

PRICING OF PROTECTED AREAS

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According to the statistics, in 2003 there were about 102,102 protected areas covering 18,764,958 square kilometres, around the world (Mulongoy and Chape, 2004). This figure is a vast area reflecting five times the size of India and greater than the size of Brazil and Canada combined. Protected sites include forest reserves, private reserves, strict nature reserves and national parks. International Union for Conservation of Nature (IUCN) has proposed six categories for national parks and protected areas.

For instance, Category II, which are the national parks, occupies a total of 3.8 per cent of the total protected areas. These areas have various roles (Mulongoy and Chape, 2004). Apart from their main role as the home for indigenous and local people to practise their own culture and traditional lifestyle, they also house several water catchments area, which provide the world's drinking water. Simultaneously, these parks particularly the marine parks, serve as the places for breeding. Protected areas also offer various recreational

activities such as jungle trekking, fishing and mountain climbing. The green leaves in protected areas are important for providing oxygen or clean air for breathing. In other words, they are the 'green lungs' of the planet. Finally, protected areas are important as stabilisers of global warming. Park resources such as trees can reduce the heat and pollution produced by human beings and provide important protection from strong winds and heavy rain.



Source: Author (2004)

An efficient funding method is one of the tools which can drive the management of protected areas to be more efficient. Resources of protected areas are not traded and no market exists for them. Thus, an attempt to put a value on these resources is necessary. Van Sickle and Eagles (1998:225) assert that, 'A technique to offset dwindling tax-based government budget is user fees and charges'. User fees can act as a powerful tool that can give the management of protected areas far greater efficiency, equity

and environmentally sustainable management (Laarman and Gregersen, 1996).

The choice of implementation of fees and charges has been determined by several factors, such as cultural and legal norms, administrative costs and human imagination (Laarman and Gregersen, 1996). It also depends on other factors such as the scale of tourism on the site, where the tourism takes place within the site, access points, and the way in which the commercial tourism sector interacts with the

site. In other words, it depends on the location and the popularity of the protected area. Table 1 shows the various types of fees normally implemented in the world's protected areas and Figure 1 shows the relationship between user fees and revenue in a protected area. As inferred, user fees come from various sources such as entrance fees, permits and concession fees. Revenue from user fees, on the other hand, is utilised for such activities as the operation and maintenance of the protected area, and the improvement of park facilities.

Table 1: Type of Fees Implemented in Protected Areas

Fee type	Observation
General entrance fee	'Gate fees' allow either free or priced access to facilities beyond the entry point
Fees for use	Examples: fee entry to visitor centres, parking, campsites, guide services, boat use, trail shelters and emergency rescue.
Concession fees	Charges (or revenue shares) are assessed on individuals and businesses which sell food, accommodation, transportation, guide services, souvenirs, and other goods and services to nature-based visitors
Royalties and profit shares	Can be charged on sales of guidebooks, postcards, tee shirts, souvenirs, books, films and photos.
Licences and permits	For tour operators, guides, researchers, wildlife collectors, mountain climbers and river rafters. The concept can be extended to individual campers and bikers.
Taxes	Examples: room taxes, airport taxes, vehicle taxes, and excise taxes on sports and outdoor equipment.
Voluntary donations	Include cash and in-kind gifts, often through 'friends of the park' organizations

Source: Adapted from Sherman and Dixon (1991:109-112).

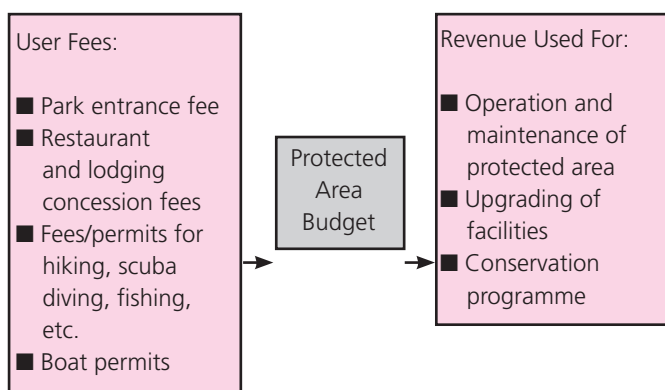


Figure 1: Schematic Depiction of Tourism User Fee Flow

Source: Adapted from Conservation Finance Alliance (2006).

