



UNIVERSITI PUTRA MALAYSIA

**CONSUMERS' SATISFACTION TOWARDS RECREATIONAL
FACILITIES AND SERVICES IN AYER KEROH FOREST
RECREATIONAL AREA, MELAKA**

AZMAN BIN A RAHMAN

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By

AZMAN BIN A RAHMAN

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia in Partial Fulfilment of the Requirement for the
Degree of Master of Science**

MARCH 2007



**This is dedicated to
my wife, Norazizan,
my children; Muhammad Hazwan, Nur Asyiqin, Muhammad Haziq,
Nur Insyirah, Muhammad Harith, Nur Hanani, Nur Dadilah and
Muhammad Hashri.**



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

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March 2007

Chairman: Associate Professor Ahmad Shuib, PhD

Faculty: Economic and Management

With the present emphasis on ecotourism, many nature and recreational areas are facing increases in demand. As a result more pressures are being inflicted on the forest recreational areas and other natural areas to provide recreational facilities to users. Facilities in the park are essential to satisfy the needs of visitors; an inadequate provision of facilities and services rendered could lead to congestion and overuse of the facilities; and a lack in services may lessen visitors' satisfaction.

The study was carried out in Ayer Keroh Forest Recreation Area using a sample of 385 visitors. The main aim of this study was to determine and evaluate the visitors' satisfaction towards the facilities and services provided. Leisure is the most popular past time activity, particularly, among the Malay visitors compared to other ethnic groups. They come in groups, either with

family members or friends for picnic which was their main purpose of visits. The visitors find that existing public amenities very satisfactory and suitable for family activities.

The mean value of the WTP is RM 21.45 per year. The total index of the perception on facilities and services is at 2.88 which mean is positive perception. There are four predictors of recreation valuation namely amount spend for the facilities and services, perception on sign facilities, participate in recreation activities and income and the result shows that respondents income have significantly influenced the WTP.

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

**KEPUASAN PENGGUNA TERHADAP KEMUDAHAN DAN
PERHIDMATAN REKREASI DI HUTAN REKREASI AYER KEROH,
MELAKA**

Oleh

AZMAN BIN A RAHMAN

Mac 2007

Pengerusi: Profesor Madya Ahmad Shuib, PhD

Fakulti: Ekonomi dan Pengurusan

Dengan kepentingan peranan eko-pelancongan pada masa sekarang, banyak kawasan semula jadi dan rekreasi telah mengalami peningkatan dari segi permintaan. Natiujahnya, kebanyakan kawasan hutan rekreasi dan kawasan semula jadi lain menghadapi tekanan untuk menyediakan kemudahan rekreasi kepada pengunjung. Penyediaan kemudahan rekreasi di kawasan tersebut dapat memenuhi kepuasan pengunjung, sekiranya kurang kemudahan disediakan dan khidmat tidak disediakan dengan sempurna ini akan mengakibatkan penggunaan yang berlebihan dan sekiranya perkhidmatan terkurang tahap kepuasan pengunjung mengalami berkurang.

Sebanyak 385 sampel pengunjung di HRAK telah ditemubual. Tujuan utama kajian ini adalah untuk mengenalpasti menilai kepuasan terhadap

kemudahan rekreasi dan perkhimatan yang disediakan. Daripada analisa diskriptif didapati aktiviti senggangan merupakan aktiviti yang paling popular dikalangan pelawat Melayu berbanding pelawat kumpulan ethnik lain. Mereka mengunjungi kawasan rekreasi ini secara berkumpulan dari kalangan kawan-kawan atau ahli keluarga untuk berkelah. Tempuh masa yang diluangkan di kawasan rekreasi adalah antara satu (1) jam hingga 3 jam. Pelawat-pelawat sangat berpuashati dengan kemudahan awam yang disediakan dan menganggap kemudahan sesuai bagi keluarga berekreasi.

Nilai min untuk kesanggupan membayar adalah RM 21.45, Indeks keseluruhan persepsi penggunaan kemudahan dan perkhidmatan adalah pada tahap 2.88 iaitu pada tahap memuaskan. Terdapat empat prediktor penilaian rekreasi seperti, jumlah perbelanjaan untuk kemudahan dan perkhidmatan, persepsi terhadap papan tanda, penglibatan dalam rekreasi dan pendapatan telah menunjukkan signifikan saling mempengaruhi terhadap kesanggupan membayar terhadap konservasi kawasan hutan rekreasi tersebut.

