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*Sustainable Finance for Protected Areas:*

## TOURISM-BASED USER FEES



*From the Conservation Finance Guide:  
 A Joint Project of the Conservation Finance Alliance*

2004



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# Tourism User Fees

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## 1 UNDERSTANDING THE MECHANISM – HOW DOES IT WORK?

### 1.1 Overview

Worldwide, tourism is the largest industry, with **ecotourism** being an important segment of the market. Every year, millions of tourists around the world visit protected areas (PAs) or travel to destinations for nature-based recreation. While PAs often supply the most important part of such recreational experiences, they typically capture very little of the total economic benefits derived from ecotourism.

A number of relatively simple, market-based mechanisms – known collectively as **tourism user fees (TUFs)** —can gather significant revenues from tourism-based activities, which can then be directed toward supporting PAs and other conservation efforts (see [Table 1](#) and [Figure 1](#)). The fees partially reflect the cost of supplying recreational services, the demand for natural resources, and the value that visitors place on their experience at the site. The direct link between maintaining natural areas and income from user fees is a strong economic incentive for conservation.

Most TUFs are *site-level* mechanisms (i.e. specific fees for specific activities are collected at PA sites). These site-based finance mechanisms are broadly referred to as **visitor use fees**. A few other types of fees are *national-level* mechanisms. This chapter focuses primarily on site-level fees.

TUFs can be structured around many activities. For example:

- **Entrance fees.** Visitors can be charged to enter PAs.
- **Concession fees.** Companies (“**concessionaires**”) providing services within PAs – such as lodging and food – can be charged fees to operate such business concessions.
- **Licenses and permits.** Private firms operating within or outside PAs (e.g. tour operators, guides, cruise ships) and individuals participating in specific recreational activities (e.g. diving, fishing, camping) can be charged for licenses or permits.
- **Tourism-based taxes.** Taxes can be levied at hotels, airports and other collection points, and channeled into conservation.

With ecotourism growing so rapidly, and with the wide range of fees available, TUFs provide a conservation

### Glossary of Terms

**Collection mechanism:** Logistical arrangement for collecting user fees (e.g. personnel issuing entrance passes, voluntary “drop boxes” at entrance gate).

**Concessionaire:** Company or individual granted the right to undertake and profit from a specified activity on the site, such as a restaurant or eco-lodge.

**Concession fee:** Fee charged to a business providing a service (e.g. lodging) within a protected area (PA).

**Day use:** Recreational outing where the visitor arrives and departs the same day.

**Ecotourism:** Environmentally responsible travel and visitation to natural areas that promotes conservation, has a low visitor impact and provides for active socio-economic involvement of local peoples.

**Entrance fee:** Fee to enter a park or PA, typically higher for foreign tourists.

**Facilities:** Human-made structures and improvements at PAs that help support public usage of the areas.

**Fee areas:** Areas where a fee is charged upon entering and reliable counts of visits can be made.

**Fee differential:** Scale of different fees charged, based upon residential and other criteria; designed to promote equity between disparate visitor income levels, and maximize revenue of PAs.

**Licenses/ permits.** Certificates that are sold, allowing users to participate in a specific activity (e.g. scuba diving).

**Overnight use.** An outing that involves an overnight stay as a sanctioned part of the recreational experience.

**Proprietary income:** Income from user fees that is legally restricted for use at the area of collection, rather than joining the government’s general treasury.

finance mechanism with perhaps the broadest application and highest overall revenue potential worldwide. Under certain conditions, TUFs have the potential to generate significant revenues for conservation, particularly in countries and specific PAs developed as *ecotourism destinations*.

In such areas, the right combination of user fees often can provide a significant portion of operating costs – but still typically not the total cost of protecting the resource. In particular, entrance fees – the most common type of TUF – have the potential to generate a large portion of the operating costs of a PA in locations where tourism volume is high and entry fees are also relatively high.

## 1.2 Key Actors and Key Motivations

Visitor use fees involve four particularly relevant stakeholder groups. General motivations for each of these groups are outlined below.

### 1.2.1 Protected area managers

PA managers are typically governmental staff but can be NGOs or community-based organizations or their members. Managers generally seek to maximize **proprietary income** from user fees that can directly support the operating costs of PA management. Managers need to ensure that user fee mechanisms and associated services, such as lodging accommodations within a PA, are consistent with and supportive of the overall conservation objectives of the PA.

