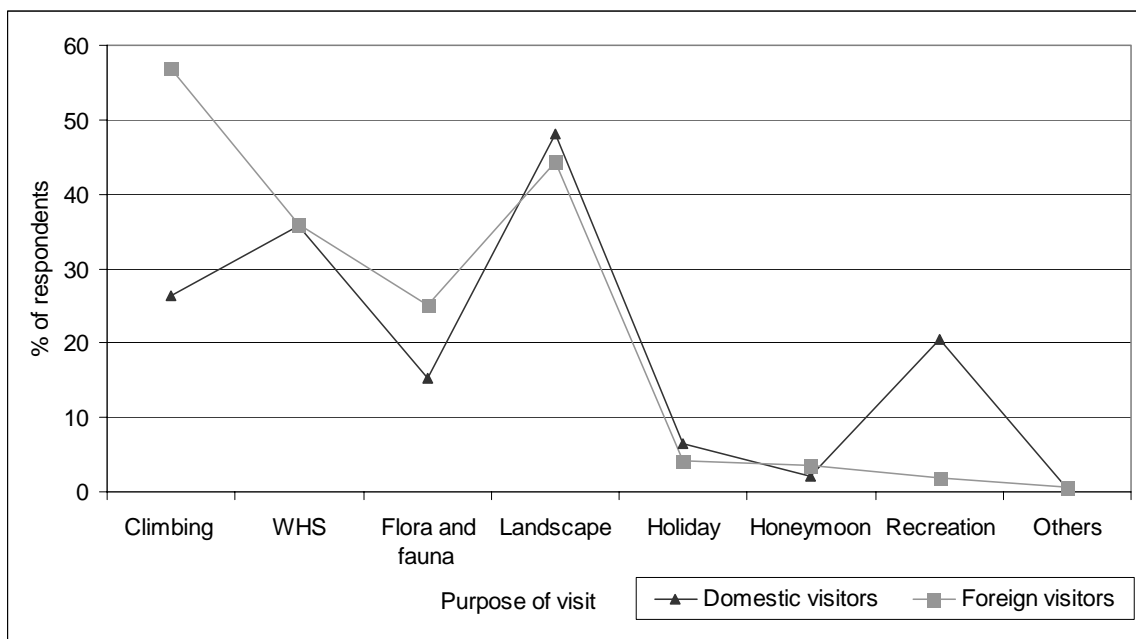


Figure 5.11 Purpose of visits to Kinabalu Park by domestic and foreign visitors

In fulfilling the purpose of their visits, 54.5% of the respondents visited at least two stations in the park, of which 37.8% visited Park HQ (mountain climbing and World Heritage Site) and Poring Hot Spring (various activities related to plants and animals). Of all visitors, 24.6% only visited Park HQ, and 16.9% only visited Poring Hot Spring, while 9% of the respondents visited all three stations.

Overall, 60.2% of the respondents participated in hot sulphur bathing, making it the most popular activity in Kinabalu Park. It was followed by mountain climbing,

botanical garden, slide shows, canopy walkway, butterfly farm, trekking, orchid conservation center, tropical garden, picnic and waterfall, Nepenthes Rajah trail and others (Figure 5.12).

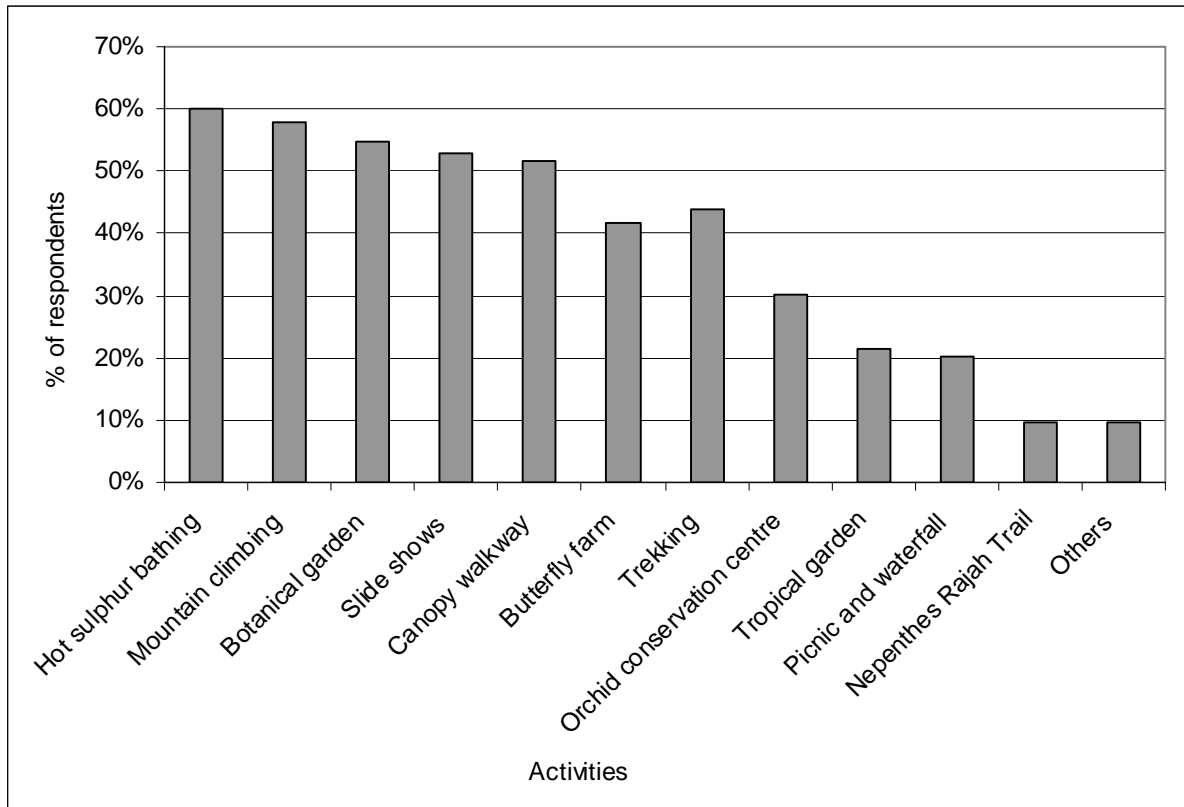


Figure 5.12 Visitor participation in activities in Kinabalu Park

However, regarding activities participated in by domestic and foreign visitors, the survey results reveal that the foreign visitors participated in most of the activities offered in the park. While the percentage of participation among the foreign visitors to tropical garden, picnics and the Nepenthes Rajah trail was above 50%, visits to the botanical garden, slide shows and trekking were above 80% (Figure 5.13).

The high rate of participation by the foreign visitors can be associated with the length of the stay of the visitors in Kinabalu Park. The longer the visitors stay, the higher the range of activities that they took part in. This is especially true for those who visited the park for the first time. The results show that the majority of the respondents stayed overnight in Kinabalu Park (38.3%), while day trippers made up 26.1% of the respondents, 20.9% spent 2 nights in the park, 10.2% spent 3 nights, 3.5% spent 4

nights, while 1% of the respondents spent more than 4 nights in the park. Domestic visitors made up 72.4% of the day trippers. Besides, 57.3% of the visitors to Kinabalu Park were there for the first time, whereas 93.5% of the foreign visitors were first-time visitors.

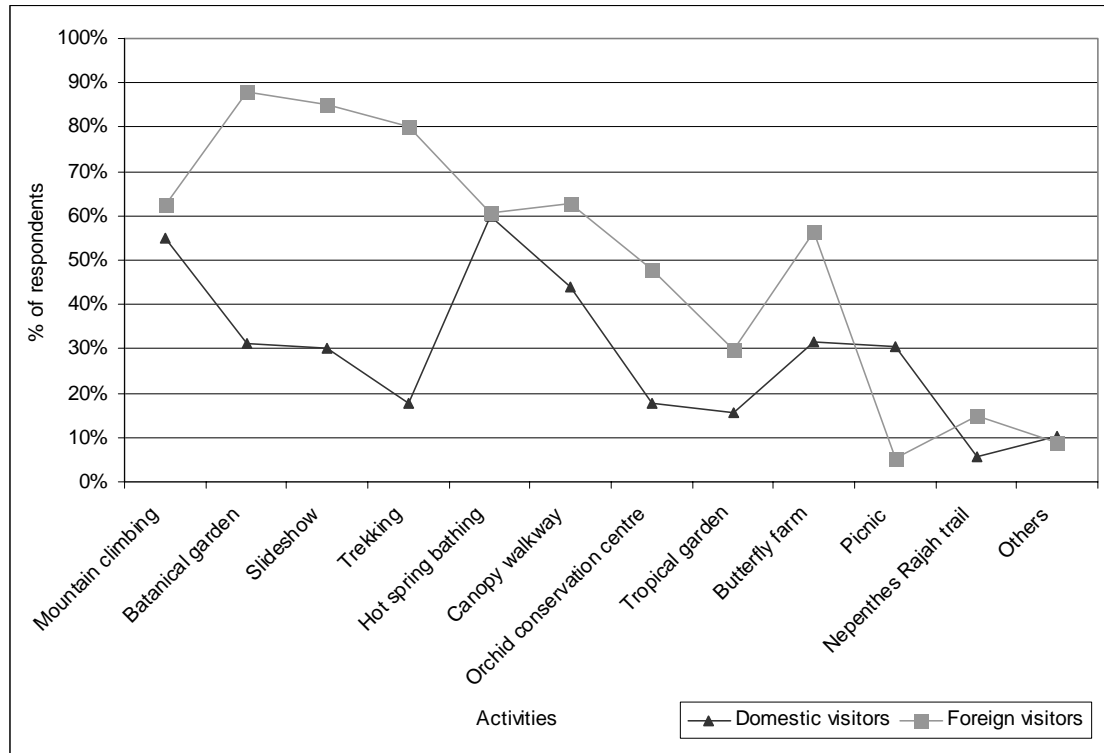


Figure 5.13 Domestic and foreign visitor participation in activities in Kinabalu Park

The activities offered in Kinabalu Park were evaluated based on accessibility, attractiveness, cleanliness and information/educational value. In average, the activities were rated as expected and satisfying by the respondents (Table 5.2).

Table 5.2 Evaluation of visitor satisfaction level with activities in Kinabalu Park

Description	Most disappointing	Disappointing	As expected	Satisfying	Most satisfying
Easy accessibility	4.1%	10.7%	31.4%	40.2%	13.7%
Attractiveness	0%	0.3%	7.2%	44.63%	47.9%
Cleanliness	1%	4.4%	27.3%	44.3%	22.9%
Information /educational value	1.7%	12.0%	56.4%	27.6%	2.3%

Accessibility and cleanliness were rated slightly low due to the crowdedness experienced during peak periods such as public holidays and weekends. Information and educational value scored lower than the other three elements. Respondents were of the opinion that the attractiveness of information sheets and presentation techniques needed to be upgraded.

The wish for better information and educational quality of activities is possibly related to the education and occupation profile of the respondents. More than half of the respondents (52.3%) to Kinabalu Park were university graduates. In addition, 43.1% of the respondents worked in executive/managerial positions or as professionals, while 17.2% were students. These groups of visitors require better information about the park and its environment. Many also complained about the absence of brochures made available by Sabah Parks. This was especially claimed by foreign respondents, who were of the opinion that brochures with general park information should be provided, which could be distributed at the park entrance, for a small fee if necessary. Repeat visitors conveyed that the information sheets/posters had been there for years but had not been updated or improved.

In terms of pricing of activities, in average the majority of the respondents rated the existing prices for activities as expected and above satisfactory: 44.0% rated the price as satisfying, 30.0% as expected and 15.6% as most satisfying, while 10.4% rated the pricing as disappointing and most disappointing. Besides, an important comment made by the visitors was that there were too many hidden costs in the park. They were of the opinion that the park authority should introduce package activities to help the visitors in decision making and for a better overview about activities and prices offered in the park. This especially applied to the foreign visitors who were on non-package tours and the first-time visitors.

Although the overall prices for activities were seen to be acceptable by most of the respondents, the climbing permit fee was an exception. This was rated as expected by the majority of the respondents (50.5%), but 29.8% were disappointed and most disappointed with the price. Only 19.7% rated it as satisfying. Disappointment over the climbing permit was expressed mostly by foreign visitors (Figure 5.14).

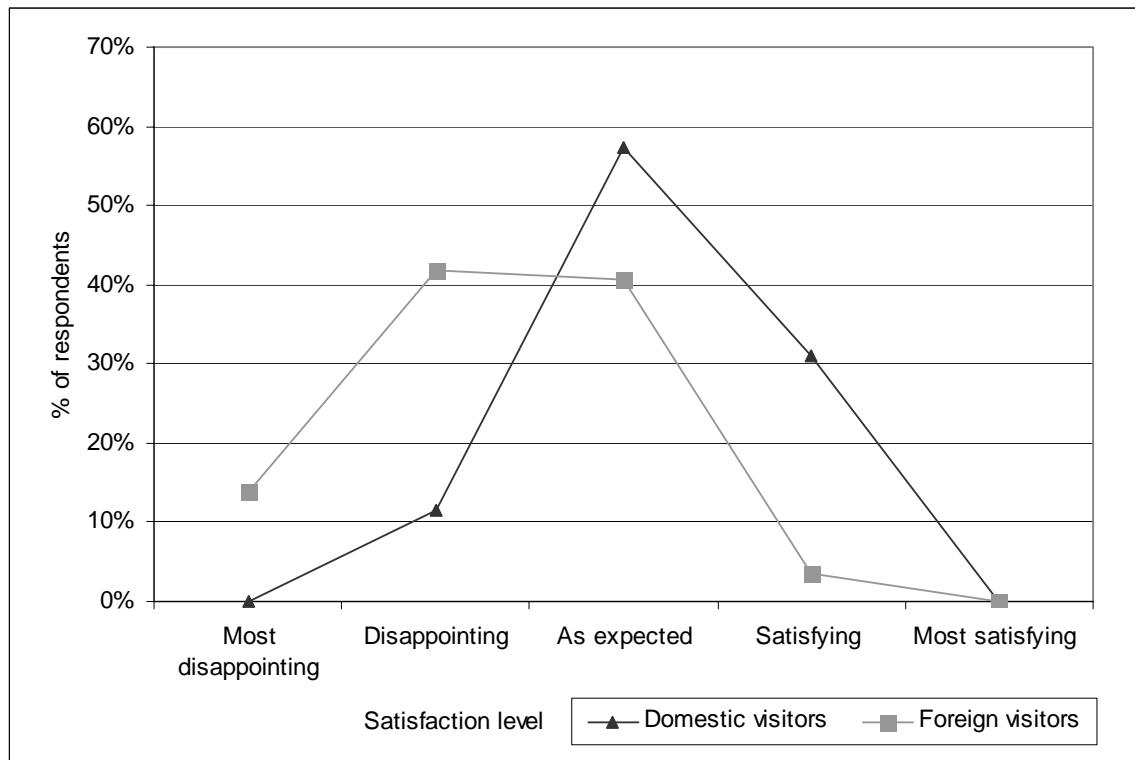


Figure 5.14 Domestic and foreign visitor satisfaction with climbing permit fee in Kinabalu Park

Of the foreign respondents, 55.7% rated the fee for the climbing permit as disappointing and most disappointing and only 3.6% rated the fee as satisfying. When respondents were asked about the reason for their comment, the much higher rate of RM 100 for foreign climbers compared to RM 30 for domestic climbers was given as the main reason. Another reason was the fact that there was no reduced rate for students despite of the status of the park as a UNESCO World Heritage Site. On the other hand, 85.8% of the respondents stated that the current rate for mountain guides was reasonable. Some would have been prepared to pay a higher rate, because they were aware that the money they spent directly benefited the local communities. Moreover, they recognized the crucial role played by the mountain guides in terms of safety, especially during emergencies on the summit trail.

Mountain climbing is the main activity in Kinabalu Park. The ascent can be made using the Park HQ summit trail or the longer and more difficult Mesilau nature trail (Figure 5.15). The survey results reveal that 84.6% of the climbers used the Park HQ summit trail and 4.7% the Mesilau nature trail, while 10.7% of the climbers

combined the Park HQ summit trail and the Mesilau nature trail, either starting from Park HQ and ending at the Mesilau nature trail starting point or vice versa.

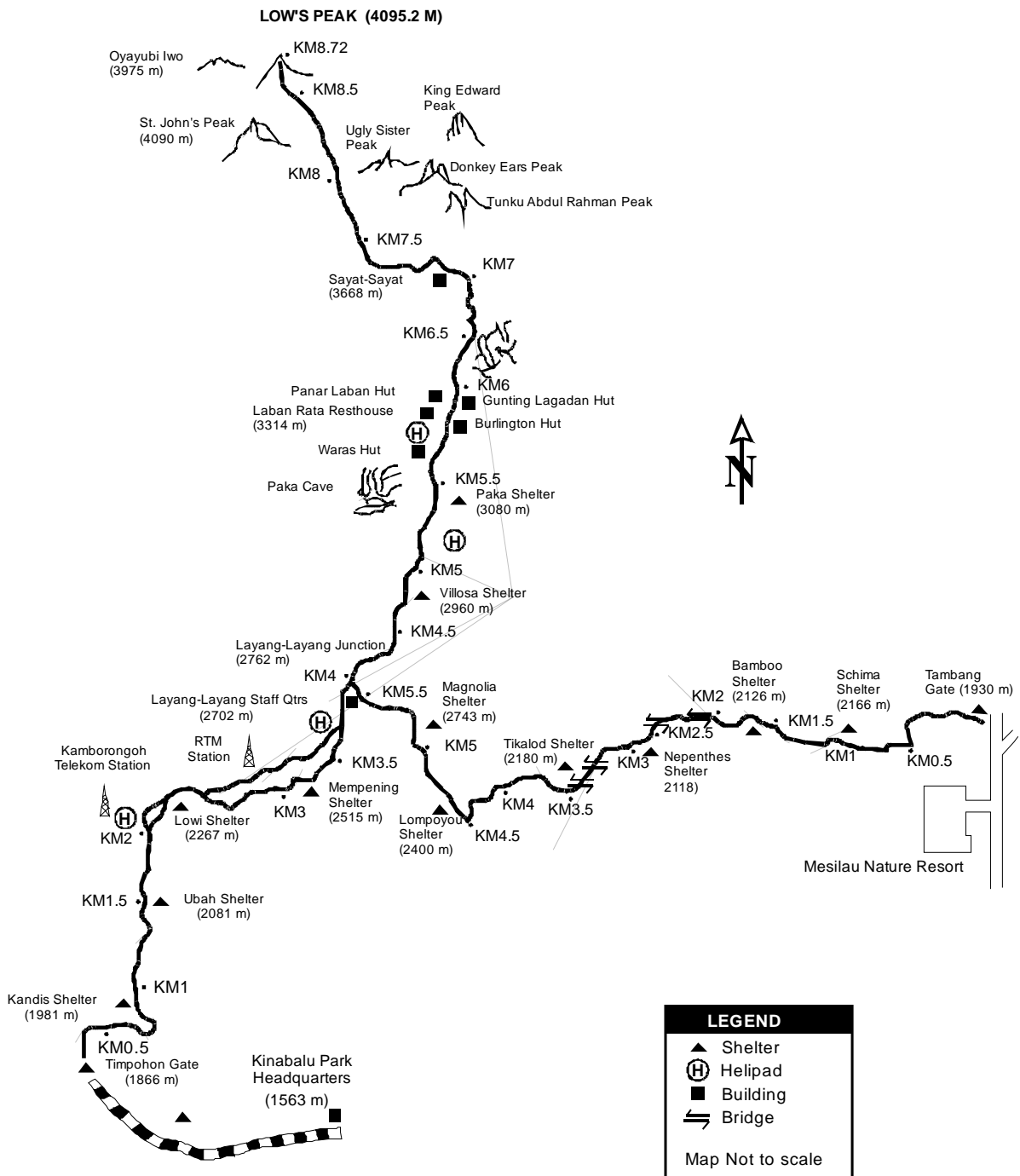


Figure 5.15 Ascent to Mount Kinabalu summit can be made using the Park HQ summit trail or the Mesilau nature trail. Source: Sabah Parks (2006)

The survey results also indicate that 68.2% of the respondents were first-time climbers. By nationality, 92.3% of the foreign climbers were first timers, while this was true for 48.8% of the domestic climbers.

