

Revenue-Generating Mechanisms

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Introduction

Natural resource conservation creates a multiplicity of economic benefits for society such as fresh water, clean air, genetic banks, carbon sinks, coastal protection (coral reefs and mangroves), recreation, etc. However, as these benefits have not been allocated a market value, consumers have typically enjoyed them for free. At lower levels of demand in the past, this pattern may have been sustainable. Today, however, the voracious demand for natural resources and their often unequal distribution means that they — and the ecosystem services they provide — are increasingly threatened.

Despite their obvious and growing popularity with tourists, recreational opportunities in protected areas are rarely priced adequately. Parks around the world frequently charge a low, or no, price for providing recreational opportunities to the public. Consequently, the demand for access to a protected area often exceeds an area manager's capacity to manage it. The results of over-visitation are sometimes painfully visible at some sites while at others they are more insidious as baseline data on ecosystem health are often non-existent and it

is difficult or impossible to assess how an area has been degraded over time by excessive tourist use.

In developing countries, governments pressured by structural adjustment programs and debt interest payments increasingly limit funding for protected area conservation. In this context, it is essential that protected area systems do not subsidize recreation opportunities for foreign nature tourists and access for tour operators.

Income-Generating Mechanisms

A number of relatively simple market-based mechanisms exist to generate tourism revenues for conservation (see Table 5.1).

In general, revenue produced by these activities can be described by the following income collection categories:

Entrance Fees

This is a fee charged to visitors in order to enter a protected area or other ecotourism site. It can be collected at the entrance to the site or previously at another administrative center. It can be charged directly to the

Table 5.1 Types of Fees and Charges in Protected Areas

Fee type	Description
Entrance fees	Allows access to points beyond the entry gate.
Admission fees	Collected for use of a facility or special activity, e.g., museum or photography class.
User fees	Fees paid by visitors to use facilities within the protected area, e.g., parking, camping, visitor centers, boat use, shelter use, etc.
Licenses and permits	For private tourism firms to operate on protected area property, e.g., tour operators, guides, transport providers and other users.
Royalties and sales revenue	Monies from sales of souvenirs.
Concession fees	Charges or revenue shares paid by concessionaires that provide services to protected area visitors, e.g., souvenir shops.
Taxes	Such as on hotel rooms, airport use and vehicles.
Leases and rent fees	Charges for renting or leasing park property or equipment.
Voluntary donations	Includes cash, 'in-kind' gifts and labor, often received through 'friends of the park' groups.

source: Brown, 2001

Table 5.2 Entrance Fees to Protected Areas Managed by the Belize Audubon Society

Protected Area	Hectares	Entrance fees (US\$)	
		Belizean Citizens	Foreigners
Guanacaste National Park	20	0.50	2.55
Blue Hole National Park	232	1.00	4.00
Crooked Tree Wildlife Sanctuary	6,475	1.00	4.00
Cockscomb Basin Wildlife Sanctuary	41,278	1.25	5.00
Half Moon Caye National Monument	3,925	1.25	5.00
Tapir Mountain Nature Reserve	2,728	no access	no access
Shipstern Nature Reserve	8,903	1.00	5.00

source: Brown, 2001

visitor or, alternatively, tour operators may purchase tickets in advance so that visitors on organized tours have the fee included in the total cost of their package. Differential fees are common. In developing countries, citizens are typically charged less than foreign visitors are. This is to be encouraged for several reasons:

- ❖ Residents of a destination country (i.e., country of site location) are already paying through taxes for protected area conservation;
- ❖ Environmental education and recreation objectives of protected areas will normally seek to encourage visitation by local people; and
- ❖ Foreigners from developed countries are generally willing to pay more for access to protected areas.

A further differential may be made for students who are usually charged an even lower fee. Table 5.2 shows an example of how privately-managed protect-

ed areas in Belize differentiate between local citizens and foreigners.

Table 5.3 shows the differentiated entrance fees in effect in the Galapagos National Park in Ecuador. In this case, fees are differentiated into a greater number of categories to offer lower prices to neighboring countries.

Table 5.4 shows entrance fees charged by the Kenya Wildlife Service. These are not only differentiated by visitor type but also by levels of visitation. Categories and entrance fees in Kenya are established based on levels of visitation. Parks with similar visitation levels are grouped together, and the most heavily-visited sites charge the highest entrance fees.

Traditionally, this is the fee mechanism that most contributes to revenues generated by an ecotourism site, in part because it is the easiest to collect.