### 1.2.2 Tourism-related businesses

This includes many different kinds of businesses, covering such industries as: food services; hotel and lodging; airlines; sport fishing, snorkeling, scuba diving and other water-based recreation; souvenirs and other retail sales. Generally, these businesses seek to maximize their profit and minimize the fees they are required to pay.

### 1.2.3 Local communities and local governments

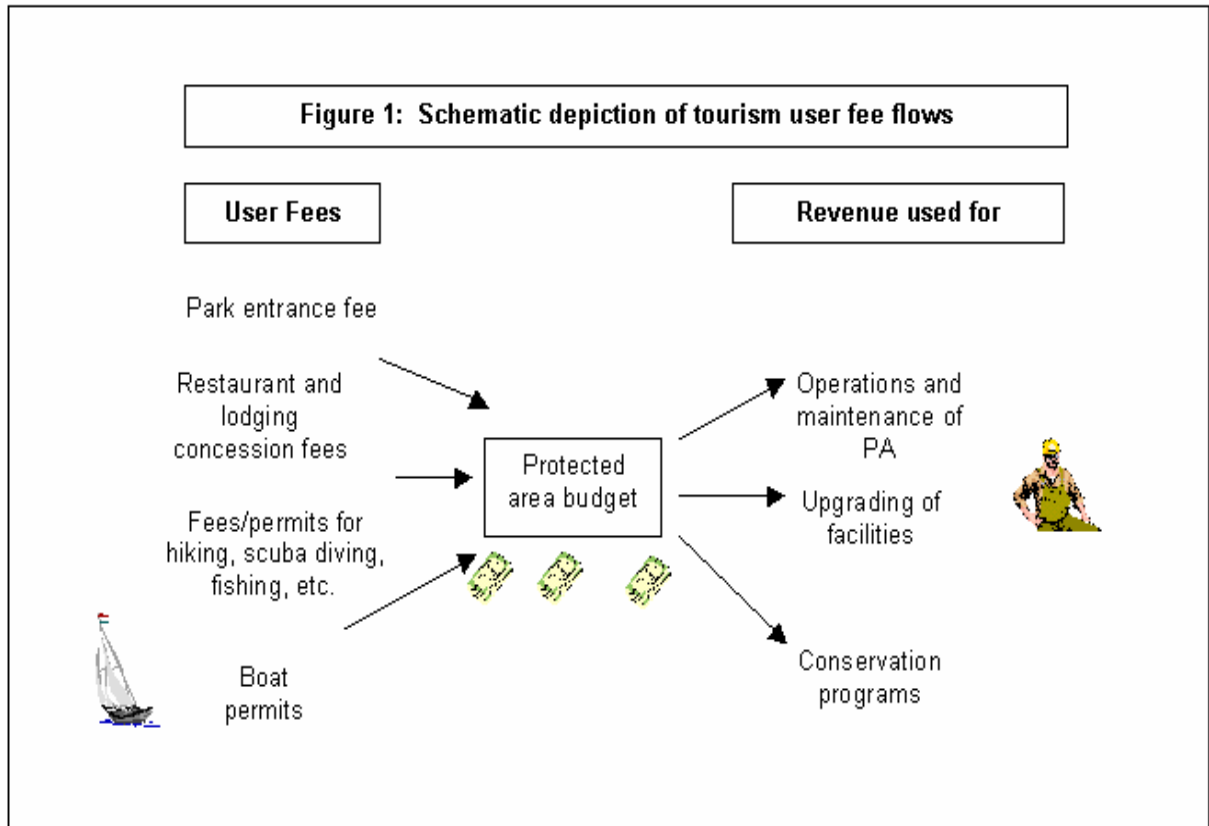
Local communities and governments seek income benefits from TUFs. Local community members provide significant labor for tourism-related businesses, and can benefit at least indirectly when these businesses maximize their profits. On the other hand, *large-scale* businesses, in particular, can have harmful impacts on local community cultural values and traditions, especially if local participation or collaboration in management is diminished. Therefore, many local community members will seek to ensure that any business concession or permit schemes around PAs require that businesses be sensitive to and supportive of such cultural values and traditions. Local and national governments are often the primary authority responsible for PA management, and therefore are also, as with protected area managers, motivated to maximize **proprietary income** from user fees that can directly support the operating costs of PA management. In addition, some local government officials are resistant to any taxes that would be earmarked for conservation, diverting potential tax revenues from other priorities.