In terms of difficulty, 57.9% of the respondents stated that the climbing was much more difficult than they had expected. Of these, 70.2% were first-time climbers. Some climbers who were not first-time climbers felt climbing was more difficult than expected mainly due to the unpredictable weather conditions.

When the respondents were asked whether they attended the climbing briefing provided by SSL, 37.9% of the respondents gave a positive answer: 27.1% of the package-tour climbers and 43.5% of the non-package-tour climbers. Of those who did not attend, some said that they did not know about the briefing and had not been informed about it, while others said that their private guide had briefed them. Of those who had attended, 92.3% felt that the briefing was helpful for their preparation.

Pertaining to the climbing briefing, 78.5% of the respondents felt that Sabah Parks should play a stronger role in providing detailed information about the climbing for better preparation by the climbers: 80.9% of the non-package-tour climbers and 72.5% of the package-tour climbers. Furthermore, 33.1% of the respondents were of the opinion that Sabah Parks should provide detailed briefing on daily temperatures and winds through the mountain guides. This was especially important for those who were first-time climbers and on non-package tours that had no private guide to provide them with information. 24.1% felt that videos showing the height of each level and the conditions along the trails would help them in their preparation, while 25.1% felt that Sabah Parks should prepare a special brochure on Mount Kinabalu climbing, which should come with the climbing permit. A few respondents stated that the advertisement about Mount Kinabalu saying that 'the mountain climbing in Kinabalu Park is one of the easiest in the world' led to many climbers underestimating the difficulties that they might face during the ascent, especially the first timers.

In terms of safety measurements, 81.2% of the respondents thought that Sabah Parks had made substantial efforts to enhance climbing safety, and 89.9% of the respondents felt that the summit trail was well kept. In addition, the majority of the respondents was satisfied with staff hospitality in Kinabalu Park (51.7%), while 42.5% rated it as expected, and 5.5% were most satisfied. Only 0.2% were disappointed.

5.3.3 Guiding services

The guiding service in Kinabalu Park consists of guided nature walks provided by Sabah Parks and mountain guiding by mountain guides arranged by Sabah parks. The scheduled guided nature walks three times a day are conducted by the staff from the interpretation and education unit of the R&E division and are available at Park HQ on the Silau-silau trail and the botanical garden, at Poring Hot Spring in the tropical garden, orchid conservation center, canopy walkway and butterfly farm, and at Mesilau Nature Resort on the Nepenthes Rajah trail and within the resort. All guided walks are conducted in English. A Malay language tour is available upon request.

The mountain guiding service is provided by guides from the local communities and arranged by Sabah Parks. The duties of a mountain guide include ensuring the safety of climbers, providing information about the park and plants along the summit trail and assisting during emergencies and when difficulties arise.

Of the respondents, 33.3% joined the guided walks. Of these, 64.9% participated in the guided walk at Park HQ, 5.2% at Poring Hot Spring, 16.4% at the Mesilau Nature Resort and 13.4% participated in at least two guided walks. The satisfaction with the nature guiding service in Kinabalu Park was measured based on five attributes: attractiveness, information provided by guide, guide's knowledge when answering questions, English proficiency and friendliness (Figure 5.16).

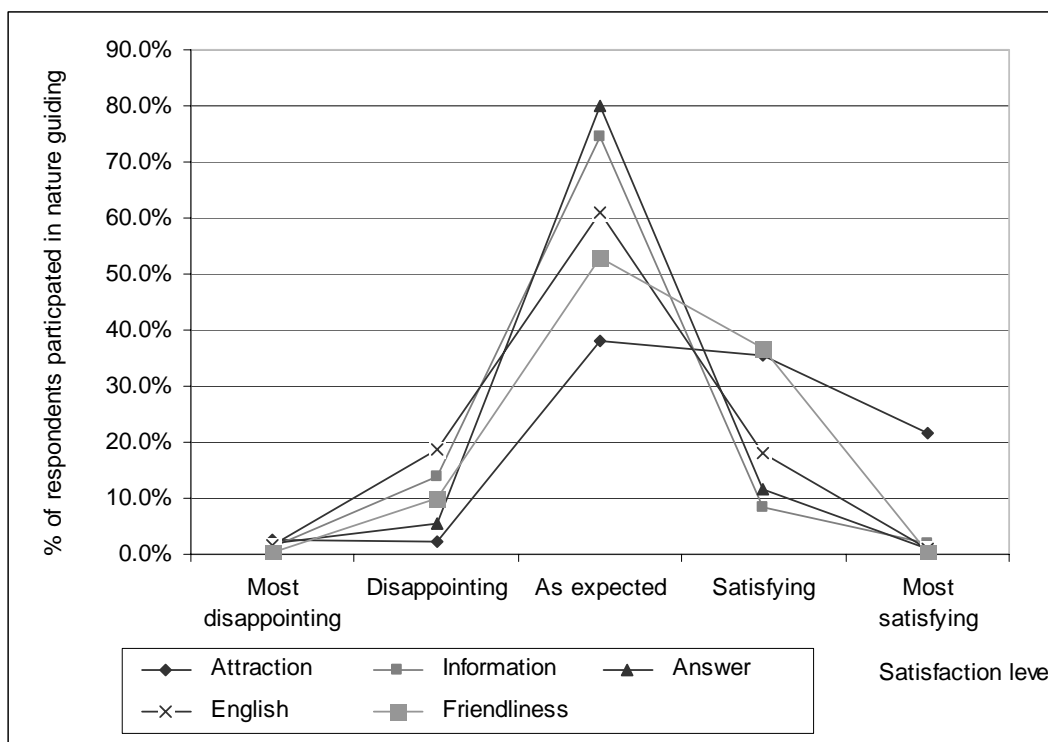


Figure 5.16 Satisfaction with nature guiding in Kinabalu Park

Attractiveness of the guided nature walk was highly rated. Only 5.3% of the participants rated attractiveness as poor and very poor, 38.4% as expected and 57.6% as satisfying and most satisfying. Friendliness of guide was mostly rated as expected (52.9%) and satisfying (36.6%), while 10.2% of the respondents rated guide friendliness as disappointing, 0.3% as most disappointing and another 0.3% as most satisfying.

Information provision, guide’s ability in answering questions and English proficiency were rated as average. In terms of information provided by the guide, 74.6% rated it as expected, 15.1% as disappointing and most disappointing, and 10.3% as satisfying and most satisfying. Similarly, the majority of the respondents rated the guide’s ability to answer questions as expected (80%), 7.4% rated it as disappointing and most disappointing, 12.5% rated it as satisfying and most satisfying. The performance of the nature guides was less satisfying regarding English proficiency: 20.4% of the respondents rated it as disappointing and most disappointing, 60.8% as expected and 18.8% as satisfying and most satisfying.

The lower rating on English proficiency is believed to have influenced the evaluation of the guide’s ability in providing information and answering questions. The chi-square test further supports this assumption: The p-value for information provided

by guides ($p=0.000$) and the ability of guides to answer questions ($p=0.000$) is less than 0.05. The evaluation of attractiveness of nature guiding ($p=0.094$, >0.05) and the friendliness of guides ($p=0.172$, >0.05) was not influenced by the guides' English proficiency.

In addition to English proficiency, the less satisfying 'information provided by the guides' may be due to any one or a combination of the following factors. Sabah Parks does not impose group size limits in nature guiding. From the author's observations, the group sizes ranged from one participant to up to 20 participants during weekends or public holidays. Nevertheless, only one nature guide was on duty on each nature guiding session. There was no standby guide during peak seasons. The difficulty faced by a nature guide in communicating with a large group could have affected the effectiveness of conveying information to all participants. Besides, the lack of knowledge on the natural history of Kinabalu Park may also have contributed to the less satisfying information provision and ability to answer questions.

Another noteworthy point to be made is that there were inconsistencies in terms of information provision and quality of services provided by the park guides during the guided nature walks. Similarly, inconsistencies in service quality were also observed among the private tour guides. However, the private guides had better communication skills and better interaction with their tourists due to the smaller group size.



Figure 5.17 Guided nature walk with five participants (top left) or more than 20 (top right); group size of a private tour was normally smaller (bottom right)

The performance of mountain guiding in Kinabalu Park is associated with the roles supposed to be played by mountain guides in the respondents' opinion. The importance of the mountain guides was fully recognized by the climbers: 85.6% said it was necessary to hire a mountain guide. Safety was rated as the highest concern among the climbers, and 76.4% of the respondents rated it as the key reason for hiring a mountain guide. Even those climbers who were not first-time climbers were also of the opinion that hiring a mountain guide was necessary for safety reasons due to the unpredictable weather conditions on the summit trail and especially on the summit plateau. Of the respondents, 16.9% were of the opinion that a mountain guide should be able to provide information and knowledge about the surroundings of the summit trail, which would make their experience of climbing more fruitful than just 'climbing'.

Despite the fact that safety was rated as the key factor for most climbers, it was expected that the mountain guide should provide knowledge on park ecology and

history, especially among the foreign climbers. About 20% of the foreign climbers selected both attributes as reasons for hiring a mountain guide as compared to 11.5% among the domestic climbers. Showing direction (6%), assisting during ascent and emergencies (3%) and guarding and protecting the environment and ecosystem along the summit trail (2%) were other reasons for hiring a mountain guide (Figure 5.18).

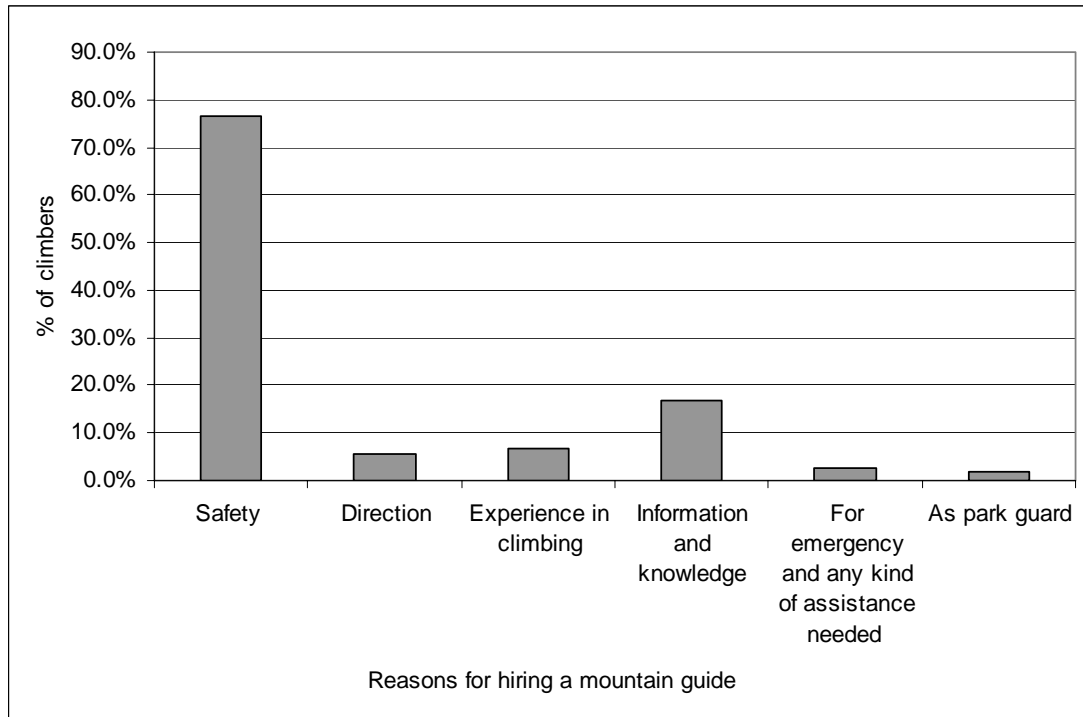


Figure 5.18 Reasons for hiring a mountain guide in Kinabalu Park

The climbers who were of the opinion that it was unnecessary to hire a mountain guide felt that the climb was quite easy, especially for those who were not first timers. However, they added that assistance should be extended to climbers at the second stage of the climb starting from Laban Rata up to the summit. Besides, some of the climbers were on a package tour and therefore, it was unnecessary to spend extra money on a mountain guide since they had already hired a private guide for the entire tour.

A slightly different set of attributes was used to evaluate the performance of mountain guides in Kinabalu Park as compared to nature guiding taking into consideration the length of interaction between the guide and participants as well as the risk involved. These were knowledge and communication skills attributes in the

‘competency’ category, friendliness and language proficiency in the ‘communication’ category and responsibility in the ‘responsibility’ category. While nature guiding involved interaction between the guide and participants lasting only 30 minutes to an hour, mountain guiding involved 1.5-day to 2-day interaction, and here communication skills were very important in influencing the participants’ rating of the performance of the mountain guides. Responsibility was another important attribute in mountain guiding due to the inherent risk associated with the activity.

Generally, mountain guides in Kinabalu Park performed above average in all five attributes (Table 5.3). The majority of climbers rated all attributes as expected. This is followed by satisfying and most satisfying. Only 7% of the respondents rated knowledge provided by the mountain guide as most disappointing and disappointing, the same for language proficiency. Communication skills were rated as most disappointing and disappointing by 5% of the respondents, while the attributes of the friendliness and responsibility categories were rated less than average by 12% and 15% of the respondents, respectively.

Table 5.3 Satisfaction with performance of mountain guides in Kinabalu Park

Attribute	Most disappointing	Disappointing	As expected	Satisfying	Most satisfying
Knowledge	3%	4%	63%	29%	2%
Communication skills	2%	3%	53%	39%	3%
Friendliness	3%	9%	43%	38%	7%
Language proficiency	1%	6%	53%	37%	2%
Responsibility	3%	12%	45%	33%	7%

When climbers were asked to differentiate the role of a mountain guide and a porter in Kinabalu Park, 48% of the respondents said they did not see any difference, while 52% differentiated between the two mainly because ‘porters carry goods and stuffs, guides show direction, give courage and information’. Some were of the opinion that a guide was supposed to show directions and give courage, but they did not perceive a great difference between the two. Although many reasons could possibly contribute to the fact that a large number of respondents were not able to differentiate between the roles played by the mountain guides and porters, the negative comments as

summarized below indicate that a significant number of the mountain guides in Kinabalu Park did not play their role as 'guide' effectively. Most of the comments were related to the poor level of competency and communication. Similar comments were also obtained from casual conversations with private tour guides who got feedback from their tourists, such as:

'Could be a bit more available to answer questions and point out things of interest. Our guide kept getting lost!'

'Our guide didn't volunteer to provide any information until he was asked.'

'My guide knew some species of pitcher plants along the summit trail and was able to take me to the precise locations to take photographs. Unfortunately, he was unable to provide further information about the plants, neither in their scientific names nor about their habitats.'

'They should be well prepared to provide information about the environment here. The few times that I asked questions concerning the history of Kinabalu Park and the plant species along the summit trail, our guide either kept quiet, did not reply or summarized his answer in one sentence'.

'The guides should be more interactive with climbers and not among themselves.'

'They should stay with the group and give information'.

'They should speak the climbers' language.'

'I think the biggest problem with our guide was that he could not communicate with us effectively in a language that both parties understood. Although he was friendly and very helpful, my experience was thwarted by the fact that I was expecting the climb to be more informative and educational. My guide was my guard, not my guide which I had expected.'

'Hiring mountain guides from the surrounding communities is good for the local economy but they need to be educated, especially when we have to pay such a large amount of money for the climbing permit. Sabah Parks should play a more pro-active role to help to improve the quality of mountain guiding, since they are the park authority.'

When the performance of the mountain guides was analyzed according to the nationality of the respondents, significant differences were observed between the rating given by the domestic and foreign respondents (Figure 5.19 - 5.23). Overall, the domestic climbers showed a higher level of satisfaction in all attributes. As for the attribute ‘knowledge provided by the mountain guide’, while 40% of the domestic climbers rated it as satisfying and most satisfying, only 18% of the foreigners were satisfied; 70% of the foreign climbers and 56% of the domestic climbers rated the knowledge given by their mountain guide as expected. More foreign climbers (11%) were disappointed with the knowledge provided by their mountain guides than domestic climbers (4%) (Figure 5.19).

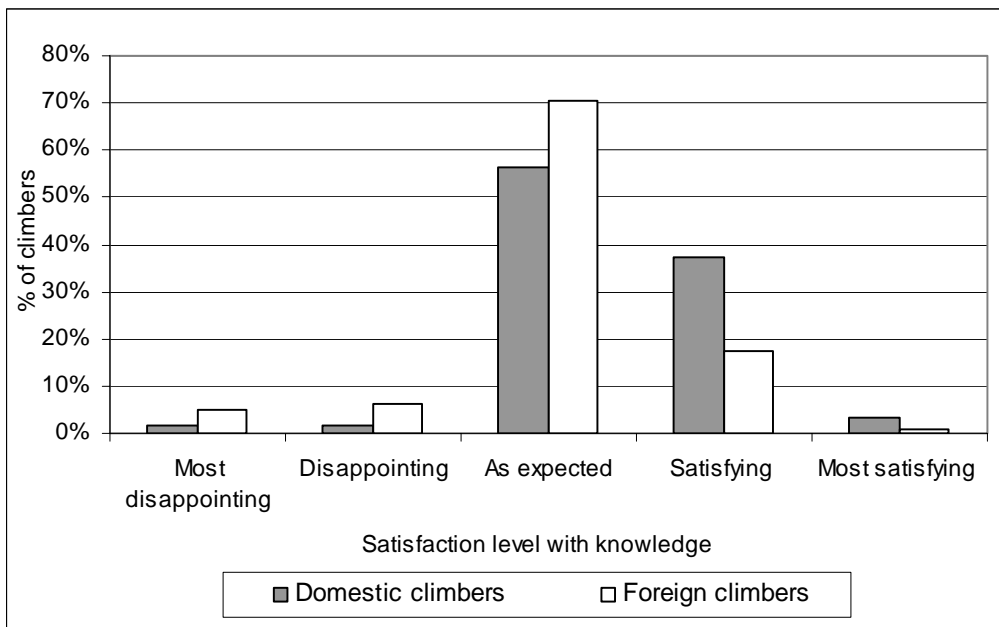


Figure 5.19 Satisfaction of domestic and foreign climbers with knowledge provided by mountain guides

A similar trend is revealed for the communication skills. While 53% of the domestic climbers were satisfied with the performance of the mountain guides, only 27% of the foreign climbers were satisfied. More foreign climbers rated the attribute as average and below average than domestic climbers (65% versus 44% in ‘as expected’; 8% versus 4% in ‘disappointing’ and ‘most disappointing’) (Figure 5.20).