Table 5.3 Entrance Fees for the Galapagos National Park, Ecuador

<u>Category</u>	<u>Amount in US\$</u>
Foreign tourist (non-resident)	100
Foreign tourist under 12 years	50
Foreign tourist of a member country of the Andean Community or Mercosur	50
Foreign tourist of a member country of the Andean Community or Mercosur under 12 years	25
Citizen or resident of Ecuador	6
Citizen or resident of Ecuador under 12 years	3
Foreign tourist non-resident attending a national academic institution	25
National or foreign children under 2 years	No fee

source: Government of Ecuador, 1998

Table 5.4 Visitor Entrance Fees for Kenya's National Parks

	Non Residents (US\$ per day)	Kenya Residents (Kshs per day) **	Kenya Citizens (Kshs per day)**
Category A: Aberdares, Amboseli & Lake Nakuru			
Adults	27	500	100
Children (from 3 to 18 years)	10	50	50
Student and organized groups*	10	50	50
Category B: Tsavo East & Tsavo West			
Adults	23	200	100
Children (from 3 to 18 years)	8	50	50
Student and organized groups*	10	50	50
Category C: Nairobi, Shimba Hills & Meru			
Adults	20	150	100
Children (from 3 to 18 years)	5	50	50
Student and organized groups*	10	50	50
Category D: All other parks			
Adults	15	100	100
Children (from 3 to 18 years)	5	50	50
Student and organized groups*	5	50	50

* Includes students over 18 years and adults from educational, conservation and civic institutions.

**70 Ksh = US\$1

source: Kenya Wildlife Service, 2001

Normally, the objective of charging an entrance fee is to increase the funding available for the area's maintenance and development activities. However, the amount of the entrance fee can also be a mechanism for facilitating or limiting visitor access, depending upon the site's particular situation. If a site's administration wishes to limit visitation because of adverse visitor impacts, raising the entrance fee is one way to attempt this objective. However, raising and lowering entrance fees alone does not always have a direct impact on visitor numbers. It may also have unintended consequences, especially if the fee level has not been defined based upon demand. Additionally, there is a need to communicate significant changes in fees to operators, guide book authors, etc. in order avoid surprises by foreign visitors at the gate. It requires a thorough knowledge of the demand for a site's attractions before the effect of changing the amount of an entrance fee can be reasonably predicted.

Determining Entrance Fee Levels

Ideally, an ecotourism site should have as its objective the generation of enough income to cover its operating expenses plus a surplus to invest in conservation and community development priorities. Achieving this will depend upon a site's importance as a tourism destina-

tion and the management and marketing capabilities of the administration and tourism managers.

There are three principal considerations in determining entrance fee levels:

- ❖ Willingness to pay for access to a managed area by the visitor. This is determined by surveying visitors to the site. If an entrance fee is currently being charged that is not based on willingness to pay, visitors can be asked if it is the right amount and what the maximum is that they would pay. The survey format might provide a range of entrance fee options to choose from.
- ❖ Comparison of fees charged at other similar sites in similar circumstances. Remember to allow for differences in natural/cultural attractions, infrastructure development, etc.
- ❖ Cover costs associated with provision and maintenance of recreational opportunities. A minimum level of revenue to be generated from entrance fees and other use fees should be enough to properly finance the costs incurred by area management in providing ecotourism opportunities. Very often protected areas contribute to their own problems by undercharging use fees.

Admission Fees

This is a fee collected for the use of a facility or special activity such as a museum or a photography class.

User Fees

This is a fee charged to visitors for the use of a service or a particular opportunity offered by the site that incurs a cost higher than that covered by the entrance fee. (Some sites opt not to charge an entrance fee but instead charge for whatever activities a visitor wishes to participate in). Examples of this would be charging a fee for parking, visitor center use or for camping in organized camping or primitive areas.

Licenses or Permits

These are fees charged to tour operators to allow them to manage visitors in protected areas, e.g., charter boat owners in the Galapagos islands. Typically, they need to be renewed annually and can be used by protected area managers as a means for controlling and limiting access to an area. Additionally they can be issued to allow the visitor to carry out a specific activity that requires special supervision/management because it is infrequently participated in or because demand for this activity must be rationed, such as backcountry camping or rock climbing. It is common for some activities to be rationed in order to reduce human impact and/or provide for a particular visitor experience such as a high level of solitude. It is a good mechanism for monitoring how many visitors actually carry out certain activities. Fishing is another activity for which a license is frequently required. Guides and tour operators may also need special permission to work within the site, for which a fee is usually charged.

Sales

In many cases, the site's administration or third parties may sell souvenirs, food and other products to visitors within the site. Profit from these sales is another source of income. Especially in this case, profit must be calculated carefully after deducting all costs, such as of purchasing or manufacturing the product, labor costs, etc. Third parties must also make a profit before the site's administration receives a percentage.

Concessions

This is a mechanism by which third persons provide a service to visitors within an ecotourism site. The most common examples of this are providing lodging and food services to visitors within the site; offering the use of horses, guided tours and boat transportation can also be done via the concession mechanism.