**Tourism user fees (TUFs):** Fees on tourism-based activities designed to generate revenues to support conservation.

**[Eco]tourism development/management plan.** Strategy to attract appropriate volume and type of tourists, and manage tourism impacts and visitor use fees.

**Visitor use fees.** Generic term covering a range of TUFs charged to visitors to PAs.

**Willingness-to-Pay.** Amount users are willing to pay for benefits derived from a site, relative to other competing uses of their income.



### 1.2.4 Tourists

Tourists generally fall into two categories: foreign and domestic. In developing countries, there are generally large income disparities between these two groups. Fee differentials are applied: foreign tourists pay significantly higher user fee rates. Both categories of tourists generally are motivated to pay at least modest user fees if they are earmarked toward maintaining the PA attributes that have inspired their visit. Many higher-income tourists are motivated (willing) to pay significantly more than existing TUF rates.

### 1.3 Types of Tourism User Fees

There are many ways to categorize TUFs. Several broad categories are delineated below.



### 1.3.1 Entrance fees

This is a fee charged to visitors in order to enter a protected natural area. There are a number of ways entrance fees can be collected – e.g. at the entrance to the site or at an administrative center. They can be charged directly to the visitor or, alternatively, tour operator companies may purchase tickets in advance so that visitors on organized tours have the fee included in the total cost of their tour package. The most efficient method possible should be chosen to avoid unnecessary queuing and delays.

Marine protected areas present challenges in the collection of entrance fees because there are often multiple entry points, not all of which can be monitored. Therefore it is more difficult to ensure that all those entering the park have paid their fee. In addition to purchasing entrance tickets through tour operators, MPAs can require visitors to carry their tickets at all times. For example, at Bonaire Marine Park (Bonaire) and Bunaken National Park (Indonesia), visitors are given a waterproof tag which can be easily affixed to diving or snorkeling gear or backpacks. Enforcement is conducted through spot checks by park rangers both on land and at sea.

Differential fees are widely viewed as essential for the following reasons:

- Residents of a destination country are already paying, through taxes, for PA conservation, as well as encountering opportunity costs (e.g. reduced use of resources from the land now protected);
- Environmental education and recreation objectives of PAs will normally seek to encourage visits by local people, which would be discouraged with higher user fee rates; and
- Foreign tourists from developed countries are generally willing and able to pay more for access to PAs.

Fee type	Description	Examples
Entrance fees	Charge for entering a PA.	Fees collected at entry gates.
Concession fees	Charges or shares of revenue paid by businesses operating within PAs, providing services to visitors.	Fees to operate restaurants, hotels, eco-lodge facilities and souvenir shops.
General user fees	Fees paid by visitors to use facilities within the PA.	Fees to use parking lots, campsites, visitor centers, boats, shelters.
Royalties and sales revenue	Monies from sales of consumer goods.	Fees on recreational equipment, souvenirs.
Licenses and permits	Instruments required for private firms (or individuals) to conduct activities on PA property.	Permits for tour operators and guides for scuba/snorkel, kayaking, sport fishing; mountain climbing/hiking permits; licenses for cruise ship visits.
Taxes	Targeted taxes on relevant points on the market chain related to the tourism industry, earmarked for conservation.	Taxes on hotel rooms, airport use (entry or departure tax).

Some examples of differentiated entrance fee structures are provided below. Table 2 shows how public PAs managed by an NGO in Belize differentiate their entrance fees between local citizens and foreigners. Table 3 shows the differentiated entrance fees in effect in Galápagos National Park in Ecuador. In this case, fees are differentiated into a greater number of categories to offer lower prices to neighboring countries. Table 4 shows entrance fees charged by the Kenya Wildlife Service. These are not only differentiated by visitor type but also by levels of visitation. Parks with similar visiting levels are grouped



together, and the most heavily visited sites charge the highest entrance fees. A further differential may be made for students who are usually charged an even lower fee, as is done at Galapagos.