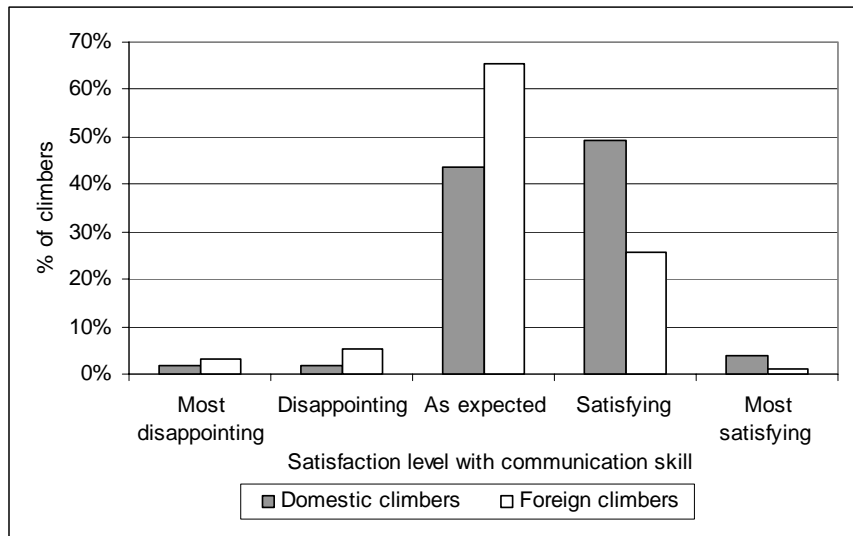


Figure 5.20 Satisfaction of domestic and foreign climbers with mountain guides' communication skills

Concerning language proficiency, the gap between the domestic and foreign climbers in rating language proficiency as satisfying and most satisfying was the biggest among all attributes: 61% of the domestic climbers were satisfied with the performance of their guide but only 11% of the foreign climbers. However, 76% of the foreign climbers rated this attribute as average and 13% rated it as below average. As for the domestic climbers, 36% rated it as average and only 3% rated it as below average (Figure 5.21).

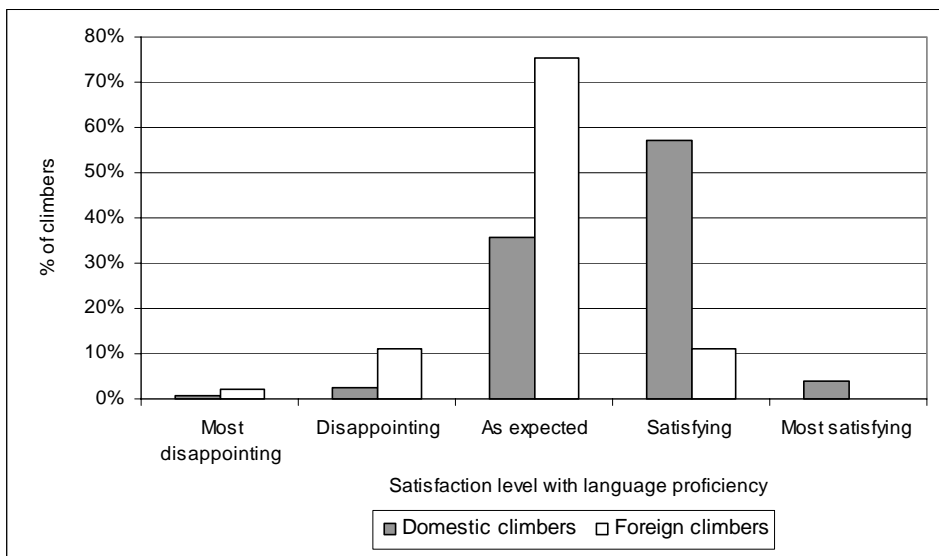


Figure 5.21 Satisfaction of domestic and foreign climbers with mountain guides' language proficiency

A similar percentage of domestic and foreign climbers expressed satisfaction with the attributes of friendliness (49% versus 38%) and responsibility (42% versus 37%) of their mountain guide. Nevertheless, a higher percentage of foreigners expressed their disappointment in both the friendliness (17% versus 9%) (Figure 5.22) and responsibility attributes (19% versus 12%) (Figure 5.23).

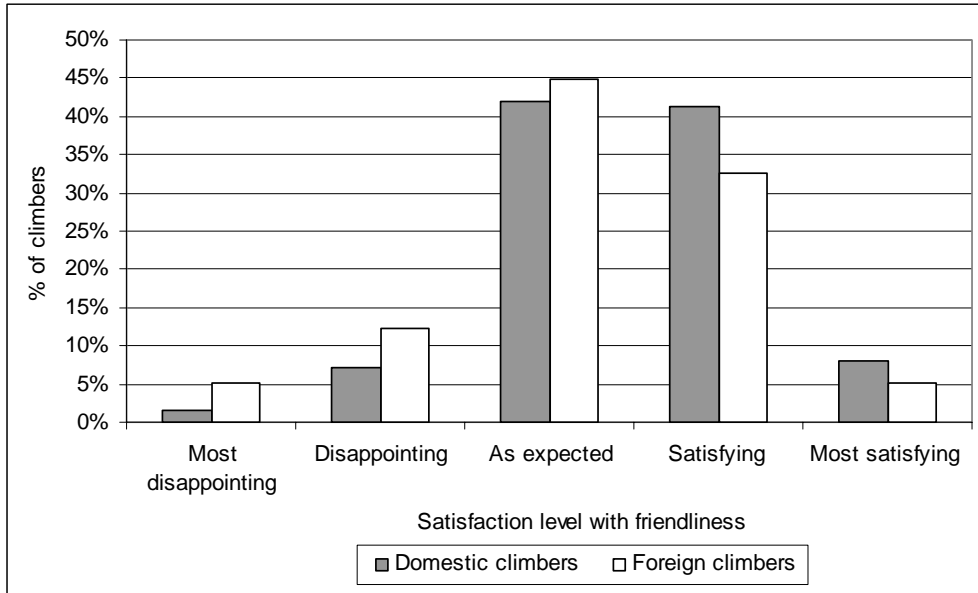


Figure 5.22 Satisfaction of domestic and foreign climbers with mountain guides' friendliness

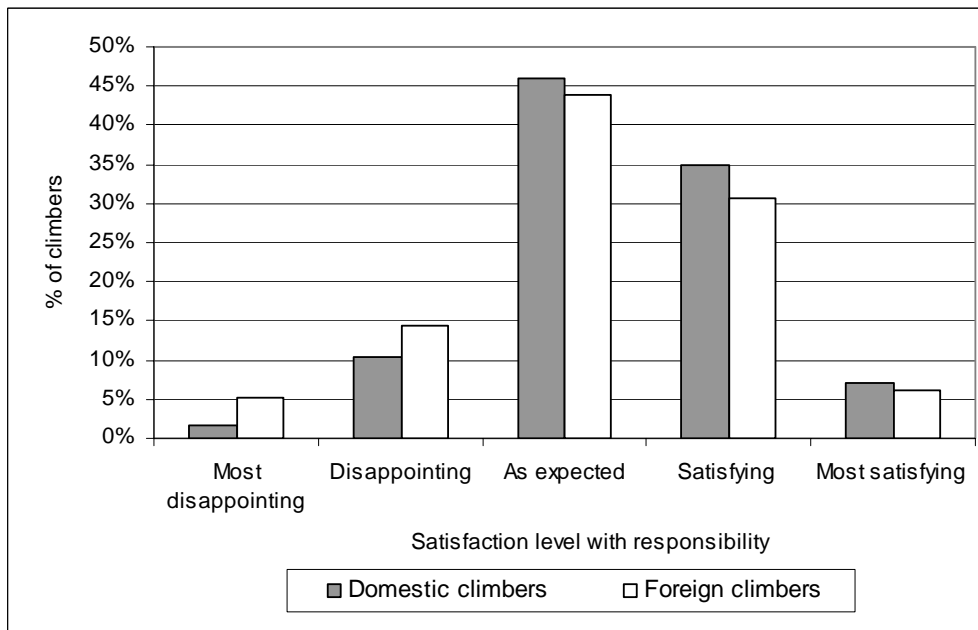


Figure 5.23 Satisfaction of domestic and foreign climbers with mountain guides' sense of responsibility

Overall, there are three possible explanations for the lower satisfaction level expressed by the foreign climbers. The first is related to the mountain climbing fee they had to pay, which is much higher than that is paid by the domestic climbers, and thus higher expectations regarding the experience of the guiding service.

The second is related to the high expectations resulting from the educational profile and the purpose of the visits to the park: 56.9% of the foreign visitors said that mountain climbing was the main purpose of their visit to Kinabalu Park compared to 26.4% of the domestic visitors, and 25.1% said that flora and fauna were the key motivation, but only 15.3% of the domestic visitors. The survey results also show that 71.3% of the foreign visitors were university graduates as compared to 38.6% of the domestic visitors.

The third refers to the status of Kinabalu Park as a World Heritage Site, and the foreign climbers had high expectation regarding the services provided in the park. Of these, 39.5% said that the status of Kinabalu Park as a World Heritage Site was the main reason for their visit. Specifically, the lower satisfaction of the foreign climbers with the knowledge provided by mountain guides is possibly related to the roles of mountain guides perceived by them. As revealed earlier, the foreign climbers had higher expectations regarding educational experience during the climbing than the domestic climbers. The chi-square test also indicates that the rating of the guides' knowledge ($p=0.000$) and communication skills ($p=0.000$) by the climbers was directly influenced by the level of the guides' English proficiency.

5.4 Willingness to pay more

Of the respondents, 40.4% indicated a willingness to pay more in Kinabalu Park (Figure 5.24). For those who were willing to pay more, 18.8% were of the opinion that the fees charged in Kinabalu Park were reasonable, because they also paid a similar amount in other parks; 51.7% of the respondents agreed to pay more if the money were to be used for conservation purposes, while 57.7% of the respondents would have liked the money to be used for improving visitor facilities and activities in Kinabalu Park; 40.3% of the respondents believed that the money would improve the living standard of the local communities, while 3.5% said they were willing to pay more because the existing fee was on the low side.

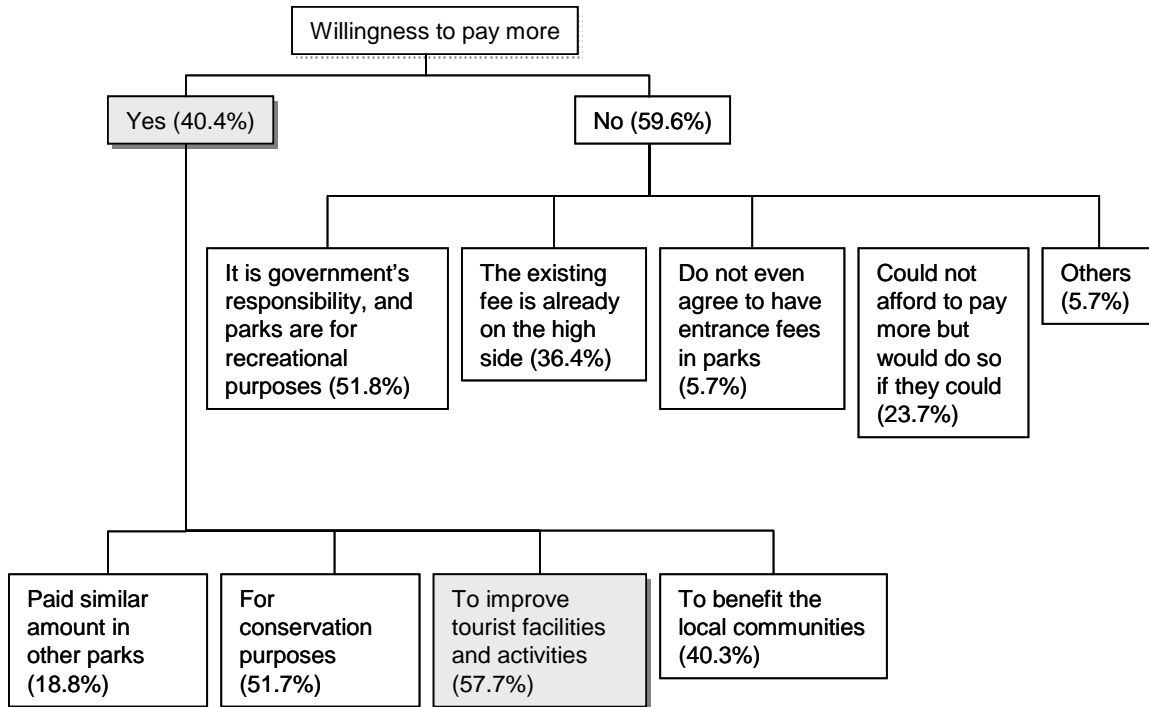


Figure 5.24 Willingness to pay more among the visitors to Kinabalu Park

There were some slight differences in the reasons that motivated the respondents to pay more. As for the domestic visitors, 69.5% wanted improvements in visitor facilities, while 48.8% favored investments in conservation measures, and 34.1% wanted to help the local communities. As for the foreign visitors, highest priority was given to conservation (55.2%) rather than to improvements in visitor facilities (43.3%), and to benefits for the local communities (47.8%) (Figure 5.25).

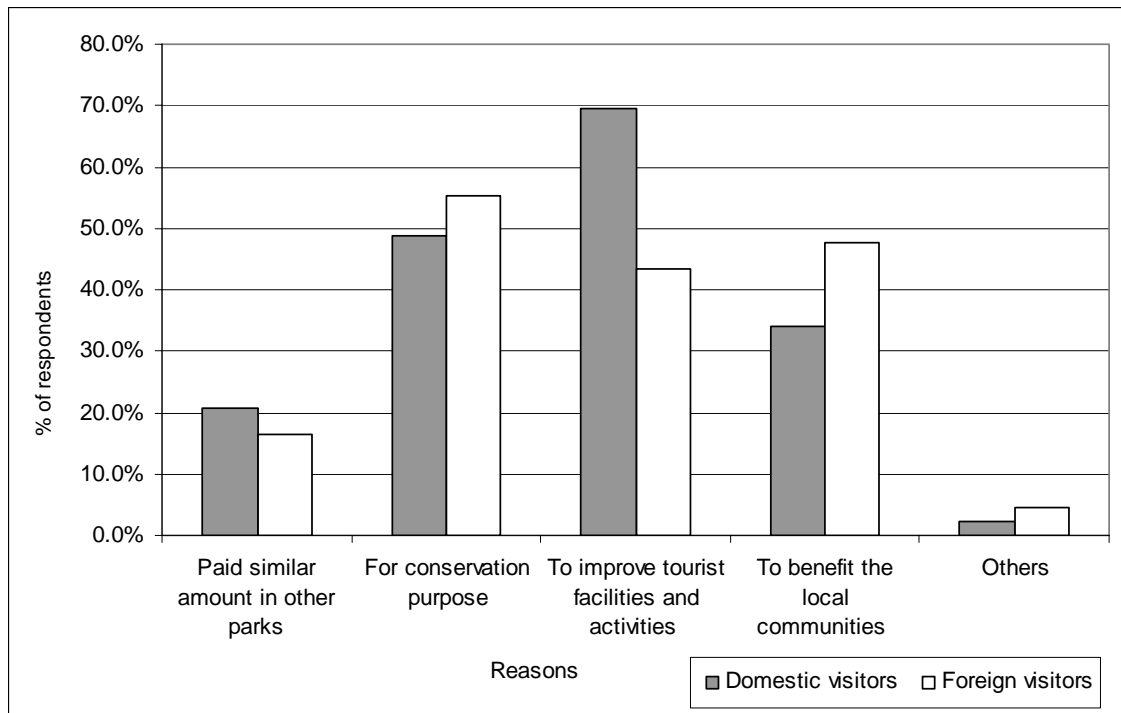


Figure 5.25 Reasons favoring willingness to pay more by domestic and foreign visitors in Kinabalu Park

As for those who did not want to pay more, 51.8% were of the opinion that the park was government responsibility and that national parks should be provided to the public for recreational purposes; 36.4% said the existing fee was already on the high side, while 5.7% even disagreed with the presence of entrance fees. Of the respondents who did not want to pay more, 23.7% indicated that they could not afford to pay more but would do so if they could.

The chi-square test performed to test the significance between the overall satisfaction and willingness to pay confirms that the general rule on the relationship between these two variables applies: the visitors' satisfaction directly influenced the willingness to pay more ($p=0.048$, $<0.05\%$). Of all the respondents who were willing to pay more, 40.5% rated their overall experience in Kinabalu Park as satisfactory, and 56.2% as expected.

When visitors were asked how much more they were willing to pay, 45.0% were of the opinion that an extra amount between RM 5 and RM 10 was acceptable, while 41.7% said less than RM 5 would be preferable. Nevertheless, 13.2% of the respondents were willing to pay more than RM 10.

When the visitors were asked that if a fee increment were to be implemented and would exceed the amount that they were willing to pay, would it affect their visits to Kinabalu Park, 32.7% said it would not affect their visits because Kinabalu Park had so much to offer, 46.7% said they would think twice and lessen the frequency of their visits, 18.6% said they would look for other destinations, while the remaining 6.9% had other opinions, e.g., they would think about it later, and also since they had visited Kinabalu Park and had no intention to revisit the park, this question did not apply to them. While the domestic and foreign respondents (54.6% against 45.4%) shared the opinion that Kinabalu Park had so much to offer and that the fee increment would not affect their visits, the domestic visitors showed a higher tendency to lessen the frequency of their visits to Kinabalu Park than the foreign visitors (78.3% against 21.7%). On the other hand, the tendency for foreign visitors to look for other destinations was higher (66.7% against 33.3%) (Figure 5.26).