Binkley and Mendelsohn (1987) found that user fees can generate revenue for protected areas in two different ways: direct revenue from visitors' fees; and indirect revenue from the reduction in the use of the recreation site, with a concomitant reduction in costs. The rationale for collecting higher entrance fees is that they can be used in the management of visitors to reduce congestion problems and avoid excessive burdens on the natural environment (Bamford *et al.*, 1988). In nature-based tourism, congestion is an important criterion in determining the quality of recreation. Two problems occur because of congestion. First, it degrades the environment and makes the national parks' lifespan shorter. In addition, it also reduces the visitors' overall satisfaction. Lilieholm and Romney (2000) note that there are various methods available to restrict the number of visitors. These include rationing permits, allowing entry on a first-come-first-serve basis, setting quotas, implementing lotteries and setting higher fees. The entrance fee can also be used in the promotion of visitation during the low season. While increases in entrance fees in the high season will reduce the number of visitors, park authorities should do the opposite during the low season to encourage visitors. However, it should be noted that high entrance fees in the peak season can still fail to stem the number of visitors from visiting national parks.

A set of pricing objectives and policies is necessary for each ecotourism site, in order to guide managers' pricing decisions (Backman *et al.*, 2001). Pricing policy is set at a national level and is established by defining the purposes of the fee programme. However, Van Sickle and Eagles (1998) argue that these pricing and park revenue generation policies do not get the attention they deserve and are sometimes ignored. This happens because countries often give free access to protected areas as these protected areas are normally funded by the governments.

There are various types of pricing strategies in protected areas. Marginal cost pricing is the most logical and important guideline for a pricing strategy in such areas (Walsh, 1986). This is based on the costs of administration, operations and degradation incurred from each additional user. Park authorities have to calculate the maximum optimum number of visitors before finding the marginal costs of additional users at this level. The fees should then be set, based on the cost of that additional user. All visitors will have to pay the same fees. The next strategy is comparable pricing. Comparable pricing is also called going-rate pricing. In this technique, the fee is based on the average prices which are charged at equivalent attractions. For example, national park X will compare its entrance fee to that of national park Y. Walsh (1986) notes that this pricing system is often proposed to overcome controversy. Controversy will be eliminated if various parks charge similar prices.

The third strategy is multi-tiered pricing. Fees in multi-tiered pricing vary according to the category of the visitor. These categories involve various groups such as local residents, nationals, researchers and foreigners who tend to have a high willingness to pay (WTP) (Lindberg, 1991). The implementation of dual price or multi-tiered pricing, which is based on a distinction between local and foreign visitors, results in conflicts between

the host country and visitors. But host countries have several reasons for the implementation of price discrimination. Firstly, residents of the host country often subsidize the foreign tourist for the enjoyment of recreational resources. The residents in the host country have already paid for the creation and management of the park through taxes (Laarman and Gregersen, 1996). Secondly, most foreign tourists have a higher level of income than local people. Foreigners tend to have a higher WTP to visit and enjoy the beauty of a national park, and thus it is appropriate to impose a high entrance fee. The final strategy is differential pricing. Differential pricing can be defined as a price that is based on the level of service offered (Walsh, 1986).

Because of a lack of government funding and an increase in the cost of management and operations, park authorities have been obliged to seek extra sources for revenue generation. Most park authorities have begun to charge fees in their parks. Protected areas cannot operate in isolation. The commitment of various groups, whether it directly or indirectly affects protected areas, is important for their survival. Partnership among stakeholders such as government, private sector, local community and experts, is therefore important to sustain the management and biodiversity of protected areas.

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