In some ecotourism sites, the administration may choose to carry out all of these services in house without involving concessions. On the other hand, most ecotourism site managers find that they either do not have the expertise or the investment capital needed to provide these services in a professional manner. This is a decision that each site management will need to make. In any case, a strong and regularly-audited accounting would be necessary to use this option successfully.

Selection of the concessionaires is usually carried out via a bidding process in which the ecotourism site's administration develops the terms of reference and interested parties offer their services, including the amount they are willing to pay for the opportunity to provide the services. In the case of government-managed protected areas, this process can be long and involved. This is an excellent way to involve local people as either owners of the concession, co-concessionaires with a more experienced tour operator or employees of the concessionaire.

A concession may not be a viable alternative for some sites, particularly if there is not much demand for the service. On the other hand, there may be demand but not the entrepreneurs with sufficient capital or interest in taking on the risk of a situation with uncertain results. In any case, a concession should not be undertaken unless a marketing study, business plan and full-scale site plan are prepared (see Part II).

Concession income can be charged in different ways:

- 1) according to the number of people a concession serves during a given year;
- 2) as a percentage of the gross or net income of the concessionaire;
- 3) as an annual fixed fee; or
- 4) a combination of the above.

In many situations, it is very difficult to calculate profits, income and number of people served by a concessionaire. An annual fee is of course one simple way to charge a concessionaire, but it does not have much flexibility. Remember that a site is supposed to be making money. The concession may annually increase its business while the annual fee stays the same. It is not unusual for concessionaires to make huge profits while site administrations receive very little. It is important to be creative at keeping concession fees appropriate for all but easily calculated. In Costa Rica, the administration of Poas Volcano National Park charges the operators of a coffee shop according to the number of visitors who pay entrance fees. The local Red Cross charges a fee for park-

ing and in turn its members are in charge of keeping the public restrooms clean and stocked with toilet paper.

It should be made clear in the terms of reference that the concessionaire will need to adhere to best practices pertaining to ecotourism infrastructure development and management. For example, standards of cleanliness, maximum numbers of visitors (for lodging and food services), maximum prices, garbage, trash and human waste disposal should be specified in the concession contract. The ecotourism site's manager, however, is ultimately responsible for ensuring that all standards and contract conditions are monitored periodically and complied with.

Conditions for Collecting Revenues

While there may be many opportunities for generating income in the ecotourism site, producing money requires that you provide the conditions necessary to do so in a safe and professional manner.

Cost/benefit. Just because there is an opportunity to charge visitors for something does not mean that it would be economically justifiable. How much will it cost in order to charge a particular fee? Do you have the personnel available to do this? Will personnel need to place routine but important tasks such as patrolling on the back burner in order to charge an entrance fee? Do you have the infrastructure (e.g., entrance stations) needed to charge the fee? Are there enough visitors to make it worthwhile?

Quality. Visitors will be quick to notice if they are being charged for an inferior product. Before establishing an entrance fee or other fee, be sure that you are offering a product commensurate with the amount of the fee. For example, a high entrance fee should mean that the site offers high value attractions and well-developed and maintained infrastructure as well as sufficient and well-trained personnel. This also applies to concessionaires. Most visitors to the Galapagos National Park in Ecuador are happy to pay the US\$100 entrance fee because of the exceptional value of the natural resource and the generally good quality of service they receive.

It is important to recognize that income generation should never become an end in itself. You should always keep in mind that your ultimate goal is site conservation. If adding another activity to increase funding for your site is going to interfere with effective long-term site conservation, then you should probably not carry out that activity.

Safety. Because of the location of many ecotourism sites in isolated situations, the safety of the personnel in charge of collecting revenue could be an issue. The safety of the money after being collected could also be a consideration of there is no bank or other secure location for it to be placed until it can be safely deposited in a bank account.

Accounting. The more complex a fee system is, the more important it is to have an appropriate accounting system (and a trained accountant) to adequately administer all of its financial complexities. There are two important reasons for this:

- ❖ You need to know exactly how much you are producing from each activity so that you know if it is cost effective. You also need to know how much you are producing in order to develop your next budget (assuming that what you produce can be spent at your site).
- ❖ There is a need for transparency and clarity in revenue management. Mismanagement of funds is altogether too common and can be the downfall of a good ecotourism program.

Revenue Distribution

As a general rule, an ecotourism site generates income with a lot more enthusiasm if its personnel know that the income will be spent in large part on the site's management needs. Unfortunately, this is frequently not the case, especially with government-owned protected areas. The majority of income often returns to a general fund where it is used for a wide variety of situations, with very little returning to the site that produced it.