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I certify that an Examination Committee has met on the 1st March 2007 to conduct the final examination of Azman Bin A. Rahman on his Master of Science thesis entitled "Consumers' Satisfaction Towards Recreational Facilities And Services In Ayer Keroh Forest Recreational Area, Melaka" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Member of the Examination Committee are as follows:

Khalid Abdul Rahim, PhD

Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Samsinar Md Sidin, PhD

Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Mohd Shahwahid Haji Othman, PhD

Professor
Interim Institute of Tropical Forestry and Forest Product
Universiti Putra Malaysia
(Internal Examiner)

Shaharudin Tahir, PhD

Associate Professor
Faculti Pengurusan dan Pelancongan, Hospitaliti dan Alam Sekitar
Universiti Utara Malaysia
(External Examiner)

HASANAH MOHD GHAZALI, PhD

Professor/Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 17 MAY 2007



This thesis submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Science. The member of the Supervisory Committee are as follows:

Ahmad Shuib, PhD

Associate Professor
Faculty of Economic and Management
Universiti Putra Malaysia
(Chairman)

Abdullah Mohd, PhD

Associate Professor
Faculty of Forestry
Universiti Putra Malaysia
(Member)

AINI IDERIS, PhD

Professor/Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:



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LIST OF ABBREVIATION

AKFRA	Ayer Keroh Forest Recreational Area
CS	Consumer Surplus
CVM	Contingent Valuation Method
HP	Hedonic Pricing
TCM	Travel Cost Method
WTA	Willingness To Accept
WTP	Willingness To Pay

CHAPTER 1

INTRODUCTION

1.1 Forest Recreational Facilities

With rapid economic growth over the last two decades, urbanization, industrialization and improved communications in this country have greatly changed the lifestyle of the society. The change of public trends in leisure pursuits is increasingly becoming a major force to be reckoned with in the daily life of people. Undoubtedly, an increasing number of people are moving away from the traditional way of spending their leisure activities at home. They are going outdoors to fulfil their recreational needs. The increasing number of youth population, the rising personal income, the extended weekend holidays as well as urbanization and mobility have created an increasing demand for leisure and recreational activities.

Furthermore, the increasing rate of public involvement in outdoor recreational activities is also due to the realization that outdoor recreation brings benefits both physically and psychologically (Kamariyah,1983). The psychological benefits is through relaxation for the purpose of refreshing the body and mind, and in terms of physical benefits, it relieves fatigue.

There are many factors that encourage people to be involved in outdoor recreational activities. One of the main factors is their economic status. Generally, economic status is also referred to as an income which they get every month (Roberts,1970). Some people spend a lot of money to travel



from one recreational area to another. Besides, with more time for leisure due to modernization and swift communication, people go for activities that produce the highest level of experience related to satisfaction.

In pursuing outdoor recreation, different individuals have different perceptions about the recreational resources of the area. Every participant of a recreational activity has a set of priorities and expectations that set the satisfaction level for that activity. The recreation manager cannot define the parameter of those expectations and priorities. In this case, information about users' perceptions and needs would be very useful for the management in trying to provide better facilities and services to the users.

The primary purpose of providing recreational opportunities is for the enjoyment of the public, irrespective of their homes. There are several elements which influence visits to a recreational area, for example, the cost of travelling, time consumed in travelling, travelling characteristics such as types of transportation and accessibility to the recreational area. In the case of forest recreation areas, people usually look at the types of facilities and services provided in the park when they make a visit there.

A Forest Recreational Area is a forest reserve designated for public recreational use in an outdoor setting where people of all ages can relax and release tension after working through their office hours after carrying out a daily routine. Most Forest Recreational Areas are located quite near to the suburban population center and are easily accessible. These areas comprise

attractive spots which become the factors of interest for most people, particularly those who live in the urban areas. The provision of facilities and services at the forest are able to entice more people from a wider area to go there and fulfill their recreational needs. Nonetheless, the provision of facilities alone is not the reason that attracts visits but the facilities need to be properly maintained. Facilities that are not kept properly can pose dangers to users especially children. Inadequate facilities will also lead to congestion and overuse and the lack of services can cause inconvenience to the visitors. The types of facilities and services provided can cause implications in terms of costs and expenses to the management. The reason is because the park management can only get their operation fund only once a year and that the budget is shared with other forest recreational sites.