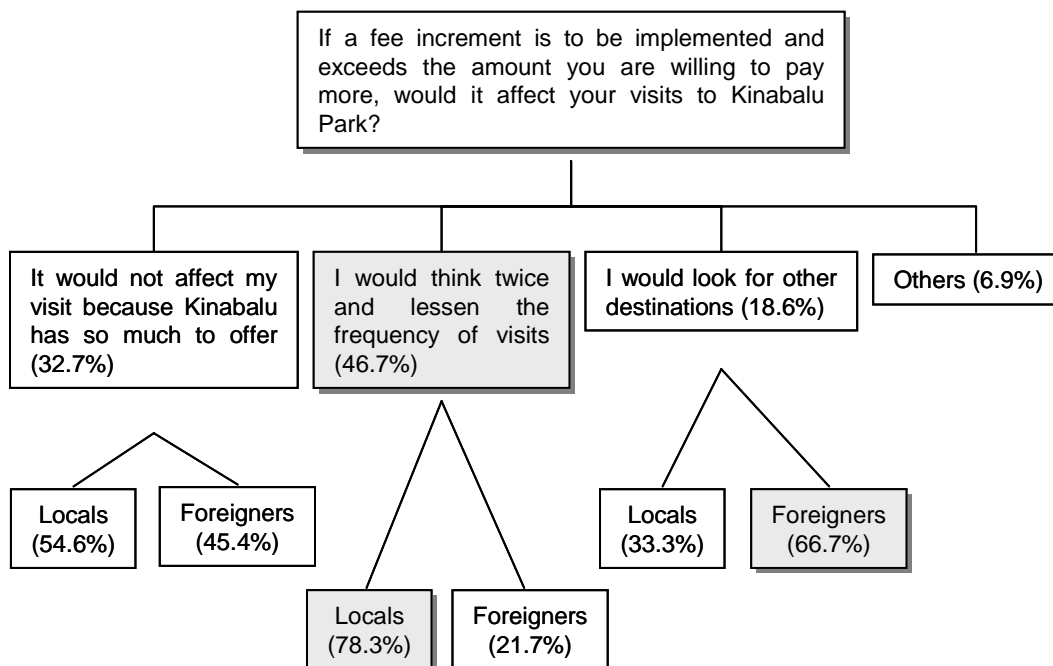


Figure 5.26 Will fee increment affect visitors' visits to Kinabalu Park

5.5 Tourism demand studies for Kinabalu Park

Tourism demand studies significantly help park authorities to enhance park visitors' experience and satisfaction. By knowing the visitors' characteristics, preferences and feedback on the existing services, the park authority is able to implement appropriate

strategies to tackle to visitor demand in terms of quality and type of the facilities and activities. In Kinabalu Park, no visitor-feedback form is made available to the visitors by Sabah Parks to rate their overall experience in the park at the end of their visit. As for climbing activities, climbers are asked verbally by the park staff at the operation counter, where they obtain their climbing certificate, whether they would like to remark on their climb. On the other hand, SSL distribute a questionnaire form to the resort guests to obtain their feedback on their stay in Kinabalu Park. Nevertheless, the questions only deal with the quality of the accommodation and eating facilities in the park, and do not include the profile of visitors, e.g., nationality, age group, gender and length of stay.

The author was informed during an interview with the personnel of the A&M division that SSL was supposed to provide information on the visitor profile to Sabah Parks as part of the terms and conditions of the privatization program. Despite several written reminders sent to SSL by the division, there was no indication that SSL intended to forward information to the authority.

5.6 Conclusions

Presented in this chapter is the park visitor satisfaction level on the tourism facilities and activities provided in Kinabalu Park and how the interactions between the park management and different types of goods and services influence the satisfaction level.

Overall, the visitor satisfaction level in Kinabalu Park was above average. Only a minority of the respondents were disappointed with their stay in the park. In addition, nearly 80% of the respondents expressed their intention to return to the park in the future. The positive result of the willingness to pay more survey confirms that the visitor satisfaction in Kinabalu Park was above average. On the one hand, this shows that the substantial efforts by the park management to tackle visitor needs and thus enhance the economic impact of tourism in the park have shown encouraging results. On the other hand, the relatively high visitor satisfaction in Kinabalu Park is only a general recognition that the park management is meeting visitor demands. Specifically, the results show that there were areas that scored high and contributed to the overall positive experience of the visitors in the park, but that there were also areas that performed below visitor expectations. The park management has to do more in order to

maintain the economic impact of tourism in Kinabalu Park in the long term by giving attention to these areas. To summarize, the areas that require immediate improvement are the knowledge-based aspects. These include the educational elements of all activities as well as the quality of nature and mountain guiding pertaining to English proficiency, communication skills, knowledge as well as information provided.

Activities offered to visitors to Kinabalu Park were evaluated based on five attributes namely 'easy accessibility', 'attractiveness', 'cleanliness' and 'information/educational value'. The attribute 'information and educational value' scored lower than the other attributes. The lower score for 'information and educational value' indicates the possibility that the visitors to Kinabalu Park expect a more informative and educational experience than that offered in the park.

Similar results were obtained for nature guiding and mountain guiding. Education-related elements, i.e., 'information provided by guide', 'guide's knowledge in answering questions', 'English proficiency', scored relatively low. The indication that English proficiency of a guide had a direct influence on the 'information provided by guide' and 'guide's knowledge in answering questions' needs to receive the immediate attention of Sabah Parks. In terms of mountain guiding, relatively lower scores were given by foreign climbers than by domestic climbers, especially in terms of 'English proficiency', 'knowledge' and 'communication skills'. Some of the key factors were possibly related to the expensive climbing permit fee paid by the foreigners, who expected the quality of experience to be on par with the price they paid.

The demand for educational and communicative experience can also be seen from the educational background of the visitors and the purpose of their visits to Kinabalu Park. Furthermore, the wish for Sabah Parks to play a pro-active role in providing information during mountain climbing was closely related to the background of the climbers, who were mostly foreign climbers on non-package tours. This demand was not well understood by Sabah Parks. These needs would have been understood if a tourism demand study had been carried out by Sabah Parks. The absence of channels for the visitors to convey feedback on their overall experience is a major shortcoming in the park. Besides, the fact that SSL has not cooperated with Sabah Parks by providing profiles of resort guests has further thwarted the efforts to react to the needs of the visitors to the park.

Sabah Parks also overlooked the importance of providing basic facilities such as shelters, toilets and walkways. The survey results reveal that Sabah Parks was unable to meet the moderate expectations of the park visitors regarding these basic facilities.

On the positive side, the facilities (e.g., accommodation, restaurants and souvenir shops) in Kinabalu Park were generally rated as expected. Specifically, accommodation facilities were rated above average both in terms of quality of service and pricing. As recognized by the repeat visitors, there were significant improvements in the quality of accommodation after the introduction of the privatization program. The survey results of willingness to pay more of the park visitors also indicate that there is room for enhancing the economic impacts of tourism to Kinabalu Park if Sabah Parks is able to provide evidence and transparency on how the money is spent in the park or even within the Sabah Parks system. This is because while the domestic visitors preferred to see their additional financial contributions go into visitor facilities and activities, the foreign visitors were in favor of extra contributions benefiting biodiversity conservation and the local communities.

In Kinabalu Park, most of the tourism activities provided are made available to the park visitors at a fee. While some of them are still available for others after they have been offered to an individual (toll goods), some are not (private goods). Examples of toll goods in Kinabalu Park include the botanical garden, butterfly farm, *Nepenthes Rajah* trail and tropical garden. Mountain climbing, slide shows and canopy walkway are examples of private goods. The communication skills, English proficiency and guide's knowledge offered to the climbers as part of the mountain guiding service are also private services. Facilities such as accommodation and restaurants are private goods and services, whereas toilets, sitting area and walkways are public services. Information and educational values are examples of public services.

The park visitors' demand for education-related elements (e.g., information and educational values, the ability of the mountain and nature guides to provide knowledge and to answer questions) was not well understood by Sabah Parks. This is mainly due to the fact that Sabah Parks did not establish an evaluation or monitoring system by conducting questionnaire surveys or obtaining feedback from the visitors regarding their experience in the park. These analysis results demonstrate the general weakness that exists within the public sector in dealing with private goods. The absence of restraints

(e.g., Sabah Parks will never go bankrupt but will survive even if it is running at a loss) has contributed to the lack of interest in understanding the market demand. On the other hand, the lack of evaluation and monitoring of the visitors' expectations also mean that the willingness of visitors to pay more for some public services (i.e., nature conservation and benefits for the local communities) was not recognized and the worth of the public services (knowledge), which could have also further enhanced the value of private goods and services in the park, was overlooked.

In contrast, the fact that SSL, driven by its profit nature, obtained feedback from the resort guests and the positive feedback of the repeat visitors on the accommodation facilities reveals the ability of SSL (private sector) in supplying the facilities to meet the market demand - the expectation of the park visitors in terms of acceptable quality of services at an affordable price. This confirms that the private sector is relatively more capable in providing private goods than the public sector (i.e., improved quality of facilities after private sector took over the management and operation). Moreover, it is also rational that SSL does not provide the profiles of resort guests to Sabah Parks, because SSL perceives neither 'incentive' (e.g., would get paid or boost its business performance) nor 'restraint' (e.g., no sanction taken by Sabah Parks on SSL) by not doing so.

6 CONCLUSIONS AND RECOMMENDATIONS

This research demonstrated the impacts of a privatization program to support the role of Kinabalu Park in conserving nature, benefiting the local communities and enhancing visitor satisfaction. Information was collected through a questionnaire survey, interviews (semi-structured and structured), observations and secondary data collection, involving various stakeholders —park visitors, park authority, private operator, park staff, private operator’s staff and the members from local communities— to ensure the correctness of the information sources. The analysis results concerning the benefit distribution of protection areas into three entities were separately presented in Chapters 3, 4 and 5. As disclosed in the conceptual framework (Chapter 2.1), the tourism aspects of nature conservation, benefits of the local communities and visitor satisfaction are interrelated. Hence, this final chapter will describe the triangle interactions among these entities and how the involvement of the private sector in park management has contributed to the interactions, which is at the core of the socio-economic principles of sustainable tourism. This chapter then links these empirical results on sustainable tourism practice with its theoretical relevance on the governance of different goods and services, as well as the issue of incomplete privatization and the possibility of political influence on privatization. Finally, recommendations are given on how the positive socio-economic impacts on tourism to Kinabalu Park can be enhanced, and concluding remarks on general lessons learnt for protected area management and nature conservation are made.

6.1 Is Kinabalu Park sustainable?

The efforts of supporting conservation, benefiting local communities and maintaining visitor satisfaction must be seen as a triangle interaction. While tourism generates financial revenue to the park, it also depends on the outstanding natural features in the park to survive; similarly, while capacity building provided by the park to the local communities aims to benefit the local communities, the improvement in communication skills and language proficiency among the members of the local communities is, in return, contributing to a more fulfilling experience among the visitors (visitor satisfaction). Enhancing visitor satisfaction has a positive influence on the revenue

generated by tourism, and it becomes the catalyst to the creation of more jobs and a better financial and human resource basis for the park management, which makes it possible to invest more in conservation activities.

Nature conservation is a key justification to the establishment of many protected areas worldwide. The analysis results reveal that the budget allocation, workforce and tourism management practice in Kinabalu Park are significant in supporting the conservation efforts in the park. The comparison with global mean clearly indicates that the financial budget allocated by the government to Kinabalu Park is high. In addition, while the park revenues are often below park-operation budgets for most parks (Goodwin 2000), the financial revenue generated from the tourism sector in Kinabalu Park was so high in 2005 that it counted for more than half of the total income generated within the Sabah Parks system, and paid for personal emolument and park operation, management and maintenance costs. The number of staff in Kinabalu Park is also relatively high as compared to the global mean. The existence of tourism impact management is also credited as an effort by Sabah Parks to minimize the negative ecological impacts of tourism activities in the park, which is in line with the conservation objectives. These mentioned features have served as the prerequisite criteria for the park management to effectively support the conservation activities in Kinabalu Park. With the implementation of a privatization program to manage the tourism facilities, Sabah Parks can then fully use these resources to focus on and enhance its conservation activities.

In meeting the social objective, protected areas must benefit the local communities. From the perspective of the local communities, employment creation is always one of the most relevant justifications for a destination to promote the tourism sector (Roche 1992; Ceballos-Lascurain 1996). In Kinabalu Park, several efforts have been made by the park management to benefit the local communities through tourism development, i.e., through the creation of jobs within the organization of Sabah Parks, Sutera Sanctuary Lodges and Multipurpose Cooperative of Sabah Parks Staff as well as of jobs for mountain guides and porters. In particular, the privatization program has now provided a total of 261 jobs to the members of the local communities. In addition, the creation of jobs for mountain guides was first stipulated under Section 13(2) of the Kinabalu National Park Regulations 1971, later Park Enactment No. 10 of 2002, which

requires all visitors climbing to the summit of Mount Kinabalu to be accompanied by a mountain guide. Apart from job opportunities, Sabah Parks and Sutera Sanctuary Lodges also provide training for their respective staff. Training is also provided by Sabah Parks for mountain guides to enhance the quality of their service in the park.

The generation of substantial tourism revenue in Kinabalu Park is partially if not mainly the result of the high-quality tourism facilities and activities provided in the park. Maintaining a high level of visitor satisfaction is important for the existence of tourism in a destination. If visitors' experiences are not positive, visitors will cease to come, and there will be no tourism (Wall 1996, p.113). The results of the visitor satisfaction survey in the park indicate the appreciation of the efforts of the park management to enhance visitor satisfaction through the provision of adequate facilities and activities. This is supported by the survey results demonstrating the high willingness of the visitors to pay more and the high tendency among the visitors to revisit the park. Feedback forms provided by the private operator (Sutera Sanctuary Lodges) have helped to improve the quality of services provided by the operator of the accommodation facilities. Casual conversations held with repeat visitors and former staff of Sabah Parks, who worked in the accommodation area before the facilities were taken over by the private sector in 1998, revealed that considerable improvements have been observed in the quality of services at affordable fees. There was also a significant reduction in complaints by the visitors who stayed overnight in the park. Through the introduction of privatization in Kinabalu Park, the quality of the tourism facilities in the park has been enhanced.

Despite the above positive features that show how the privatization program has contributed to support the sustainable tourism practice in Kinabalu Park, there were weaknesses and threats which have limited the ability of the park management to meet the sustainable principles of tourism.

In Kinabalu Park, the high budget allocation and staff number as well as substantial financial revenue generated from tourism have provided a strong basis for its nature conservation. In addition, the outsourcing of the tourism facilities management has also allowed Sabah Parks to focus on its research activities. However, the large number of park staff and strong financial support were apparently not conducive to conservation efforts in Kinabalu Park. The annual budget allocation for the park reveals

that the major part of the funding was used for tourism development. Besides, while the park revenue and expenditure statements disclosed the high budget allocation and high number of staff in Kinabalu Park, shortage of manpower and financial support constraints were the key issues faced by Kinabalu Research and Education division to carry out nature conservation activities, e.g., scientific research, species and tourism impact monitoring system. Subsequently, the absence of a monitoring system in Kinabalu Park has also made it difficult for the park management to evaluate the long-term human impacts on flora and fauna along the summit trail and to assess the effectiveness of the existing tourism impact management tools. This is related to the issue of internal staff distribution of Sabah Parks, between the Administration and Management division and the Research and Education division in Kinabalu Park. As the number of staff directly influences the park expenses, the high number of staff may have led to unnecessary spending on personal emolument. Money saved here could benefit the conservation-related areas such as monitoring system and scientific research activities. Moreover, it has also thwarted the possibility of channeling the substantial income in Kinabalu Park to other parks within the Sabah Parks system. The analysis of the annual expenses of Sabah Parks also demonstrates that limited funding has been allocated for training programs, both in the Administration and Management and the Research and Education division. Furthermore, of the total annual budget allocated for training, a major part was invested in the staff of the Sabah Parks head office instead of in staff at site level.

On the other hand, as expressed by the personnel from Research and Education division, manpower was one of the key constraints in conducting research activities in Kinabalu Park. This shows that Sabah Parks was unable to find coping strategies to overcome this shortcoming, e.g., to explore the collaboration opportunities with the local universities. This is because conversations held with the local universities during the field research revealed a willingness and interest to establish long-term research collaboration with Sabah Parks. This potential external support is important, because the existing involvement of international institutions or researchers in most cases is short-term based or within a limited time frame due to budget considerations, etc. Furthermore, international researchers come with predetermined subjects for scientific studies. In contrast, in collaboration with local universities, studies which are deemed

necessary by the park authority but are not taken up by international researchers can be explored. Collaboration with local universities will also help Sabah Parks to resolve the problem of lack of scientific manpower faced by its Research and Education division and also indirectly enhance skill development among its staff.

In enhancing visitor satisfaction, a substantial financial budget has been invested in tourism in Kinabalu Park. However, the investments were only in hardware development, e.g., creation of more activities. The rising demand of visitors to Kinabalu Park for knowledge-based experience (especially among the foreign visitors) is not well understood by Sabah Parks. This is revealed through the lower satisfaction level of the foreign visitors in nature guiding and mountain guiding regarding communication skills, English proficiency, knowledge and information provided, and the guides' ability to answer questions. These results reveal the fact that the training program provided by Sabah Parks to the staff involved in interpretation and education as well as to the mountain guides is unable to cope with the visitor expectations. There was no improvement in this area despite the considerable increase in fees in 2002. In addition, Eagles and McCool (2002) commented that many parks do not pay sufficient attention to the satisfaction of their visitors, and the services are provided on a 'take-it-or-leave-it' basis. A similar situation is observed in Kinabalu Park. Sabah Parks seems to have no interest in studying tourism demand in the park. Neither a visitor questionnaire survey nor visitor feedback was conducted or obtained. Although Sutera Sanctuary Lodges obtains the resort guests' feedback in the accommodation sector, no survey is conducted to obtain comments from the visitors on their experience in various areas especially in terms of activities participated in during their stay in Kinabalu Park. The complaints and confusion amongst the visitors about the many hidden costs in the park further confirm that the expectations and demands of the visitors were not well-understood and attended. Moreover, Sutera Sanctuary Lodges could have helped Sabah Parks by providing the profiles of resort guests, which could be used to understand the geographical characteristics of visitors who stay overnight in the park, but it does not.

The distinguishing feature of tourism to natural areas is that it should benefit nature conservation and that the benefit should not only be evaluated in economic terms. Apart from providing substantial job opportunities to the local communities, Sabah Parks was unable to provide adequate training for the mountain guides to

enhance their services to the climbers. Sabah Parks also did not emphasize capacity building among the porters so that they can protect their interest and to have negotiation power when dealing with Sutera Sanctuary Lodges. Their living standard was lowered following the implementation of the program. Their earnings were reduced by 20% in 1998 and the rates have not been revised by the private operator since then. Porters also face the problem of delayed payments. Moreover, the evidence in Multipurpose Cooperative of Sabah Parks Staff whose business has been negatively affected by the introduction of privatization program also discloses the fact that Sabah Parks as a park authority failed to ensure a fair distribution of benefits among the stakeholders. On the other hand, although the private sector has provided significant numbers of jobs to benefit the local communities, the feelings of job insecurity and income instability experienced by the staff of Sutera Sanctuary Lodges further reveal that the park may not be able to provide long-term jobs and income to the local communities.