In the United States, both the National Park Service and the National Forest Service have recently begun to allow parks and national forest administrations to retain most of the user and entrance fees that they produce (Brown, 2001). The Galapagos National Park and Marine Reserve in Ecuador, which produced around US\$5 million in 1999, keeps 50% of the fees it generates, while other Galapagos entities, including municipalities, also receive a defined percentage (Benitez, 2001). See Figure 5.1 for more on fee distribution.

It may be necessary to lobby the people in charge of financial and budgetary affairs to allow sites to retain a good part of the revenue they produce. In the meantime, being effective, efficient and professional with what you are permitted to do is an important step towards demonstrating that the site's administration should be allowed more freedom to manage its money.

Managing Revenues

If the ecotourism site is allowed to keep all or some of the income that it generates, what should happen to the money once it is collected? An important first step is that it be thoroughly accounted for and deposited in a bank account. If possible, the money should be transferred to a site-focussed trust fund. Advantages of using a trust fund include:

- ❖ The money will earn interest while it is in the trust fund.
- ❖ There is more flexibility to use it than there would be if it were part of a larger institution's administrative structure.
- ❖ A select group of individuals may act to oversee the trust fund account and must authorize both investment strategies as well as withdrawals by the site's administration. Frequently, withdrawals must be justified by a work plan presented by the site's administration.

Funding Priorities

In general, income should be spent to ensure that the site meets its conservation objectives. This is a fundamental concept but one that may get lost in the urgency to create a successful ecotourism program. If this cannot be *or* is not done, then the ecotourism program cannot have long term success. There are, however, multiple ways to spend money to meet conservation objectives, and each site must develop its own priorities.

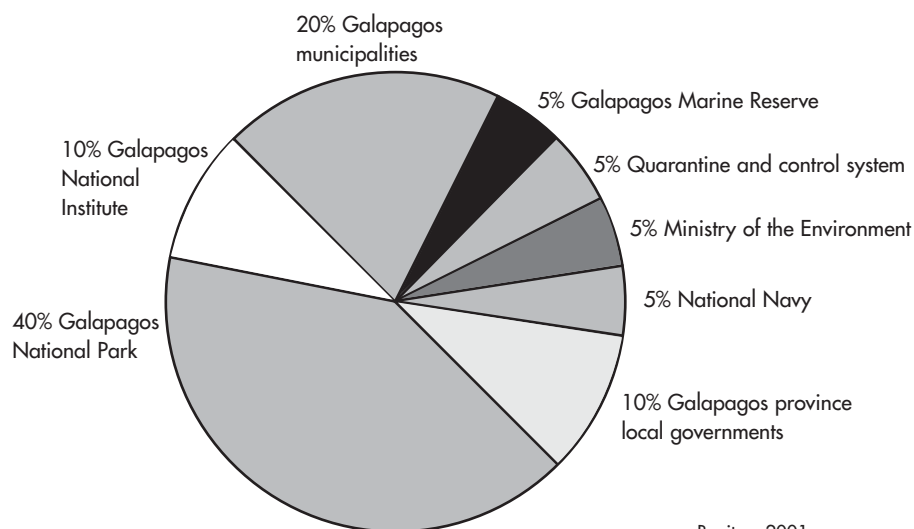
In general, there are three different stakeholder groups that can benefit from the income generated by an ecotourism site: ecosystems, visitors and local people. No matter how the money is spent, or on which group or combination of groups, the bottom line should be conservation. The key conservation benefits of ecotourism can be clustered into five areas (Brandon and Margoluis, 1996):

1. A source of financing for biodiversity conservation, especially in legally-protected areas.
2. Economic justification for protected areas.
3. Economic alternatives for local people to reduce overexploitation on or adjacent to protected areas and other natural areas.
4. Constituency building which promotes biodiversity conservation.
5. An impetus for private biodiversity conservation efforts.

More specifically, ensuring a sufficient flow of funding could be one priority, i.e., spending money in order to make more money. This could entail building trails, signs, scenic overlooks, etc., to make a site more attractive to visitors. Staff training might also be important. It could also involve doing more to market your site by preparing pamphlets, creating a web site or participating in events where you can publicize a site's attractions.

Perhaps protection of a site's natural resources is a high priority. In this case, you might want to hire more personnel, buy more equipment or establish well-

Figure 5.1 Distribution of Entrance Fees in Galapagos National Park



defined site boundaries. Another priority is ensuring that visitor impacts are kept to a minimum. Establishing a permanent monitoring program with established procedures and trained personnel is something that all ecotourism sites should have.

If there is an established Ecotourism Program, perhaps the income that is generated should go towards making that program self-sufficient or at least cover its operational budget. Providing local communities with startup funding to begin an ecotourism enterprise may also be a priority for your site.

However a site's priorities are expressed, they should be indicated in the EMP and should be a major factor in determining how ecotourism income will be spent.

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