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

Category	Amount in US\$
Foreign tourist (non-resident)	100
Foreign tourist under 12 years of age	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 of age	25
Citizen or resident of Ecuador	6
Citizen or resident of Ecuador under 12 years of age	3
Foreign tourist non-resident attending a national academic institution	25
National or foreign children under 2 years of age	No fee
source: Government of Ecuador, 1998	

Categories	Non Residents (US\$ per day)	Kenya Residents (Kshs per day) **	Kenya Citizens (Kshs per day)**
<b>CATEGORY A (very high use)</b>			
Aberdares, Amboseli, & Lake Nakuru			
Adults	27	500	100
Children (from 3 to 18 years)	10	50	50
Student and organized groups*	10	50	50
<b>CATEGORY B (high use)</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
<b>CATEGORY C (moderate use)</b>			
Nairobi, Shimba Hills & Meru			
Adults	20	150	100
Children (from 3 to 18 years)	5	50	50
Student and organized groups*	10	50	50
<b>CATEGORY D (low use): All other parks</b>			
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			

Entrance fees to PAs in developing countries vary widely. The Galápagos charges foreign visitors a US\$100 entry fee, while national parks in Kenya, Tanzania, Uganda and Botswana charge foreign tourists US\$20–30 per day. Such relatively high fees are typically only found at internationally well-known parks, or at sites that have large numbers of “charismatic” terrestrial wildlife species such as lions, elephants and primates. A few marine protected areas that have outstanding and accessible coral reef and other marine life attractions are also able to charge relatively high fees. Traditionally, entrance fees provide the greatest revenue contributions to ecotourism sites, primarily because they are the easiest fee to collect.

Entrance fees are primarily designed to increase funding available for the area’s conservation activities. However, the pricing of entrance fees can also be a mechanism for facilitating or limiting *visitor access*. If managers of a PA identify the need to limit visits because of the adverse impacts, raising the entrance fee is one tool to achieve this objective.

There is a need to communicate changes in fees in advance to tour operators, guide book authors, etc., in order avoid surprises to foreign visitors at the gate. Such changes require a thorough knowledge of the demand for a site’s attractions before the effect of changing the fee can be reasonably predicted.

### 1.3.2 Concession fees

These fees are typically collected from companies (“**concessionaires**”) that are granted “concessions” for providing a service to visitors within an ecotourism site. Concession contracts between the concessionaire and appropriate legal authority include specific provisions specifying the pricing of the fee, the collection mechanism and other logistical, financial and legal details. Depending on the legal framework of the country, any function – including the management of the entire PA or operation of specific facilities – can potentially be contracted to a concessionaire. The most common services provided through concession contracts include: lodging, food and beverage services, horse rentals, recreational equipment rentals, guided tours and boat transportation, and gift / souvenir shops. At some ecotourism sites, the PA administration may choose to carry out all of these services in-house without involving outside concessionaires. 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 typically a decision made by the management on a site-by-site basis.

Selection of concessionaires is usually done through a competitive bidding process in which the site's administration develops the terms of reference and interested companies apply, indicating the services they are offering and the amount they are willing to pay for the opportunity to provide these services. In the case of government-managed PAs, this process can be long and involved. Concessions can be an excellent way to involve local people in PAs – as either sole or co-owners of the concessionaire, or employees of the concessionaire. This can help build local community support for the PA.

A concession fee may not be a viable option for some sites, particularly if there is limited demand for the service. In some cases, there may be demand but not the entrepreneurs with sufficient capital, interest and risk-taking ability. A concession should not be undertaken unless a marketing study and business plan are prepared (in Resources Section below, see Volume 2 of *Ecotourism Development: A Manual Series for Conservation Planners and Managers* ).

One particularly difficult aspect of concessions is arriving at a balance between the amount that the concessionaire will earn by exploiting the resource, and the amount that will be returned to the PA administration. To take one example, in the US, this figure is about 2 to 3 percent of concessionaire earnings.

Concession fee income can be structured in different ways. The major options include:

- fees based on the *number of people a concession serves* during a given year
- fees based on a *percentage of the gross or net* income of the concessionaire
- an annual *fixed fee*, or
- a combination of the above

In many situations, it can be difficult for the concessionaire to track and calculate profits, income and number of people served. A fixed annual fee provides a simpler way to charge a concessionaire, but lacks flexibility: the concession may be steadily increasing its business while the annual fee remains the same. It is not unusual for concessionaires to make huge profits while site administrations receive very little in fees. It is important to be creative in setting concession fees at appropriate levels for all parties and using fee income methods that are easily calculated.