6.2 Governance of public and private goods and services – a disclosure

The management of Kinabalu Park illuminates the issue of governance of different types of goods and services. It discloses the rationale behind privatization— the profit-driven nature of private sector in managing private and public goods and services. In so doing, it mirrors the relative inability of the public sector in providing private and toll goods. The empirical evidence has also raised concerns over the emphasis of the public sector in investing into public goods and services, the issue of incomplete privatization and the possibility of political influence on privatization.

Public and private goods and services in Kinabalu Park

Three types of goods and services, i.e., public, private and toll goods, are available in Kinabalu Park. Tourism activities in the park were provided to the visitors at a fee (excludability). They are either toll goods or private goods. Examples of toll goods in Kinabalu Park include the botanical garden, butterfly farm, Nepenthes Rajah trail and tropical garden. By charging a fee, the park can exclude an individual from accessing the gardens. Nevertheless, the park gardens are still available for others once it is accessed by an individual since there is no limit to the number of visitors to the gardens (non-divisibility). In contrast, activities such as mountain climbing, slide shows and

canopy walkway are examples of private goods in the park. Fee charges and the limits on visitor/climber numbers show the park's ability to exclude access to and divide the goods. The tourism facilities provided in Kinabalu Park consist of both private and public goods and services. Accommodation and restaurant facilities are the private goods and services offered in the park whereas toilets, sitting areas, and walkways are public services made available to the visitors.

Porter and mountain guiding services are the private services provided by members of local communities. Porters cannot provide services to others when he or she has already been hired by Sutera Sanctuary Lodges or tourists. Similarly, mountain guiding is provided by mountain guides at a fee. Once a mountain guide is hired by a group of climbers, he is no longer available to other climbers. The communication skills, mountain guides' knowledge and their English proficiency, which enable them to communicate with the climbers, are some of the private services. These are only enjoyed by the climbers who have paid the guiding fees to the particular guide.

On the other hand, the nature conservation efforts (staff training, research activities and species monitoring system), information and educational values, training for the members of the local community, i.e., mountain guides and porters, are some examples of public services offered in the park. Scientific information and the park's history can be shared infinitely without diminishing their value for everyone who shares it; training provided to the mountain guides and porters are shared by everyone without loss in quality.

The private and toll goods and services generate direct financial income to the park, but the public goods and services require long-term investment. Nevertheless, this kind of investment is necessary for sustainable tourism. For instance, putting efforts into nature conservation helps to preserve the environment, which again secures the existence of tourism in Kinabalu Park. Likewise, visitor satisfaction level will be enhanced through proper training given to the mountain guides to improve their knowledge and also communication skills. Gradually, the rate of repeat visitors to the park will increase, thus leading to a positive influence on the tourism business in the park. Local communities will then benefit because of the higher job demand and also income level, and the park authority will be able to depend on tourism to generate substantial revenue in the park.

The relationship between the profit-driven nature of the private sector and private and public goods

In Kinabalu Park, the profit-driven nature of private sector in managing different goods and services in the park has led to three different outcomes: 1) improved quality of private goods, e.g., accommodation facilities, 2) failure in securing public goods which do not support the private goods, e.g., the welfare of porters, and 3) provision of the public goods that directly enhance the quality of the private goods provided by the private sector, e.g., staff training.

The positive feedback of the repeat visitors on the accommodation facilities reveals the ability of Sutera Sanctuary Lodges (private sector) to provide the facilities to the park visitors that they expect. The demand and expectations of the resort guests were evaluated and monitored through the guest feedback form. These findings confirm that private sector is relatively more capable to provide the private goods than public sector (i.e., improved quality of facilities after the private sector took over the management and operation). It is also rationale that Sutera Sanctuary Lodges did not provide expected cooperation to Sabah Parks (i.e., in giving profiles of resort guest), because they perceived neither an incentive to provide the information (e.g., get paid for the information or contribute to better business performance) nor restraints (no sanction taken by Sabah Parks).

With regard to the management of public goods, the findings reveal that the private sector supports public goods that have direct benefits on private goods it provides. Manpower and quality services are necessary for the private sector to maintain its business operation and meet the market demand. Based on this reason, Sutera Sanctuary Lodges provided substantial job opportunities and training to the members of local communities working with the organization. On the other hand, the private sector illuminates its less willingness to provide the public goods and services (i.e., the insecurity and dissatisfaction of jobs felt among its staff and the thwarted living standard experienced by the porters) since they have no influence on the private goods provided by the private sector. Instead, operating on the basis of 'making profit', private sector is gaining profit at the expense of these public goods and services (decreased income level among the porters and its workers' wages).

Are public goods best secured by the public sector? Can the public sector meet the market expectation of private and toll goods?

One of the main reasons for introducing privatization to Kinabalu Park was to enable Sabah Parks to focus on nature conservation. Nevertheless, the results of the analysis on the budget allocation and breakdown of expenses indicate that Sabah Parks did not place stronger financial emphasis on areas that support nature conservation in Kinabalu Park such as training, establishing a monitoring system, and research activities (the public goods) after the implementation of privatization.

Instead, Sabah Parks still showed more interest in investments in private goods and services, i.e., tourism development, which were perceived to be profitable. This reveals a strong short-term profit orientation. The evidence indicates a paradigm blindness. Sabah Parks was not able to adjust itself to the changing roles and responsibilities after privatization to meet the principles of sustainable tourism, which require long-term investment (i.e. financial support of nature conservation through improving staff training and establishing a monitoring system).

Sabah Parks also showed little interest in investing into human capacity development such as knowledge, information and communication abilities of mountain and nature guides in the park. This is supported by the findings on the satisfaction of the mountain guides with their income, on their communication skills and foreign language proficiency, on the negotiation ability of porters with Sutera Sanctuary Lodges, and on the response of Sabah Parks to self-organized awareness among the mountain guides and porters. These findings also indicate that Sabah Parks has not made sufficient attempts to benefit the members of local communities.

These findings reveal two main factors influencing the emphasis of Sabah Parks in the provision of public goods and services. Firstly, Sabah Parks overlooked the importance of sustainable investment into public services (trainings), which contribute to mutual symbiosis between these public services and the private services provided to the visitors, thereby enhancing visitor satisfaction and benefiting the local communities. Secondly, Sabah Parks overlooked the worth of the public services and did not recognize that the visitors were willing to pay more for nature conservation and the benefits to the local communities. This is due to the lack of a system for monitoring tourist satisfaction. While on one hand, the public sector (Sabah Parks) might not be

interested in making long-term investments in public services and goods such as nature conservation, capacity building of nature and mountain guides and porters, on the other, it is not able to respond to visitor demand (the market) because of lack of a monitoring and evaluation system.

The lack of a monitoring system also demonstrates the general weakness existing within the public sector in dealing with private goods. Sabah Parks did not understand the market demand, i.e., the expectations of the park visitors (e.g., the quality of mountain and nature guiding, information and educational values, complaints on hidden costs in the park). Unlike the private sector, which is motivated by the foreseen incentives and potential restraints, the absence of these factors in the public sector prevent it from making efforts to understand and meet the market demand. Hence, neither was feedback obtained nor a questionnaire survey conducted to understand the park visitors' expectations and evaluate the existing quality of goods and services provided in the park.

Incomplete privatization

The inability of the private operator to pay the concession fee as agreed in the early stage of the privatization program shows that the private operator was incapable of effectively managing and operating the tourism facilities in Kinabalu Park and thereby of generating profit. This indicates that the concession company was not selected based on the criteria of economic and organizational strengths in managing tourism facilities. Supported by the fact that there was also no open bidding during the selection of the concession company, it is assumed that privatization was incomplete in the case of Kinabalu Park.

As political influence may lead to incomplete privatization, one may assume that privatization of Kinabalu Park also demonstrates the possibility of political influence on the program, which led to the creation of financial burdens in the public sector rather than helping to remove them.

6.3 Application-oriented recommendations

The following recommendations are made for improving the management in Kinabalu Park. These recommendations focus mainly on a higher investment into nature

conservation activities in the park and benefits of the members of local communities in terms of capacity building, on collaboration with external institutions to improve management capacity, and on knowledge-based development for enhancing visitor satisfaction:

World heritage sites are recognized as models of effective management and conservation. Therefore, Kinabalu Park, as one of the world heritage sites, should present a good example of management and nature conservation. This is especially critical considering the role of Kinabalu Park as the biodiversity center both in Southeast Asia and the world. Conservation of its diverse biodiversity is of paramount importance. One of the key features of tourism to protected areas is its possible contribution to the financial support of conservation activities in these areas. In Kinabalu Park, the park management should invest more in research and education activities in order to improve conservation activities. Besides, staff training needs to be given more financial emphasis to enhance human resource development of Sabah Parks at site level.

In order to improve the living standard of the porters, these need to be organized to strengthen their integrity and protect their interests. Moreover, there is rising awareness among the mountain guides about the necessity of becoming involved in the management of their activities in the park. However, it is unlikely that the porters and mountain guides will succeed without external support. Kinabalu Park can support the porters and mountain guides in terms of capacity building through providing training, thus facilitating the organization of the porters and encouraging the mountain guides to participate in the management and arrangement of their work.

Constraints in human resources and/or financial allocation are frequent issues faced by management authorities in protected areas. In overcoming these issues, tying up with the local higher institutions is recommended. In the case of Kinabalu Park, with its existing human and financial resources, it is possible for Sabah Parks to further enhance its conservation efforts by establishing a long-term collaboration with the local universities to carry out necessary research. This research has not been conducted so far due to unpopular research topics or topics that require long-term and labor intensive efforts, e.g., monitoring of key and endemic species and human impacts. Apart from solving the problem regarding lack of skilled staff, this would also assist in establishing

a continuous training program for the staff by getting them to work together with the local universities.

Knowledge-based activities for visitors need to be promoted in protected areas. With an appropriate level of information, the management goals, role of the authority and understanding of the park can effectively be channeled to the visitors (Sharp 1976). Park management should concentrate on increasing the human resources capacity in the guiding services as well as on improving the quality of the tourism infrastructure. Bearing in mind also that the wish for better knowledge-based activities mostly came from the foreign visitors, and considering that foreign visitors are the key contributors to the tourism revenue in Kinabalu Park, this is of ultimate importance if Kinabalu Park wishes to enhance visitor satisfaction and thereby sustain the positive socio-economic impacts of tourism in the park, and at the same time serve the nature conservation purpose and reflect its status as World Heritage Site. Furthermore, Kinabalu Park must promote the tourism activities with emphasis on quality rather than on quantity; quality here refers to the training provided to its staff and the mountain guides as well as knowledge-based activities.

Additional educational and training programs should be provided to the nature guides and mountain guides to fill the gaps in knowledge and skills. The program should focus on the knowledge related to natural history and park ecology as well as on the attractions of the park. Fluent interpreters play an important role in enhancing visitors' experience in ecotourism (Fennell 1999). Improving the English language proficiency of the guides is most important. Park management should also initiate training in other languages. The profiles of the climbers in Kinabalu Park indicate which languages the park authority should focus on. In order to develop an appropriate level of education and training for these guides, park management can collaborate with tour operators, the Ministry of Tourism, non-governmental organizations, and tourist education institutions. Apart from improving the overall quality of the mountain guiding services, improving the training of the mountain guides could subsequently lead to an increase in their wages. As for tourism infrastructure development, park management should improve the quality of interpretation along the nature trails and in the mountain garden by providing information in an attractive manner, which could lead to a more fulfilling individual walk.

In order to increase visitor satisfaction, park management should also consider providing brochures to visitors that give general information about the park, e.g., the facilities and activities provided, setting up an information/reception counter as a stop center in the park, offering briefing on mountain climbing, introducing a series of combined activities at a package price, introducing reduced rates for students, and controlling the number of participants per guide during guided nature walks.

Meanwhile, the visitor survey results clearly indicate that visitors, especially the foreign visitors, are more likely willing to pay more if the money were to contribute to conservation in the park and benefit the local communities. Park management should display information on how the income generated from tourism is used to benefit these two areas. This will not only create a certain level of transparency but also increase the sense of awareness and appreciation among the visitors about their contribution to the park. In addition, donation boxes can be located in strategic areas within the park for fund raising.

The quality of the services provided in Kinabalu Park should be measured with respect to meeting the demands of visitors instead of solely looking at the supply (e.g. the provision and creation of a wide range of tourism activities). Sabah Parks should set up a visitor profile database in Kinabalu Park, and ensure cooperation by Sutera Sanctuary Lodges through proper mechanisms for obtaining information on the resort guests. Besides, feedback forms evaluating the overall experience and activities should be made available at strategic points within the park. This must be a continuous process, serving as part of the monitoring system to improve tourism facilities and activities as well as service quality in Kinabalu Park.

6.4 Relevance of research and concluding remarks

The Convention of Biological Diversity recognizes the roles of sustainable tourism in biodiversity conservation through job and revenue creation, thereby providing an incentive for preserving biodiversity. It also emphasizes the engagement of various stakeholders (e.g., private sectors, local communities) and the importance of education and capacity building in nature conservation. This research has direct contribution to the convention because it demonstrates the importance of the distribution of benefits created through tourism development in protected areas through analyzing the influence

of privatization on park management. It emphasizes the need to evaluate the criteria of sustainable tourism based on proper distribution rather than only on numbers as a whole by looking at firstly, at the balance between use and conservation (distribution of financial revenue to support tourism development and conservation activities) and secondly, at the shared benefits among the stakeholders (distribution of benefits enjoyed by each stakeholder in the park).

The evaluation of socio-economic impacts of tourism in Kinabalu Park gives an insight into the performance of the park with respect to meeting sustainability based on the involvement of each stakeholder and the state of tourism development. It provides useful information for the government, which can re-examine whether the private sector in protected area management facilitates or limits sustainable development. At the same time, it can examine the issues within the public sector itself, as privatization is not the solution to the problems faced by the public sector (Muzaffar 1984; Muzaffar 1987, Jomo 1994). This research reveals the need to strengthen the park management's efforts to support nature conservation, benefit local communities and enhance visitor experience, in particular through the improvement of educational and knowledge-based infrastructure, and to place more emphasis on research and human resource development. This is particularly important, since little attention has been paid by the federal and state government to the evaluation of privatization programs on a small scale in the country, e.g., in protected areas, against the goal of long-term sustainable tourism development.

While using the socio-economic indicators of sustainable tourism to measure the current state of development in Kinabalu Park is useful for practitioners and for application-oriented purposes, this research, by analyzing the characteristics of the goods and services provided, seeks to illuminate other issues involved in private and public sector interaction. That is, issues beyond those that evaluate the effects of organizational performance on economic efficiency. The research findings in Kinabalu Park advocate privatization in providing private goods. It also confirms that the private sector is less willing to invest into provision of public goods and services, except those which have a complementary value on the private goods provided by the organization.

On the other hand, the research findings also reveal that the public sector has the tendency to have higher interest to invest into provision of private and toll goods

and services (i.e., tourism development) that are profitable rather than public goods and services (e.g. nature conservation and capacity building of the local communities), which require long-term investment. The findings of the park visitor satisfaction also confirm that, notwithstanding its interest in doing so, the public sector is relatively less capable in providing private and toll goods as compared to the private sector. Moreover, the public sector also overlooks the worth of these public goods and services as sustainable investment, which directly and positively contributes to the revenue generation to the park, the benefits of the local communities and the park visitor satisfaction in long term, as outlined in the principles of sustainable tourism.

The involvement of private sector in protected area management contributes to the better quality of private goods and services provision thereby enhances the visitor satisfaction and revenue return. If public sector recognizes the worth of public goods and services and focus on the investment of these goods and services, the economic and environmental values of the protected areas can then be solidly reconciled and society objective of protected areas convincingly achieved.

7 REFERENCES

- AFTPS (2002) Republic of Madagascar: Tourism sector study. Africa region, World Bank, Washington DC, Dec 19, 2002
- Akama J S and Kieti D M (2003) Measuring tourist satisfaction with Kenya's wildlife safari: A case study of Tsavo West National Park. *Tourism Management* 24 Elsevier, Great Britain, pp73-81
- Ali L and Basintal P (1997) The Status and future directions of Sabah Parks in LESTARI Proceeding, 1997, Universiti Kebangsaan Malaysia, Selangor
- Ali L and Nais J (1996) Managing nature parks: Sabah's experience. Proceeding of the seminar on Taman Negara held at Taman Negara 16-18 Nov 1995. *Taman Negara: Conserving Our National Heritage*. Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia, Bangi, Malaysia
- Ali L, Sidek A R and Nais J (1990) The management and development of state parks in Sabah. Paper presented at the International Symposium on National Parks and Protected Areas, Kuala Lumpur, 1990
- ANZECC (2000) Benchmarking and best practice program user-pays revenue (Updated from a report originally published in Sept 1996. Report prepared for Australian and New Zealand Environment and Conservation Council (ANZECC) by Lead Agency Queensland Parks and Wildlife Service Feb 2000. <http://www.environment.gov.au/parks/publications/best-practice/user-pays/index.html>. Cited 4 Aug 2006
- Argent G, Lamb A, Phillips A and Collenette S (1988) Rhododendrons of Sabah. Sabah Parks Publication No. 8. Sabah Parks Board of Trustees, Kota Kinabalu, Malaysia
- Arkitek Summaz (2001) Pelan Pembangunan Daerah Ranau (Draf Laporan Akhir) Ogos 2001. Kementerian Pembangunan Luar Bandar Malaysia. A draft final report on the Ranau District Development Plan submitted to the Malaysia Ministry of Rural Development, Kota Kinabalu
- Augustyn M and Ho S (1998) Service quality and tourism. *Journal of Travel Research* 37(1):71-75
- Barthlott W, Lauer W and Plancke A (1996) Global distribution of species diversity in vascular plants: towards a world map of phytodiversity. *Erdkunde* 50: 317-327
- Beaman J H and Anderson C (2004) The Plants of Mount Kinabalu 5. Dicotyledon Families Magnoliaceae to Winteraceae. Natural History Publications (Borneo) Sdn. Bhd., Kota Kinabalu, Sabah Malaysia and Royal Botanic Gardens, Kew
- Beaman J H and Beaman R S (1998) The Plants of Mount Kinabalu 3. Gymnosperms and Nonorchid Monocotyledons. Natural History Publications (Borneo) Sdn. Bhd., Kota Kinabalu, Sabah Malaysia and Royal Botanical Gardens, Kew
- Beaman J H, Anderson C and Beaman R S (2001) The Plants of Mount Kinabalu 4. Dicotyledon Families Acanthaceae to Lythraceae. Natural History Publications (Borneo) Sdn. Bhd., Kota Kinabalu, Sabah Malaysia and Royal Botanic Gardens, Kew