Here, the management of forest recreational facilities must determine the needs of visitors to the park to ensure user satisfaction. Since the needs of such visitors are diverse, the management must be able to anticipate the types and levels of needs of the visitors. The reason is that such well-thought provisions can become cost-effective and beneficial to them.

Currently, there are 125 forest areas in Peninsular Malaysia designated for public recreational use; these are known as Forest Recreational Areas or Amenity Forests under the Forest Act, 1984 (**Appendix 1**). The concept of Forest Recreational Area was introduced as early as 1965 and was managed by the Forestry Department of Peninsular Malaysia. The main focus of the

establishment of Forest Recreational Area areas is to provide suitable areas for the public to enjoy the forest environment (Anon 1972).

Even though the Forestry Department has since 1995 developed 30 more Forest Recreational Areas, not much study had been done to evaluate on the perception of users on the development of the facilities. It is necessary for planning, development and management purposes, that information relating to use or participation levels be made available. This information also supports the objective for the establishment of the forested area in relation to its suitability as a recreational site.

1.2 Theoretical Framework

The demand for recreational activities, facilities and services at the recreational areas has increased. The management of the recreational centre must make sure that the provision of the facilities and services coincide with the preferences and requirements of the public (Appleton, 1974). However, there are difficulties in identifying the public needs and then quantifying the demands for recreational opportunities. Quantitative and qualitative studies are required to determine the recreational use pattern, trends and preferences for the opportunities by different groups of people who visit forest recreational spots. Having quantifiable values of the recreational use and benefits will help the management to make appropriate decisions with regards to the development of the recreational opportunities (Appleton, 1974).

The development of the outdoor recreational centre is very much related to the conservation of the environment. Although the management of the recreational centres are concerned with financial implication of the development, it is also important that the management take into account the social and environmental benefits of the outdoor recreational development. In normal terms, these social benefits may not be able to be shown in financial gain.

To better visualize the relationships of recreational satisfaction and forest recreational settings, Figure 1 illustrates the theoretical framework for recreational experience that forms the basis of the study. The framework takes into account the internal and external factors that would be associated with the level of visits and also participation in outdoor recreation at a site.

The theoretical framework for recreational experience can be divided into three main levels of visits and participation which are pre-visit conditions, visit or on-site experiences and post visit experiences. The first level includes the factors that are based on the existing conditions of the Forest Recreational Areas. The existing recreational use patterns at the site, the management inputs and the natural resources are interrelated factors or pull factors that are linked to the next level which relates to the visit experience (Manning, 1986).

The second level includes factors that are associated with visit experiences. At this level, the set of elements include the forest recreational settings and

visitors' perceptions. The second level factor is the outcome of the interaction of the factors in the first level. The user/sociological factors or push factors are related to the socio-demographic and individual need characteristics of the visitors. Whereas the altered resource conditions may be the result of natural or unnatural changes to the resources at the site. The second level factors would be reflected in the perceived satisfaction of the visitors (Chambers and Price, 1986).

The third level is the "Recreational Satisfaction" that can be defined as the positive perception of feelings, which an individual forms, elicits, or gains as a result of engaging in leisure activities and choices (Driver, 1976). This portion is divided into two sub-levels, low/negative and high/positive satisfaction levels. This level is the outcome from the second level which is the visitors' perception of the resource in the park. The user/sociological factors and altered resource conditions which affect the recreational participation also contribute towards "Recreational Satisfaction". Examples of the effect of low satisfaction are displacement, reduced visits and unattainable goals. Whereas, positive satisfaction could lead to repeated visits, promotions of the areas to friends or even the mass media to generate support for the area. The negative or positive results could be recycled into the system which would affect the other levels of inter-related factors. For instance, repeated visits could lead to further impacts on the natural resources and could cause alterations. Repeated visits could also affect future "recreational use patterns" and may alter future "user/sociological factors" such as motivation. Similarly, low or negative satisfaction could also