It is particularly important for the site administration to retain control over the concessionaire's operations to assure that resources are not over-exploited or damaged, and that protection and management functions are not neglected in favor of profit-making functions. As such, along with fee rates, the contract for concession operations should also require adherence to *best practices* pertaining to ecotourism infrastructure development and management. The ecotourism site's manager is ultimately responsible for ensuring that all standards and contract conditions are monitored periodically and complied with. Such responsibilities entail costs, which should be factored into user-fee systems.

### 1.3.3 Licenses or permits

These are typically fees charged to allow the individual visitor or a company to carry out a specific activity that requires special supervision / management because (i) it is infrequently exercised; (ii) demand for this activity must be managed; and, (iii) controlling activity is necessary to minimize resource damage. Examples of activities include: backcountry camping, sport fishing, rock climbing, boat launching, anchoring of boats, hiking, and cruise ship visits. It is common for some of these types of activities to be rationed in order to reduce human impact and/or provide for a particular visitor experience such as solitude. It is a useful mechanism for monitoring how many visitors actually carry out certain activities. Guides and tour operators may also need special permits to work within the site, for which a fee is usually charged. Trophy hunting licenses, although controversial in some quarters, can be another source of

income for conservation, as is the case in a number of African countries (e.g. the CAMPFIRE initiative) <http://www.campfire-zimbabwe.org/>

### 1.3.4 Other tourism-related fees and taxes

A wide range of other tourism related fees and taxes exist, such as:

Taxes and/or royalties on consumer items sold within the PA. In many cases, third parties may sell souvenirs, food and other products to visitors within the site. A fixed or percentage-based royalty on such sales presents another potential source of income for conservation. However, third parties must make a profit before the site's administration receives a percentage.

Airport departure tax. National-level airport departure taxes are in place in many countries. A portion of these funds can be earmarked for environmental protection. For example, Belize (Central America) has a law that requires all foreign tourists to pay a US\$3.75 "conservation fee" at the airport, in addition to the normal US\$11.25 airport departure tax. Tourists are given an explanatory brochure and a separate receipt when paying the conservation fee. Revenues go directly to the "Protected Area Conservation Trust" (PACT) that is independent of government. A number of other countries are now considering proposals to charge airport fees earmarked for parks and conservation. For example, in 1999 the Republic of the Seychelles proposed charging all foreign tourists a US\$100 fee on arrival at the airport, for the world's first "environmental tourism visa," called the Seychelles Gold Card. This would grant free lifetime admission to all state-run PAs, including two World Heritage Sites. Depending on tax code regulations, it may also be possible to institute such departure taxes at specific airports only, or for specific provinces.

Road Tolls. Road tolls can be put in place for special scenic drives located in or near PAs. For example, Florida charges a US\$3 toll to all motorists on a highway called "Alligator Alley," just north of the Everglades National Park, where it is often possible to see alligators from the road. This toll raises US\$60 million annually, all of which is earmarked for conservation of the greater Everglades ecosystem.

Cruise Ship Passenger Fees. Fees from cruise-ship visits to PAs or nearby gateways can generate significant income in high tourist visitation areas such as Komodo National Park near Bali, Indonesia and in the Caribbean. In 1998, six small countries in the Eastern Caribbean (Antigua, Dominica, Grenada, St. Kitts, St. Lucia and St. Vincent) jointly decided to charge a US\$1.50 per passenger "cruise ship waste disposal fee" to finance environmental clean-up and conservation. The Belize "conservation fee" described above is also collected from all cruise ship passengers, and goes to support the country's PAs. With fees such as the Eastern Caribbean example above, it is important to recognize the need for requiring the private sector to take responsibility for best management practices – to reduce and manage its own waste.