References

- Berita Harian* (2001a) Peraturan baru bantu pendaki Gunung Kinabalu, dated 18 Sept 2001
- Berita Harian* (2001b) Yuran daki Gunung Kinabalu naik by Tahuddius U., dated 19 Oct 2001
- Bikers K and Williams J T (2001) Public policy analysis. A political economy approach. Houghton Mifflin, New York, Boston
- Boyd S W and Butler R W (2000) Tourism and national parks: The origin of the concept. In: Butler R and Boyd S W (eds) Tourism and national parks. Issues and implications. John Wiley, West Sussex, England
- Brohman J (1996) New directions in tourism for third world development. *Annals of Tourism Research* 23(1):48-70
- Carney D and Farrington J (1998) Natural Resource Management and Institutional Change. Routledge, London
- Ceballos-Lascurrain H (1996) Tourism, ecotourism and protected areas. World Conservation Union (IUCN) Gland and Cambridge
- Chang M Y (2002) Taburan *Nepenthes Villosa* sepanjang trail utama dari pondok layang-layang sehingga pondok Gua Paka di Gunung Kinabalu. A project report submitted to Program Taman Alam Semulajadi dan Rekreasi Sekolah Perhutanan Tropika Antarabangsa, Universiti Malaysia Sabah, Kota Kinabalu
- Chen I J, Gupta A and Rom W (1994) A study of price and quality in service operations. *International Journal of Service Industry Management* 5(2):23-33
- Christ C, Hillel O, Matus S and Sweeting J (2003) Tourism and biodiversity: Mapping tourism's global footprint. UNEP and CI
- Clarke C (1997) *Nepenthes of Borneo*. Natural History Publication (Borneo) in association with Science and Technology Unit, Sabah
- Coopers and Lybrand Management Consultants and Sun Chong and Wong (1992) Management and development master plan for the Board of Trustees of Sabah Parks. Dec 1992. Kota Kinabalu
- Daily Express* (2001a) Curbing spread of Kinablau's choking weed by Kan Y.C., dated 27 Sept 2001
- Daily Express* (2001b) Foreign threat to Kinabalu. Urgent measures need to be taken by Kan Y.C., dated 4 May 2001
- Daily Express* (2001c) Improving Kinabalu safety by Kong J., dated 12 Sept 2001
- Daily Express* (2001d) Parks confirm no dandelion in 70s. To weed them out by Kan Y.C., dated 24 May 2001
- Daily Express* (2001e) Taman-Taman Sabah tetap naikkan yuran menyelam by Kan Y.C., dated 4 Dec 2001
- Damania R and Hatch J (2002) Protecting Eden: markets or government? Discussion paper No 0235, Center for International Economic Studies, University of Adelaide, Australia
- DELIVERI (undated) Public-private good analysis. Some experiences from DELIVERI. http://www.deliveri.org/Guidelines/misc/proj_papers/pp_9.htm. Cited 30 Sept 2007
- de Groot R S (1983) Tourism and conservation in the Galapagos Islands. *Biological Conservation* 26(4):291-300

References

- DWNP-DANCED (2002) A master plan for capacity building and strengthening of the protected areas system in Peninsular Malaysia. Department of Wildlife and National Parks (DWNP), Kuala Lumpur
- Eagles P F J, McCool S F and Haynes C D A (2002) Sustainable tourism in protected areas: Guidelines for planning and management. IUCN Gland, Switzerland and Cambridge, UK
- Eagles P F J and McCool S F (2002) Tourism in national parks and protected areas. Planning and management. CABI Publishing, UK
- Eraqi M I (2006) Tourism services quality (TourServQual) in Egypt: The viewpoints of external and internal customers. *Benchmarking: An International Journal* 13(4):469-492
- Ernst and Young (1997) Privatization of Sabah Parks. Unpublished report prepared for Sabah Parks in assessing the financial viability of the proposed privatization of Sabah Parks facilities, Oct 1997. Kota Kinabalu
- Felkins L (2006) Introduction to public choice theory. Written 10 Jan 1997. Latest revision 13 Dec 2006. <http://perspicuity.net/sd/pub-choice.html>. Cited 30 Sept 2007
- Fennell D A (1999) Ecotourism: an introduction. Routledge, Taylor and Francis Group, London and New York
- Font X, Cochrane J and Tapper R (2004) Tourism for protected area financing: Understanding tourism revenues for effective management plans, Leeds (UK): Leeds Metropolitan University. A report submitted to WWF
- Forestry Tasmania (1994) Guided nature-based tourism in Tasmania's forests: trends, constraints and implications. Forestry Tasmania, Hobart, Australia
- Foster D (undated) Measuring customer satisfaction in the tourism industry. Paper presented in the Third International and Sixth National Research Conference on Quality Management. The Center for Management Quality Research at RMIT University
- Gambakon G (1983) Legends of Poring. Kampung Poring, Sabah
- Gatzweiler F W (2005) Institutionalizing biodiversity conservation- the case of Ethiopian coffee forests. *Conservation and Society* 3 (1):201-223
- Goodwin H (2000) Tourism, national parks and partnership. In: Butler R and Boyd S W (eds) *Tourism and national parks. Issues and implications*. John Wiley, England
- Goodwin H J, Kent I J, Parker K T and Walpole M J (1997) Tourism, conservation and sustainable development, volume I, Comparative Report. Final Report to the Department for International Development. Durrell Institute of Conservation and Ecology (Dice), Institute of Mathematics and Statistics (IMS), University of Kent
- Goodwin H J, Kent I J, Parker K T and Walpole M J (1997) Tourism, conservation and sustainable development, volume II, Keoladeo National Park, India. Final Report to the Department for International Development. Durrell Institute of Conservation and Ecology (Dice), Institute of Mathematics and Statistics (IMS), University of Kent
- Goodwin H J, Kent I J, Parker K T and Walpole M J (1997) Tourism, conservation and sustainable development, volume III, Komodo National Park, Indonesia. Final Report to the Department for International Development. Durrell

References

- Institute of Conservation and Ecology (Dice), Institute of Mathematics and Statistics (IMS), University of Kent
- Goodwin H J, Kent I J, Parker K T and Walpole M J (1997) Tourism, conservation and sustainable development, volume IV, The South-East Lowveld, Zimbabwe. Final Report to the Department for International Development. Durrell Institute of Conservation and Ecology (Dice), Institute of Mathematics and Statistics (IMS), University of Kent
- Government of Malaysia (1981) Fourth Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Malaysia (1986) Fifth Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Malaysia (1991) Sixth Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Malaysia (1996) Seventh Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Malaysia (2001) Eight Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Malaysia (2006) Ninth Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Malaysia (2006) Ninth Malaysia Plan. Economic Planning Unit, Prime Minister's Department, Malaysia
- Government of Sabah (1962) National Parks Ordinance, 1962 (Sabah No. 5 of 1962). Jabatan Cetak Kerajaan. Sabah
- Government of Sabah (1970) Annual report of the Sabah National Park Trustee for 1970. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1971) Annual report of the Sabah National Park Trustee for 1971. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1973) Annual report of the Sabah National Park Trustee for 1973. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1975) Annual report of the Sabah National Park Trustee for 1975. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1976) Annual report of the Sabah National Park Trustee for 1976. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1977) National Parks Ordinance, 1977 (Sabah No. 13 of 1977). Jabatan Cetak Kerajaan. Sabah
- Government of Sabah (1978) Annual report of the Sabah National Park Trustee for 1978. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1979) Annual report of the Sabah National Park Trustee for 1979. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1980) Annual report of the Sabah National Park Trustee for 1980. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1981) Annual report of the Sabah National Park Trustee for 1981. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1982) Annual report of the Sabah National Park Trustee for 1982. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1983) Annual report of the Sabah National Park Trustee for 1983. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah

References

- Government of Sabah (1984) Parks Enactment, 1984 (Sabah No. 6 of 1984). Jabatan Cetak Kerajaan. Sabah
- Government of Sabah (1987) Annual report of the Sabah Parks Trustee for 1984-1987. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1991) Annual report of the Sabah Parks Trustee for 1988-1991. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1995) Annual report of the Sabah Parks Trustee for 1992-1995. Sabah Parks Board of Trustees, Kota Kinabalu, Sabah
- Government of Sabah (1996) Parks Enactment, 1996 (Sabah No. 7 of 1996). Jabatan Cetak Kerajaan. Sabah
- Government of Sabah (2002) Parks Enactment, 2002 (Sabah No. 10 of 2002). Jabatan Cetak Kerajaan. Sabah
- Groenendijk L and Dopheide E (2003) Planning and management tools. A reference book. The International Institute for Geo-Information Science and Earth Observation (ITC), Enschede, The Netherlands
- Halasz D, Juranics J, Marton M, Sanets E and Vilimaite K (2002) Visitor management in protected areas. A report written by an interdisciplinary project team at the University of Debrecen, as part of the European Postgraduates Course in Environmental Management (EPCEM) 2001/2002. Report Number EPCEM 2002-5. Center for Environmental Management and Policy, Debrecen, Hungary
- Hall C M and McArthur S (1998) Integrated heritage management. The Stationery Office, Norwich, UK
- Hamzah A (1997) The sustainability of small-scale tourism in Malaysia. Unpublished PhD. Thesis of University of East Anglia, Norwich
- Hamzah A (undated) Policy and planning of the tourism industry in Malaysia. The road ahead. Department of Urban and Regional Planning, Faculty of Built Environment, Universiti Teknologi Malaysia
- Hann C (2000) Tragedy of the Privates? Postsocialist Property Relations in Anthropological Perspective. Working paper No. 2. Max Planck Institute for Social Anthropology, Halle/Saale, Germany. <http://www.eth.mpg.de/pubs/wps/pdf/mpi-eth-working-paper-0002.pdf>. Cited 23 Aug 2007
- Harper P (1997) The importance of community involvement in sustainable tourism development. In: Stabler M J (ed) Tourism & sustainability. Principles and practice. CAB International, Oxon, UK
- Healy G (1992) The role of tourism in sustainable development. Paper presented at the IUCN 4th World Congress on Parks and Protected Areas, Venezuela, 10-21 Feb 1992
- Heinen J T (1990) The design and implementation of a training program for tour guides in Royal Chitwan National Park, Nepal. Tiger Paper 17(2):11-15
- IUCN (1994) Guidelines for protected area management categories. Commission on national parks and protected areas with the assistance of the World Conservation Monitoring Center. IUCN, Gland, Switzerland
- IUCN (2005) Benefits beyond boundaries. Proceedings of the Vth IUCN World Parks Congress. IUCN, Gland, Switzerland and Cambridge, UK
- IUCN and UNEP WCMC (2003) 2003 United Nations List of Protected Areas (Compiled by Stuart Chape, Simon Blyth, Lucy Fish, Phillip Fox and

- Mark Spalding). IUCN, Gland and Cambridge, UNEP WCMC, Cambridge
- IUCN and WCPA (1995) World Parks Congresses. <http://www.iucn.org/themes/wcpa/wpc2003/english/about/intro.htm#caracas>. Cited 24 Mar 2006
- IUCN and WCPA (2004) The IUCN management Categories – Speaking a common language about protected areas (information paper). 7th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP7), Kuala Lumpur, Malaysia 9-20 Feb 2004. <http://www.iucn.org/themes/wcpa/pubs/pdfs/pacopcategories.pdf>. Cited 23 June 2007
- IUCN, UNEP and WWF (1980) World conservation strategy: Living resource conservation for sustainable development. International Union for Conservation of Nature and Natural Resources, Gland
- Jacobson S K (1987b) Conservation education programs: Evaluate and improve them. *Environmental Education* 14:201-206
- Jacobson S K and Robles R (1992) Ecotourism, sustainable development and conservation education: Development of a tour guide training program in Tortuguero, Costa Rica. *Environmental Management* 16(6):701-713
- James A N (1999) Institutional constraints to protected area funding. In *PARKS* 9 (2): 15-26
- James A, Gaston K J and Balmford A (2000) Why private institutions alone will not do enough to protect biodiversity. *Nature* 404:120
- James A, Green M and Paine J (1999) A global review of protected area Budgets and Staffing. WCMC Biodiversity Series No. 10. World Conservation Monitoring Center, Cambridge, UK
- Jenkins C L (undated) Tourism in developing countries: The privatization issue. <http://learning.north.londonmet.ac.uk/le319/Jenkins%20article.htm>. Cited 11 Aug 2007
- Jomo K S (1994) Privatization. In: Jomo K S (ed) *Malaysia's economy in the Nineties*. Pelanduk Publications, Petaling Jaya
- Joppe M (1996) Sustainable community tourism development revisited. *Tourism Management* 17(7):475-479
- Kassioumis K (1992) Challenges of managing protected areas not only to conserve natural values but also to satisfy human needs. Paper presented in the IV World Congress on National Parks and Protected Areas, Caracas
- Kiew R (1996) Is montane plant biodiversity at a crossroads? Heights of sustainable development seminar on the management and conservation of highland areas in Malaysia, held at the Institute of Environmental Studies, University of Malaysia, 16 Jan (WWFM, Kuala Lumpur, Malaysia), pp33-38
- KOKTAS (1994) *Koperasi Serbagun Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad dalam era kecemerlangan*. KOKTAS Sabah Berhad
- KOKTAS (1989) *Lembaranimbangan pada 31 Disember 1989 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad*. KOKTAS, Kota Kinabalu

- KOKTAS (1990) Lembaran imbangan pada 31 Disember 1990 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1991) Lembaran imbangan pada 31 Disember 1991 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1993) Lembaran imbangan pada 31 Disember 1993 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1994) Akaun pembahagian keuntungan untuk tahun berakhir 31 Disember 1994 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1995) Kunci kira-kira pada 31 Disember 1995 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1996) Penyata sumber dan penggunaan dana bagi tahun berakhir 31 Disember 1996 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1998) Kunci kira-kira pada 31 Disember 1998 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (1999) Kunci kira-kira pada 31 Disember 1999 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (2000) Kunci kira-kira pada 31 Disember 2000 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (2001) Kunci kira-kira pada 31 Disember 2001 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (2002) Kunci kira-kira pada 31 Disember 2002 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (2003) Kunci kira-kira pada 31 Disember 2003 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- KOKTAS (2004) Kunci kira-kira pada 31 Disember 2004 Koperasi Serbaguna Kakitangan Taman-Taman Sabah dan Kakitangan Tenggara Rakyat dan Alam Sekitar Sabah Berhad. KOKTAS, Kota Kinabalu
- Komoo I (1997) Geomorfologi glasier penara Kinabalu. In: Warisan geologi Malaysia: Geologi pemuliharaan untuk ekopelancongan, University Kebangsaan Malaysia, Malaysia, pp299-319
- Laarman J G and Gregersen H M (1996) Pricing policy in nature-based tourism. *Tourism Management* 17 (4): 247-254
- Lai H D (2002) Taburan dandelion (*Taraxacum Officinale*, Compositae) di summit trail, Gunung Kinabalu. A project report submitted to Program Taman Alam

References

- Semulajadi dan Rekreasi Sekolah Perhutanan Tropika Antarabangsa, Universiti Malaysia Sabah, Kota Kinabalu
- Legal Research Board (2003) Tourism Industry Act 1992 (Act 482). Laws of Malaysia. International Law Book Services, Petaling Jaya, Selangor
- Legal Research Board (2005) Federal Constitution, Laws of Malaysia as at 1 Aug 2005. International Law Book Services (Malaysia), Petaling Jaya
- Liew S P F (1996) Kinabalu Park: Past, present and future. In: Wong K M and Phillipps A (eds) Kinabalu – Summit of Borneo. A revised and expanded edition. The Sabah Society in association with Sabah Parks, Kota Kinabalu, Malaysia
- Lindberg K (2001) Protected area visitor fees– overview. Cooperative Research Center for Sustainable Tourism, Griffith University, Australia
- Lindberg K and Aylward B (1999) Price responsiveness in the developing country nature tourism context: Review and Costa Rican case study. *Journal of Leisure Research* 31(3):281-299
- Lindberg K and Enriquez J (1994) Summary report: An analysis of ecotourism's contribution to conservation and development in Belize. Vol. 1. WWF, Washington, DC, USA
- Litchfield C (2001) Responsible tourism with great apes in Uganda. In: McCool S F and Moisey R N (eds) *Tourism, recreation and sustainability: linking culture and the environment*, CAB International, Wallingford, UK, pp105-132
- Martin G, Agama A L, Beaman J H and Nais J (2002) Projek Ethnobotani Kinabalu. The making of a Dusun Ethnoflora (Sabah, Malaysia). People and Plants working paper 9. UNESCO, Paris
- Martin G J (2004) *Ethnobotany: A methods manual (People and Plants Conservation)*. Earthscan, WWK-UK and the International Institute for Environment and Development
- Ministry of Tourism Malaysia (2006) http://www.motour.gov.my/laman_web/index.php?page=statistik. Cited 6 June 2006
- MOCAT (Ministry of Arts, Culture and Tourism) (1992) National Tourism Policy Study, Ministry of Arts, Culture and Tourism, Kuala Lumpur
- Mohamed M and Kusano T (eds) (2002) A guide book of Bornean Biodiversity and Ecosystems Conservation (BBEC) Program in Sabah: Proceedings of the official launching ceremony and seminar 25-26th Mar 2002 at Universiti Malaysia Sabah, Kota Kinabalu, Sabah with the cooperation framework and program documents. BBEC Secretariat, JICA, Kota Kinabalu, Sabah
- Moore A W (1981) Tour guides as a factor in national park management. *Parks* 6(1):12-15
- Mustafa K Y and Kusano T (eds) (2003) Bornean Biodiversity and Ecosystems Conservation Program in Sabah. Towards nature conservation together. Progress of BBEC program Feb 2002 – Sept 2003. BBEC Secretariat, JICA, Kota Kinabalu, Sabah
- Muzaffar C (1984) Privatization. Part of paper presented at an International Trade Union Seminar and appeared in the *Aliran Monthly* (May 1984). In: Muzaffar C (undated) *The NEP development and alternative consciousness*, *Aliran Kesedaran Negara*, Gelugor, pp146-148.
- Muzaffar C (1987) Scandals... An elite disease. Article appeared in the *Aliran Monthly* (Feb/Mar 1987). In: Muzaffar C (undated) *The NEP development and*

References

- alternative consciousness, *Aliran Kesedaran Negara*, Gelugor, pp149-153
- Nais J (1996) Kinabalu Park and the surrounding indigenous communities. Working paper No. 17, 1996. UNESCO, Paris
- Nepal S K (2000) Tourism, national parks and local communities. In: Butler R and Boyd S W (eds) *Tourism and national parks. Issues and implications*. John Wiley, England
- New Sabah Times* (2001) Kinabalu- weather worst in 15 years, says guide. By Jackson S, Newmond T and Haryati K, dated Aug 2001
- New Straits Times* (2001) Important lesson for all, says STA, dated 23 Aug 2001
- Paaby P, Clark D.B. and Gonzalez H. (1991) Training rural residents as naturalist guides: Evaluation of a pilot project in Costa Rica. *Conservation Biology* 5(4):542-546
- Page S J and Dowling R K (2002) *Ecotourism*. Prentice-Hall, Harlow, England.
- Parasuraman A., Zeithaml V. A. and Berry L. (1990) *Delivering quality service*. Free Press, New York
- Phillipps A and Liew F (2000) *Globetrotter visitor's guide: Kinabalu Park, Sabah, Malaysian Borneo*. New Holland Publishers, UK
- Phillips A (2003) Turning ideas on their head – The new paradigm for protected areas. <http://www.uvm.edu/conservationlectures/vermont.pdf>. Cited 29 Mar 2006
- Phillips A (2004) The IUCN management categories - Speaking a common language about protected areas. <http://www.chinabiodiversity.com/protected-area/iucn-categories2-en.htm>. Cited 24 Mar 2006
- Pinto da Silva P S V (2002) *Common property to co-management: Social change and participation in Brazil's first maritime extractive reserve*. Unpublished doctor of philosophy thesis, London School of Economics. United Kingdom
- Rahimatsah A (1998) *Performance of tour guides in Kinabalu Park, Malaysia*. A report submitted to Sabah Parks. Universiti Teknologi Malaysia, Johor Bahru
- Roche M (1992) Mega-events and micro-modernization: on the sociology of the new urban tourism. *British Journal of Sociology* 43:563-600
- Roggenbuck J W, Williams D R and Bobinski C T (1992) Public-private partnership to increase commercial tour guides' effectiveness as nature interpreters. *Journal of Park and Recreation Administration* 10(2):41-50
- Rojas M and Cohen S (2004) Enabling activities to ensure effectiveness of protected areas. In: Secretariat of the Convention on Biological Diversity 2004. *Biodiversity issues for consideration in the planning, establishment and management of protected area sites and networks*. Montreal, SCBD, 164 pages and I to iv. (CBD Technical Series no. 15), pp116-118
- Sabah Parks (1998) *Kinabalu Park: A world heritage site? Sabah Parks proposal submitted to the Sabah State Cabinet*, unpublished paper, Kota Kinabalu, Sabah
- Sabah Parks (2006) <http://www.sabahparks.org.my>. Cited 30 June 2006
- Sabah Parks (1996a) *Statement of expenditure for the month of January to December 1996*. Sabah Parks, Kota Kinabalu
- Sabah Parks (1996b) *Statement of revenue for the month of January to December 1996*. Sabah Parks, Kota Kinabalu

References

- Sabah Parks (1997a) Statement of expenditure for the month of January to December 1997. Sabah Parks, Kota Kinabalu
- Sabah Parks (1997b) Statement of revenue for the month of January to December 1997. Sabah Parks, Kota Kinabalu
- Sabah Parks (1998a) Statement of expenditure for the month of January to December 1998. Sabah Parks, Kota Kinabalu
- Sabah Parks (1998b) Statement of revenue for the month of January to December 1998. Sabah Parks, Kota Kinabalu
- Sabah Parks (1999a) Statement of expenditure for the month of January to December 1999. Sabah Parks, Kota Kinabalu
- Sabah Parks (1999b) Statement of revenue for the month of January to December 1999. Sabah Parks, Kota Kinabalu
- Sabah Parks (2000a) Statement of expenditure for the month of January to December 2000. Sabah Parks, Kota Kinabalu
- Sabah Parks (2000b) Statement of revenue for the month of January to December 2000. Sabah Parks, Kota Kinabalu
- Sabah Parks (2001a) Statement of expenditure for the month of January to December 2001. Sabah Parks, Kota Kinabalu
- Sabah Parks (2001b) Statement of revenue for the month of January to December 2001. Sabah Parks, Kota Kinabalu
- Sabah Parks (2002a) Statement of expenditure for the month of January to December 2002. Sabah Parks, Kota Kinabalu
- Sabah Parks (2002b) Statement of revenue for the month of January to December 2002. Sabah Parks, Kota Kinabalu
- Sabah Parks (2003a) Penyata perbelanjaan bagi bulan Januari 2003 hingga Disember 2003. Sabah Parks, Kota Kinabalu
- Sabah Parks (2003b) Penyata pungutan hasil bagi bulan Januari 2003 hingga Disember 2003. Sabah Parks, Kota Kinabalu
- Sabah Parks (2004a) Penyata perbelanjaan bagi bulan Januari 2004 hingga Disember 2004. Sabah Parks, Kota Kinabalu
- Sabah Parks (2004b) Penyata pungutan hasil bagi bulan Januari 2004 hingga Disember 2004. Sabah Parks, Kota Kinabalu
- Sabah Parks (2005a) Penyata perbelanjaan bagi bulan Januari 2005 hingga Disember 2005. Sabah Parks, Kota Kinabalu
- Sabah Parks (2005b) Penyata pungutan hasil bagi bulan Januari 2005 hingga Disember 2005. Sabah Parks, Kota Kinabalu
- Sabah Tourism Promotion Board (2005) Accommodation facilities in Kundasang. <http://www.sabahtourism.com/accommodation.php>. Cited 4 Dec 2005
- Sharma U R (1990) An overview of park-people interactions in Royal Chitwan National Park, Nepal. *Landscape and urban planning*, 19: 133-144, Elsevier Science Ltd, Great Britain
- Sharp G W (1976) *Interpreting the environment*. John Wiley and Sons, New York, USA
- Smith J M B (1978) Human impact upon higher areas of the Mt. Kinabalu National Park. Department of Geography, University of New England, Australia. In Sabah Parks (1977) Annual Report of the Sabah National Parks Trustees for 1977. Sabah Parks. Sabah, Malaysia

References

- Spreng A R and Mackoy R D (1996) An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing* 72(2):201-214
- Starr P (1989) The meaning of privatization. *Yale Law and Policy Review* 6 (1988): 6-41. Reprinted in Alfred Kahn and Sheila Kamerman (eds) *Privatization and the Welfare State*. Princeton University Press. <http://www.princeton.edu/~starr/articles/articles80-89/Starr-MeaningPrivatization-88.htm>. Cited 30 Sept 2007
- Stevens T (2002) Sustainable tourism in national parks: An overview. Stevens and Associates. Scottish Natural Heritage, Swansea
- Stoep G A van der. (2000) Community tourism development. In: Gartner W C and Lime D W (eds) *Trends in outdoor recreation, leisure and tourism*. CAB International, Oxon, UK
- SSL Sutura Sanctuary Lodges (2006) <http://www.suterasanctuarylodges.com.my/index.shtml>. Cited 20 Dec 2006
- UNESCO WHC (2006) New sites to be inscribed on UNESCO World Heritage List. <http://whc.unesco.org/en/news/132>. Cited 23 Mar 2006
- UNESCO WHC (2007) World Heritage: Kinabalu Park. <http://whc.unesco.org/en/list/1012>. Cited 20 Aug 2007
- Vaske J J, Donnelly M P and Whittaker D (2000) Tourism, national parks and impact management. In: Butler R and Boyd S W (eds) *Tourism and national parks. Issues and implications*. John Wiley, England
- Von Benda-Beackmann F and K (1999) 'A functional analysis of property rights, with special reference to Indonesia'. In: van Neijl T and von Benda-Beckmann F (eds) *Property rights and economic development; land and natural resources in Southeast Asia and Oceania*, Kegan Paul International, London, pp15-56
- Wade R (1990) *Governing the market: Economic theory and the role of government in East Asian industrialization*. Princeton University Press, Princeton
- Wall G (1996) Ecotourism: Change, impacts and opportunities. In: Miller J A and Malek-Zadeh E (eds) *The ecotourism equation: measuring the Impacts*. Bulletin Series: Yale School of Forestry and Environmental Studies number 99, Yale University, New Haven, Connecticut, pp108-117
- WCPA Financing Protected Areas Task Force of the World Commission on Protected Areas of IUCN, in collaboration with the Economics Unit of IUCN (2000) *Financing Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK
- WHOA! Adventures (2006) Map of Malaysia. <http://www.whoa-adventures.com/malaysia.htm>. Cited 9 July 2007
- Wong K M and Phillipps A (eds) (1996) *Kinabalu – summit of Borneo. A revised and expanded edition*. The Sabah Society in association with Sabah Parks, Kota Kinabalu, Malaysia
- Woods J J, Beaman R S and Beaman J H (1993) *The plants of Mount Kinabalu 2: Orchids*. Royal Botanic Gardens, Kew
- WTO (2004) *Indicators of sustainable development for tourism destinations: A guidebook*. World Tourism Organization, Madrid
- WTO (2004) <http://www.world-tourism.org/facts/tmt.html>. Cited 16 Feb 2004
- WTTC (2002) *Malaysia, the impact of travel and tourism on jobs and the economy*. WTTC, London

References

- WTTC (2004) World travel and tourism forging ahead. The 2004 Travel and Tourism Economic Research, WTTC London
- WWF (2005) A rapid assessment of the management effectiveness of national and state parks in Malaysia 2005. WWF, Kuala Lumpur
- WWF Malaysia (1996) Malaysia National Ecotourism Plan. Part 1, 2, 3, 4, 5 and 6. A study prepared for the Ministry of Culture, Arts and Tourism, Government of Malaysia. WWF Malaysia, Petaling Jaya, Malaysia
- WWF UK (1992) Beyond the green horizon. Principles for sustainable tourism. Surrey, WWF UK
- Yamane T (1967) Elementary sampling theory. Englewood Cliffs, Prentice Hall, New Jersey

8 APPENDICES

Appendix 1a: Visitor survey (English version)



Survey number	VS- _____
Date	_____
Time	_____
Location	_____
Interviewer	_____
Group size	_____

VISITORS SURVEY NOVEMBER/DECEMBER 2005

Introductory remarks (Instructions for the interviewer)

I/we are from the Center of Development Research (Zentrum fuer Entwicklungsforschung/ZEF), Bonn University in Germany. We are conducting a study on the tourism impacts in Kinabalu Park. Survey results will be used to recommend improvements in the park management.

Your answers will remain confidential and will be used solely for the purpose of this research. This survey will take approximately 15 minutes of your time. Do you mind answering a few questions?

Positive answer

Thank you for your cooperation. Shall we start?

Negative answer

Thank you for your time, anyway. Have a nice day!

Visitation profile

1. Are you in Kinabalu Park for the first time?
 - Yes (go to Q3)
 - No

2. If no, how frequently do you visit Kinabalu Park?
 - Weekly
 - Monthly
 - Yearly
 - Or how many times so far, _____ times

3. What is the purpose of your visit?
 - Climbing
 - World Heritage Site
 - Flora/Fauna
 - Landscape/Scenery
 - Holiday
 - Honeymoon
 - Recreation
 - Others, _____

4. What is your travel arrangement to Kinabalu Park?
 - Package tour
 - Non-package tour

5. Which station(s) is/are included in your visit? You may choose more than 1 answer.
 - Park HQ
 - Poring Hot Spring
 - Mesilau Nature Resort

6. How long is your visit to Kinabalu Park?
 - Day trip
 - Overnight
 - 2 nights
 - 3 nights
 - 4 nights
 - More, _____ nights

7. Types of accommodation during your stay? (you may choose more than 1 answer)
 - Lodges
 - Hostels
 - Camping ground
 - Others, _____
 - Outside the park

Appendices

8. Which activities did you take part in during your stay in Kinabalu Park?

- Mountain climbing
- Botanical garden
- Slide shows
- Jungle trekking
- Hot spring bath
- Canopy walkway
- Orchid conservation center
- Tropical garden
- Butterfly farm
- Picnic/waterfall
- Nepenthes rajah trail
- Others, _____

9. Which nature guided tour did you join? (you may choose more than 1 answer)

- Park HQ
- Poring Hot Spring
- Mesilau Nature Resort
- No, I didn't join any of the above.

Level of satisfaction

10. How do you rate the quality of following experience in Kinabalu Park?

- 0 Not applicable
- 1 Most disappointing
- 2 Disappointing
- 3 As expected
- 4 Satisfying
- 5 Most satisfying

Easy accessibility to location	0	1	2	3	4	5
Cleanliness	0	1	2	3	4	5
Information/educational value	0	1	2	3	4	5
Natural scenery	0	1	2	3	4	5
Public facilities	0	1	2	3	4	5
Activities	0	1	2	3	4	5
Meals	0	1	2	3	4	5
Services in accommodation	0	1	2	3	4	5
Staff hospitality	0	1	2	3	4	5

11. Which of the following best reflects the existing charges during your visit?

- 0 Not applicable
- 1 Most disappointing
- 2 Disappointing
- 3 As expected
- 4 Satisfying
- 5 Most satisfying

Appendices

Accommodation	0	1	2	3	4	5
Eateries	0	1	2	3	4	5
Souvenirs	0	1	2	3	4	5
Fees to activities	0	1	2	3	4	5
Climbing permit	0	1	2	3	4	5

12. In your opinion, what are the improvements that can be make to enhance the overall experiences in Kinabalu Park?

Service quality, _____
 Facilities, _____
 Activities, _____
 Information, _____
 Fees, _____
 Others, _____

13. How do you rate the guided tour?

0 Not applicable
 1 Most disappointing
 2 Disappointing
 3 As expected
 4 Satisfying
 5 Most satisfying

Description	Park HQ	Poring Hot Spring	Mesilau N.R.
Attractiveness			
Information provided by guide			
Guide's knowledge to answer questions			
Guide's English proficiency			
Guide's friendliness			

14. Overall, how do you rate your visit to Kinabalu Park?

Most satisfying
 Satisfying
 As expected
 Disappointing
 Most disappointing

15. Will you visit Kinabalu Park again?

Yes
 No
 Not sure

Climbing experience

16. Is this your first time climbing Mount Kinabalu?

Yes
 No

Appendices

17. Which trail did you follow?
- Park HQ summit trail
 - Mesilau summit trail
 - Both, started at Park HQ/Mesilau and ended at Mesilau/Park HQ

18. Did you attend the briefing provided by SSL at the Balsam Restaurant?
- Yes
 - No (go to Q20)

19. If you attended, do you think the briefing was helpful for your climbing?
- Yes
 - No

20. In your opinion, do you think it is necessary to hire a mountain guide?

- Yes
- No

Please elaborate your answer: _____

21. How do you rate the quality of mountain guiding?

- 0 Not applicable
- 1 Most disappointing
- 2 Disappointing
- 3 As expected
- 4 Satisfying
- 5 Most satisfying

Knowledge/information	0	1	2	3	4	5
Communication skill	0	1	2	3	4	5
Friendliness	0	1	2	3	4	5
Language proficiency	0	1	2	3	4	5
Responsibility	0	1	2	3	4	5

22. Do you think the fee for hiring a mountain guide is reasonable?

- Yes
- No

23. Do you think the climbing is much more difficult than what you expected?

- Yes
- No

24. Do you think the Park Authority should play a bigger role in providing detailed information about the climbing for better preparation by the climbers?

- Yes
- No (go to Q26)

25. What do you think can be done by the Park Authority to improve the preparation by the climbers?

Appendices

- Prepare detailed briefing such as temperature, wind conditions, health concern for each season, etc.
- Provide video showing the height of each level and the conditions along the trails
- To prepare special brochure on Mt. Kinabalu climbing
- Others, _____

26. During the climb, did you observe any difference between the service given by mountain guide and porters?

- Yes
- No

Please elaborate your answer: _____

27. Do you think the safety measurement for mountain climbing taken by Sabah parks is sufficient?

- Yes
- No

28. Do you think the summit trail is well kept?

- Yes
- No

Willingness to pay

29. Would you be in favor of increased government spending and thereby an increment of charge on your entrance and other facilities/activities?

- Yes (skip Q32)
- No (go to Q32)

30. If yes, what is the reason for your reply?

- I feel that it is reasonable to pay similar amount to that paid at other parks visited before
- If it is to be used for conservation purpose
- If it is to be used to improve and upgrade the current visitor facilities
- Believe that it will indirectly/directly help to improve the living standard of the local communities living around Kinabalu Park
- Others, _____

31. If yes, how much more are you willing to pay?

- <RM5
- RM5<x>RM10
- >RM10

32. If no, what is the reason for your reply?
- I cannot afford to pay but would do so otherwise
 - I think the existing fee is already on the high side as compared to other parks I have visited
 - I feel it is government responsibility to protect the park and to provide recreational facilities to the public
 - I do not agree even with introducing entrance fees in national parks
 - Others, _____
33. If a fee increment is implemented and exceeds the amount you are willing to pay, would it affect your visit to Kinabalu Park?
- The same, this park has so much to offer
 - I will think twice and lessen the frequent of visits
 - I will look for other destinations
 - Others, _____

Respondent background

34. What is your nationality?
- Malaysian
 - ASEAN
 - Asian, but not ASEAN
 - African
 - Australian
 - European
 - North American
 - South American
 - Others, _____
35. If you are Malaysian, please specify where you come from
- Peninsular Malaysia
 - Sarawak
 - Sabah
36. Gender
- Male
 - Female
37. Education background
- Primary school
 - Secondary school
 - College
 - University
 - Others, _____
38. What is your occupation?
- Student
 - Retired
 - Self-employed
 - Executive/managerial
 - Unemployed/home duty

Appendices

- General worker
- Clerical/supervisory
- Professional
- Others, _____

39. What is your estimated annual income before tax? (currency: _____)

- NA
- Below 6,000
- 6,000-12,000
- 12,000-35,999
- 36,000-59,999
- 60,000-95,999
- 96,000-119,999
- 120,000 and above

Thank you very much for your time!

Appendix 1b: Visitor survey (Malay version)



No soal selidik	VS- _____
Tarikh	_____
Masa	_____
Lokasi	_____
Penyoal selidik	_____
Saiz kumpulan	_____

**SOAL SELIDIK PELAWAT
NOVEMBER/DESEMBER 2005**

Nota pengenalan kepada soal selidik pelawat

Saya/kami dari Center of Development Research (Zentrum fuer Entwicklungsforschung/ZEF), Bonn University, German sedang mengendalikan satu kajian berkenaan impak pelancongan Taman Kinabalu. Maklumat daripada kajian soal selidik ini akan hanya digunakan untuk tujuan rujukan bagi memperbaiki sistem pengurusan pihak taman.

Jawapan anda akan digunakan hanya untuk tujuan kajian ini sahaja. Soal selidik ini akan mengambil masa kira-kira 15 minutes. Sudikah anda menjawab beberapa soalan yang saya kemukakan?

Jawapan Positif

Terima kasih ke atas kerjasama anda. Boleh kita mula sekarang?

Jawapan Negatif

Terima kasih atas masa yang diluahkan. Semoga anda berseronok dengan kawan-kawan dan keluarga dalam Taman Kinabalu!