Scuba Diving Fees. Scuba diving typically involves high-spending tourists and has the potential to generate significant income. The two Caribbean islands of Bonaire and Saba in the Netherlands Antilles use revenue from diving fees to finance 100% of the operating costs of their marine PAs. Divers are charged a flat fee of US\$10 in Bonaire, and an average of US\$30 in Saba, based on the number of dives they make. The Pacific island Republic of Palau charges a US\$15 per person diving fee to the 60,000 to 80,000 divers who go there each year. Diving fees now generate about US\$1,000,000 per year, which is used for maintaining Palau's PAs. Tubbataha Reefs National Park (a World Heritage site) in the Philippines just began charging divers a US\$50 per person "reef conservation fee," after surveys showed that divers would be willing to pay such fees if the money would only be used for protecting Tubbataha's coral reefs, instead of going into the general treasury.

Hotel Room Taxes. Surcharges on hotel rooms have been used in various places around the world as a way of raising funds for conservation. For example, in the US, 10% of the money raised by the state of Delaware's 8% tax on hotel rooms is earmarked (by law) to finance the state's "Beach Preservation Program." In the Turks and Caicos Island (in the eastern Caribbean), hotel room taxes were increased from 8% to 9%, and the additional 1% goes directly into a PA conservation trust fund that is modeled on the one in Belize. In other places, a small, voluntary "nature conservation surcharge" of one or two dollars is added to all visitors' hotel bills, with an explanation on the bill stating that the hotel will delete the conservation surcharge, if a guest so requests (which very few guests will do).

Taxes on Hunting, Fishing and Other Recreational Equipment. Taxes on hunting and fishing equipment can be used to help conserve and manage habitat for species of game and sports fish, and for other conservation purposes. For example, the US federal government imposes an 11% excise tax on all sales of hunting weapons and ammunition, which now generates more than US\$300 million each year. Half of this amount is used to finance the US Wildlife Restoration Fund. There is a similar 10% US federal excise tax on sales of sport fishing equipment and motorboat fuel, which is used to finance the US Aquatic Resources Trust Fund. National and sub-national governments could impose a similar tax on sales of camping and hiking equipment, and earmark the resulting revenues to finance conservation.

Voluntary Donations. Visitors to protected areas are often prepared to contribute more to conservation than they are asked to do through established tourism user fees. Hotel and tour operators can play a very valuable role in soliciting voluntary contributions for protected area conservation through, for example, per night add-on fees and simply by soliciting and gathering donations (e.g. Galapagos). In some cases, where other fees are difficult to charge, perhaps for legal reasons, voluntary donations can be an attractive and viable alternative.

Other Fees. Fee can also be charged for the use of other services or particular opportunities offered by the site that incurs a cost higher than that covered by the entrance fee. Examples include: parking fees, fees for visitor center use or for camping in organized camping or primitive areas, and admission fees for the use of a facility or special activity such as a nature museum or educational exhibit. However, site administration must be mindful that a proliferation of many small visitor fees could discourage visitors and ultimately lower revenues. In this case, a small number of coordinated larger fees may be better than many small fees. Some PAs obtain revenues by charging "publicity fees" to corporations using the PA as a location or backdrop for advertising, films, and posters. Some charge for installation / use of such facilities as transmission towers, marine platforms, or research stations.

## 1.4 Strengths and Weaknesses of Tourism User Fees

### Strengths

- **Equitable “user pays” system.** Consumers of the recreation who highly value a site pay for its conservation and the cost of their activities.
- **Financial self sufficiency.** If fee-based income is proprietary (i.e. earmarked for conservation activities at the site of collection), it could offset a portion of operational costs of a PA, making it more self-sufficient and independent from the politics of a national budget allocation.
- **Public appreciation.** The public may have greater appreciation for services it pays for.
- **Congestion control.** Fees allow increased management and control of park access by users, helping to address overcrowding and directing activities to appropriate areas. Visitors will pay more for a less-crowded experience.
- **Information exchange.** Fee collection provides an opportunity for information exchange between visitors and park personnel.
- **Service and innovation incentives.** Greater PA self-sufficiency from fee revenues gives managers incentives to provide attractive services to the public and maintain PAs and their natural resources in good condition. Also, fees encourage managers to be entrepreneurial, since their budgets may be dependent on fee revenues.
- **Economic value.** Fee (pricing) mechanisms can give economic value to recreation as an ecosystem service provided by PAs.
- **Motivate expansion of PA system.** High income from TUFs may motivate a government to protect more areas.
- **Public perception and external funding.** Self-generation of income enhances public perception of a site’s value and its administration’s competence, which can be used as political leverage and to attract national, international, and private donors to invest in larger conservation projects.
- **Commercial professionalism.** Privatization of concession services can increase commercial professionalism and reduces the site manager’s business responsibilities and the associated operating costs.
- **Engaging stakeholders.** Concession rights include the private sector and their local staff, and sometimes NGOs, as service providers and site partners, helping to engage them more actively in PA management and to increase local support for the site.
- **Employment.** TUFs can create additional local employment as collectors, guards and concessionaire staff.