Lawatan taman

1. Adakah ini kali pertama anda melawat Taman Kinabalu?
 - Ya (S3)
 - Tidak

2. Kalau tidak, berapa kerap anda melawat ke Taman Kinabalu?
 - Setiap minggu
 - Setiap bulan
 - Setiap tahun
 - Atau berapa kali sudah anda melawat ke Taman Kinabalu, _____ kali

3. Apakah tujuan anda melawat ke Taman Kinabalu?
 - Mendaki
 - Tapak warisan dunia
 - Flora/fauna
 - Lanskap/pemandangan
 - Bercuti
 - Berbulan madu
 - Rekreasi
 - Lain-lain, _____

4. Apakah bentuk pengaturan lawatan anda ke Taman Kinabalu?
 - Lawatan berpakej
 - Lawatan tidak berpakej

5. Stesen mana dalam Taman Kinabalu yang anda akan dan telah lawat kali ini? Anda boleh memilih melebihi daripada 1 jawapan.
 - Park HQ
 - Poring Hot Spring
 - Mesilau Nature Resort

6. Berapa lama anda akan tinggal di dalam Taman Kinabalu kali ini?
 - Lawatan harian
 - 1 malam
 - 2 malam
 - 3 malam
 - 4 malam
 - Lebih daripada 4 malam, _____ (jumlah malam)

7. Di mana anda tinggal semasa lawatan anda di Taman Kinabalu?
 - Lodges
 - Asrama
 - Tapak perkhemahan
 - Lain-lain, sila nyatakan _____
 - Di luar taman

8. Aktiviti manakah yang telah anda sertai di dalam Taman Kinabalu?

- Mendaki gunung
- Taman Botani
- Slideshow
- Trekking
- Mandi air panas
- Canopy walkway
- Pusat Pemuliharaan Orkid
- Taman Tropika
- Taman Rama-rama
- Berkelah/air terjun
- Trail Nepenthes Rajah
- Lain-lain

9. Lawatan berpandu semulajadi/‘Guided tour’ yang manakah anda sertai?

- Park HQ
- Poring Hot Spring
- Mesilau Nature Resort
- Tidak, saya tidak menyertai mana-mana lawatan tersebut

Tahap kepuasan

10. Apakah pengalaman anda terhadap elemen-elemen tersenarai di bawah ini?

- 0 Tidak berkenaan
- 1 Sangat kecewa
- 2 Kecewa
- 3 Dalam jangkakan
- 4 Puas hati
- 5 Sangat puas hati

Kemudahsampaian ke lokasi	0	1	2	3	4	5
Kebersihan	0	1	2	3	4	5
Maklumat dan nilai-nilai pendidikan	0	1	2	3	4	5
Daya tarikan semulajadi	0	1	2	3	4	5
Kemudahan awam	0	1	2	3	4	5
Aktiviti-aktiviti yang disediakan	0	1	2	3	4	5
Makanan dan minuman	0	1	2	3	4	5
Perkhidmatan penginapan	0	1	2	3	4	5
Layanan pekerja	0	1	2	3	4	5

11. Apakah penilaian anda terhadap kadar bayaran yang dikenakan di Taman Kinabalu?

- 0 Tidak berkenaan
- 1 Sangat kecewa
- 2 Kecewa
- 3 Dalam jangkakan
- 4 Puas hati
- 5 Sangat puas hati

Appendices

Penginapan	0	1	2	3	4	5
Makanan dan minuman	0	1	2	3	4	5
Cenderamata	0	1	2	3	4	5
Kadar bayaran aktiviti	0	1	2	3	4	5
Permit mendaki	0	1	2	3	4	5

12. Pada pendapat anda, apa yang perlu diperbaiki bagi meningkatkan pengalaman pelawat ke Taman Kinabalu?

Kualiti perkhidmatan _____
 Kemudahan _____
 Aktiviti _____
 Maklumat _____
 Kadar bayaran _____
 Lain-lain _____

13. Bagaimanakah penilaian anda ke atas lawatan berpandu semulajadi yang andara mengambil bahagian?

- 0 Tidak berkenaan
 1 Sangat kecewa
 2 Kecewa
 3 Dalam jangkaan
 4 Puas hati
 5 Sangat puas hati

Huraian	Park HQ	Poring Hot Spring	Mesilau Nature Resort
Daya tarikan			
Maklumat yang diberikan oleh pemandu pelancong			
Pengetahuan pemandu pelancong dalam menjawab soalan yang dikemukakan			
Keupayaan bertutur dalam bahasa Inggeris pemandu pelancong			
Kemesraan pemandu pelancong			

14. Secara keseluruhan, bagaimanakah penilaian anda terhadap lawatan anda ke Taman Kinabalu?

- Sangat puas hati
 Puas hati
 Dalam jangkaan
 kecewa
 Sangat kecewa

15. Adakah anda akan melawat Taman Kinabalu lagi?

- Ya
 Tidak

Pengalaman mendaki

16. Ada ini kali pertama anda mendaki Gunung Kinabalu?
 Ya
 Tidak
17. Trail mana yang anda ikuti?
 Park HQ summit trail
 Mesilau summit trail
 Kedua-duanya, bermula di Park HQ/Mesilau dan berakhir di Mesilau/Park HQ
18. Adakah anda menghadiri sesi taklimat yang dianjurkan oleh SSL di Balsam Restaurant?
 Ya
 Tidak (pergi ke S20)
19. Sekiranya anda menghadiri taklimat tersebut, pada pendapat anda, adalah taklimat tersebut berguna bagi persiapan anda dalam pendakian gunung?
 Ya
 Tidak
20. Pada pendapat anda, adalah itu satu keperluan untuk mengupah seorang malim (mountain guide)?
 Ya
 Tidak
 Sila terangkan jawapan anda _____

21. Bagaimanakan anda menilai kualiti pemanduan gunung (mountain guiding)?
 0 Tidak berkenaan
 1 Sangat kecewa
 2 Kecewa
 3 Dalam jangkaan
 4 Puas hati
 5 Sangat puas hati

Pengetahuan/maklumat	0	1	2	3	4	5
Kemahiran berkommunikasi	0	1	2	3	4	5
Kemesraan	0	1	2	3	4	5
Keupayaan pertuturan bahasa	0	1	2	3	4	5
Sikap bertanggungjawab	0	1	2	3	4	5

22. Pada pendapat anda, adakah bayaran mengupah malim berpatutan?
 Ya
 Tidak
23. Adakah pada pendapat anda pendakian lebih susah daripada yang dijangkakan?
 Ya
 Tidak

24. Adakah pada pendapat anda Pihak Taman perlu memainkan peranan yang lebih penting dalam menyediakan maklumat berkenaan pendakian supaya para pendaki mempunyai Persiapan yang lebih menyeluruh sebelum mendaki?
- Ya
 - Tidak
25. Sekiranya ya, pada pendapat anda, apa yang boleh diperbaiki oleh Pihak Taman bagi membolehkan persiapan yang lebih menyeluruh dibuat oleh para pendaki?
- Menyediakan taklimat yang terperinci seperti keadaan cuaca, suhu, keadaan angin, keperluan tahap kesihatan bagi setiap musim dan sebagainya
 - Menyediakan tayangan video yang menunjukkan keadaan setiap tahap ketinggian dan keadaan sepanjang summit trail
 - Menyediakan brochure khas untuk pendakian Gunung Kinabalu
 - Lain-lain, _____
26. Berdasarkan kepada pengalaman mendaki gunung anda, adakah anda perhatikan perbezaan dari segi perkhidmatan ayng diberikan oleh malim gunung dan pengangkat barang (porter)?
- Ya
 - Tidak
- Sila huraikan jawapan anda: _____
- _____
- _____
27. Adakah pada pendapat anda langkah-langkah keselamatan yang disediakan oleh Pihak Taman berkesan dan memuaskan?
- Ya
 - Tidak
28. Adakah pada pendapat anda keadaan sepanjang Summit Trail dipelihara dengan baik?
- Ya
 - Tidak

Kesanggupan membayar (willingness to pay)

29. Adakah anda bersetuju sekiranya terdapat kenaikan harga pintu masuk dan pelbagai kemudahan dalam taman disebabkan oleh kenaikan perbelanjaan pihak kerajaan/taman?
- Ya (tinggalkan S32)
 - Tidak (pergi ke S32)
30. Sekiranya ya, apakah sebab bagi jawapan anda?
- Saya berpendapat bahawa kadar yuran adalah munasabah sepertimana yang saya bayar untuk masuk ke taman-taman lain
 - Sekiranya ia digunakan untuk tujuan pemuliharaan dalam taman
 - Sekiranya ia digunakan untuk memperbaiki dan menaik taraf kemudahan pelawat dalam taman
 - Saya percaya bahawa kenaikan yuran akan dapat membantu mempertingkatkan taraf hidup penduduk tempat yang tinggal di sekitar taman
 - Lain-lain, _____

31. Sekiranya ya, berapakah yang anda sanggup membayar lebih (kenaikan keseluruhan)?
- < RM5
 - RM5 < x > RM10
 - > RM10
32. Sekiranya tidak, apakah sebab bagi jawapan anda?
- Saya tidak dapat tanggung kenaikan yuran tetapi tetap akan membayar sekiranya yuran itu dinaikkan
 - Saya berpendapat bahawa kadar yuran sedia ada sudah tinggi berbanding dengan taman-taman lain yang saya pernah lawati
 - Saya berpendapat bahawa ini merupakan tanggungjawab pihak kerajaan bagi melindungi taman dan menyediakan kemudahan rekreasi kepada orang awam
 - Saya tidak bersetuju sama sekali dengan penganan yuran pintu masuk di taman-taman negara
 - Lain-lain, sila nyatakan _____
33. Sekiranya kenaikan yuran telah dilaksanakan dan melebihi jumlah yang anda sanggup bayar, adalah ini akan menjejaskan lawatan anda ke Taman Kinabalu?
- Sama saja, taman ini mempunyai sangat banyak yang boleh ditawarkan
 - Saya akan mempertimbangkan lawatan saya dan mengurangkan kekerapan melawat
 - Saya akan mencari destinasi lain. Ini bukannya satu-satunya tempat yang boleh saya pergi.
 - Lain-lain, _____

Latar belakang pelawat

34. Warganegara anda?
- Malaysian
 - ASEAN
 - Asian, tetapi bukan ASEAN
 - African
 - Australian
 - European
 - North American
 - South American
 - Lain-lain, _____
35. Sekiranya anda ialah Warga Malaysia, sila nyatakan di mana anda tinggal.
- Semenanjung Malaysia
 - Sarawak
 - Sabah
36. Jantina
- Lelaki
 - Perempuan
37. Tahap persekolahan
- Sekolah rendah
 - Sekolah menengah

- Kolej
- Universiti
- Lain-lain, _____

38. Apakah pekerjaan anda?

- Pelajar
- Bersara
- Kerja sendiri
- Eksekutif/pengurus
- Tidak bekerja/suri rumah tangga
- Pekerja am
- Kerani/supervisor
- Professional
- Lain-lain, _____

39. Berapakah anggaran pendapat tahunan anda sebelum tax? (Matawang: _____)

- NA
- Di bawah 6,000
- 6,000 – 12,000
- 12,000 – 35,999
- 36,000 – 59,999
- 60,000 – 95,999
- 96,000 – 119,999
- 120,000 ke atas

Terima kasih ke atas kerjasama dan masa anda!

Appendix 2: Mountain guide survey

Borang soal selidik malim gunung 2006, Taman Kinabalu

1. Umur : _____ tahun kampung: _____
2. Berapa tahun anda bekerja sebagai malim gunung? _____ Tahun
3. Adakah ini kerja sepenuh masa (full-time) anda? Ya _____ Tidak _____
4. Adakah anda sekarang berdaftar dengan mocat sebagai pemandu pelancong?
Ya _____ Tidak pernah _____
Dulu ya, sekarang tidak lagi (tahun berdaftar _____, Tahun berhenti _____)
5. Anggaran pendapatan bulanan anda sebagai malim gunung RM _____
6. Adakah anda puas hati dengan gaji harian sekarang iaitu RM35? Ya _____ Tidak _____
7. Jika tidak, berapakah gaji harian yang berpatutan? RM _____ satu hari
8. Adakah anda fasih bahasa inggeris? Ya _____ Tidak _____
9. Pada pendapat anda, adalah jumlah malim gunung mencukupi untuk menampung jumlah pendaki gunung? Mencukupi _____ Tidak mencukupi _____ Terlalu ramai _____
10. Adakah anda puas hati dengan jadual giliran kerja yang diatur oleh pihak taman-taman sabah? Ya _____ Tidak _____
11. Sekiranya tidak, apakah kelemahan jadual sedia ada? _____

12. Sekiranya tidak setuju, pihak mana yang paling sesuai diberi tanggungjawab tersebut?
 Pihak taman-taman sabah
 Persatuan malim gunung sendiri
 Gabungan pihak taman-taman sabah dan jawatankuasa malim gunung
 Pihak lain, sila nyatakan _____

Appendices

13. Adakah anda setuju sekiranya gaji malim gunung berdasarkan tahun pengalaman dan kelayakan lain seperti pemilikan lesen pemandu pelancong mocat dan kefasihan bahasa lain? Ya _____ Tidak _____
14. Apakah masalah yang dihadapi oleh anda bekerja sebagai seorang malim gunung?
- Masalah komunikasi dengan pendaki dari segi bahasa
 - Sikap pendaki yang kasar dan tidak senonoh dan saya tidak dapat memilih pendaki yang akan dibawa
 - Masalah jumlah malim gunung yang semakin ramai
 - Masalah pengagihan kerja malim gunung yang kurang adil
 - Masalah gaji harian yang rendah dan tidak tetap terutamanya pada bulan-bulan tertentu seperti hujung dan awal tahun
 - Masalah jumlah pendaki yang terlalu ramai yang perlu dibawa oleh saya (berapakah jumlah yang sesuai, sila nyatakan _____ orang pendaki/satu orang malim gunung)
 - Masalah kemudahan penginapan di laban rata yang kurang menyenangkan
 - Masalah ketiadaan EPF (KWSP) and SOCSO pekerja
 - Lain-lain masalah, sila nyatakan _____

Appendix 3: Porter survey

Borang soal selidik porter 2006, Taman Kinabalu

1. Umur: _____ tahun
2. Berasal dari kampung mana? _____
3. Sudah berapa lama anda bekerja sebagai porter? _____ tahun
4. Adakah ini kerja sepenuh masa (full time)?
Ya _____ Tidak _____
5. Berapakah anggaran pendapatan bulanan anda sebagai porter? RM _____
6. Berapa kali anda bekerja satu bulan (secara purata)? _____ kali
7. Anda mengangkat barang untuk
Pendaki gunung _____ SSL _____
8. Adakah anda puas hati dengan bayaran mengangkat barang untuk pendaki gunung?
Ya _____ Tidak _____
9. Adakah anda puas hati dengan bayaran mengangkut barang untuk SSL?
Ya _____ Tidak _____
10. Adakah anda setuju sekiranya terdapat AJK (ahli jawatan kuasa) untuk menguruskan pengagihan kerja-kerja porter?
Ya _____ Tidak _____
11. Adakah jumlah porter sekarang
Tidak mencukupi _____ Mencukupi _____ Terlalu ramai _____
12. Apakah masalah yang dihadapi oleh anda sebagai seorang porter?
(anda boleh pilih lebih daripada satu jawapan)

	Bayaran yang rendah dan tidak berbaloi dengan kerja berat yang dilakukan
	Ketiadaan pihak yang bertanggungjawab dalam menguruskan pengagihan kerja porter
	Kekerapan kerja yang tidak tetap
	Masalah kesihatan dan sakit-sakit kerana angkatan yang berat
	Persaingan antara porter kerana jumlah porter yang semakin ramai
	Lain-lain, sila nyatakan _____

Appendix 4: SSL staff survey

Borang soal selidik pekerja SSL 2006, Taman Kinabalu

Maklumat pekerjaan dahulu

1. Agensi manakah yang anda pernah bekerja? (Anda boleh tanda lebih daripada 1 jawapan)
 - Sabah Parks
 - KOKTAS
 - Kinabalu Gold Resort
 - Kinabalu Nature Resort
 - Sutera Sanctuary Lodges

2. Agensi manakah yang anda pernah bekerja? (Anda boleh tanda lebih daripada 1 jawapan)

No	Agensi	Tahun masuk kerja	Tahun berhenti kerja	Anggaran gaji (harian atau bulanan)	Berapakah gaji terakhir sebelum berhenti kerja?	Adakah kenaikan gaji semasa anda bekerja? (ada/tiada)	Jika ada, berkaa kalikah kenaikan gaji?
1	Sabah Parks						
2	KOKTAS						
3	Kinabalu Gold Resort						
4	Kinabalu Nature Resort						
5	Sutera Sanctuary Lodges						

Appendices

3. Maklumat jawatan, sebab-sebab permohonan kerja dan berhenti kerja (sila jawab bagi semua agensi yang anda pernah bekerja)
*Catatan: contoh jawatan ialah *tukang masak, pelayan restoran, tukang kemas bilik, tukang kebun, tukang bersih, staff di kaunter reception, akauntan dan sebagainya.*

No	Agensi	Jawatan yang disandang	Sebab-sebab permohonan kerja	Sebab-sebab berhenti kerja
1	Sabah Parks			
2	KOKTAS			
3	Kinabalu Gold Resort			
4	Kinabalu Nature Resort			
5	Sutera Sanctuary Lodges			

Maklumat pekerjaan sekarang

4. Dengan agensi manakah anda bekerja pada masa ini?

- Sabah Parks
- KOKTAS
- Sutera Sanctuary Lodges
- Lain-lain, sila nyatakan jenis pekerjaan anda sekarang, _____

Appendices

5. Maklumat tahun masuk kerja, sebab-sebab permohonan kerja dan anggaran gaji sekarang

No	Agensi	Tahun masuk kerja	Sebab - sebab permohonan kerja	Anggaran gaji sekarang (RM) – harian / bulanan	Tahun kali terakhir kenaikan gaji	Berapa kali kenaikan gaji sejak masuk kerja?
1	Sabah Parks					
2	KOKTAS					
3	Sutera Sanctuary Lodges					

6. Adakah anda berpuas hati dengan pekerjaan anda sekarang?

- Ya
- Tidak

7. Sekiranya tidak, apakah masalah yang dihadapi oleh anda? (Anda boleh tanda lebih daripada 1 jawapan)

- Gaji rendah
- Bayaran gaji tidak tetap
- Tiada insentif
- Tiada kenaikan gaji, nyatakan _____
- Kerja terlalu banyak dan pekerja tidak cukup
- Saya tidak dapat mempelajari apa-apa dalam bidang kerja saya
- Saya rasa kerja ini tidak stabil dan bila-bila masa saya akan kehilangan kerja
- Lain-lain, sila nyatakan, _____

Terima kasih banyak-banyak kerana sudi meluangkan masa untuk menjawab borang soal selidik ini!