### Weaknesses

- **Unstable revenue.** Visitation rates, and thus income from fees, can be subject to seasonal and annual fluctuation. Revenues can therefore be unstable.
- **Alienating constituents.** Can alienate constituents, especially local communities that have traditionally enjoyed free access.
- **Exclude poor.** Can exclude the very poor domestic visitors from enjoying the site if user fees are high-priced.
- **Visitor experience changes.** Some dimensions of the visitor experience can be changed adversely (e.g. more structured and commercialized).
- **Commercialization risks.** Inherent risk of commercialization of sites when concession agreements are put in place. A parks agency that places its emphasis on user-fee revenues can lose sight of some of its objectives, and tend toward facilities designed to produce income rather than protect natural resources. It is particularly important to retain control over the concessionaire’s operations to assure that resources are not over-exploited or damaged.
- **Personnel diversion.** Initial diversion of personnel resources to fee collection instead of site protection and conservation. (However, additional fee-based revenues should soon be able to support hiring of additional staff.)
- **Lack of marketing expertise.** Obtaining adequate marketing expertise can be a challenge for PAs in developing countries.
- **Liabilities.** With more tourists, increased exposure to legal liabilities for on-site accidents.
- **Double taxation.** A weakness identified by critics in a developed country context when local residents must pay a user fee as well as local taxes that support the PA system. In developing countries however, fees are charged precisely because taxes are not adequate to cover PA management.
- **Enforcement.** Tourism user fees can be difficult to collect and enforce in MPAs where entry is difficult to restrict to specific locations.

## 1.5 Success Factors

A variety of factors will influence the likelihood of success, including:

- **Tourist volume.** Sufficient numbers of tourists to generate revenue levels that offset a significant portion of operating costs of a PA.
- **Fair pricing of fees.** Placing a fair value on uses and services of a site through fee pricing, while still generating acceptable net returns.
- **Fee adjustment.** Flexible approach by site administration to adjusting fees as needed.
- **Political acceptability of charging fees.** Acceptance by local stakeholders and domestic tourists of the advantages of and need for TUFs.
- **Proprietary use of income for conservation.** Income generated by TUFs is channeled to support *conservation at the site of collection*, rather than channeled into national or provincial general treasuries.
- **Accounting and audit systems.** Well-organized accounting systems to help in tracking and analyzing financial data. Periodic, independent audits.
- **Marketing experience.** Adequate marketing expertise to develop marketing campaigns that can attract sufficient tourism volume if it does not already exist.
- **Well-trained staff for entrance fee program.** Well-trained staff who can effectively collect fees (including differential rates for various tourist profiles) at reasonable administrative costs and provide sufficient information at the entrance gate to help enhance the tourist experience.
- **Professional concessionaire operations drawing upon local employee pool.** Professional commercial operation for delivering services and collecting revenues. Local community members hired to staff concession operations.



## 1.6 Step-By-Step Methodology

This methodology outlines general steps for implementing a comprehensive Tourism User Fee Program. In this illustrative methodology, two specific categories of TUFs – entrance and concession fees – are initiated in the first phase. Other user fees could be brought on stream in later phases of the Program. It is important to note that precise sequencing and implementation of these steps will vary considerably, depending on many circumstances specific to the locality. It is also important to note that the steps outlined below (e.g. conducting an in-depth feasibility study) should be integrated into a broader tourism management plan and linked to management strategies including protected area tourism use zoning and tourism impact monitoring. Steps 1-5 are more general in nature and applicable to establishing an entrance fee system or concession fees. Specific measures for establishing an entrance fee system are detailed in Steps 6a-8a. Specific ways of establishing concession fees are detailed in Steps 6b-10b.

**Step 1:** Site administration (i.e. management authority), in consultation with other stakeholders, determines the general need for and purpose of a tourism user fee program.

- Conduct brainstorming sessions and draft papers on what types of user fees might be charged, how such revenues might be allocated, ways to evaluate the success of the user fee program, etc. (see the Business Planning for Protected Areas chapter of this Guide)

### IF INTEREST IN PURSUING USER FEE PROGRAM EXISTS:

**Step 2:** Site administration conducts feasibility assessment (see Assessment Section below for detailed TOR).

- Profile current tourists through existing data and tourist surveys ([see sample price responsiveness / "willingness to pay" survey](#)): important elements of their visit, motivations for current and future trips, average expenditures, average duration of stay, tourist segmentation (e.g. mass tourism versus high-end tourism, bird watchers, white-water rafters), countries of origin, etc. This is done for entrance fee only.
- In conjunction with local tour operators, estimate current visitation rate and project future trends.
- Estimate the impact capacity at the site (i.e., what are "limits of acceptable change"?)
- Assess existing ecotourism management plans and marketing plans, and identify elements for improving such plans.
- Building on any existing zoning, identify specific steps to develop / implement a *visitor zone designation scheme*, with varying levels of visitation and other use restrictions.
- Assess feasibility (e.g. revenue potential, consistency with PA objectives, legal and regulatory issues, implementation feasibility, etc.) of a range of TUFs, starting with **entrance** and **concession** fees (see section b below).
- Assess implementation issues, such as funds management and distribution, participation in oversight bodies, etc.

### IF TUF PROGRAM DETERMINED FEASIBLE:

**Step 3:** Site administration meets with government officials, legal counsel and key stakeholder groups to agree on the framework for a TUF Program.

- Issues to be discussed include: types of user fees to be employed, along with prioritization and sequencing of such fees and fee differentials; the need for any changes to the existing legal/regulatory framework; principles for implementing the TUF program; allocation of income, etc.

**Step 4:** Site administration creates a detailed TUF Action Plan, consistent with Ecotourism Management or public-use plan.

- *Identify key areas of action:* major services to be provided; allowed activities; fee rates and collection methods; necessary equipment, supplies, personnel, and installation efforts; administration policies; control systems; and evaluation methods.

- Identify specific steps to develop / implement an *ecotourism marketing campaign* to attract more visitors, if consistent with limits of acceptable change.
- Identify specific steps to ascertain appropriate fee prices, including:
  - Calculate the cost of providing and maintaining recreational opportunities for visitors.
  - Determine whether fees should be tiered (i.e. different rates on different visitor profiles).
  - Gather information on fees charged at other similar sites nationally and internationally.
  - Develop steps that address the site's *liability responsibilities* towards visitors.
  - Prepare a *revenue allocation plan*, designating the use of revenues from TUFs for various conservation projects or to cover more general costs (see Business Planning for Protected Areas chapter)

**Step 5:** Initiate the TUF Action Plan.

- Determine how and where the fee will be collected (entrance gate, through tourist operators, etc.)
- Redistribute existing personnel or hire new personnel for fee collection. Purchase any necessary equipment and supplies. If needed, construct / install any new facilities needed for entrance fee collection, such as turnstiles and booths. (Locate collection facilities, special attractions, and infrastructure to minimize impact on natural resources.)
- Establish an accounting system to track and analyze fees being collected.
- Hire an independent firm to audit the site's accounts periodically.
- Led by appropriate tourism agencies, if appropriate, begin or expand ecotourism marketing campaign, in coordination with private sector.
- Be transparent about how the revenues will be allocated.

Entrance Fees	Concession Fees
<p><b>Step 6a:</b> <u>Site administrators conduct a pilot implementation (e.g. 3-6 months) of the entrance fee to test the market.</u></p> <ul style="list-style-type: none"> <li>• Begin controlling access points to PA: start collecting fees and data on visitation. The test could involve collection at just one or two sites, and simple fee differential scales (e.g. only 2 rates).</li> <li>• Evaluate the price responsiveness (visitors' willingness to pay) and visitors' reactions to the fee mechanisms and levels.</li> <li>• Evaluate effectiveness of collection systems and performance of entrance fee staff.</li> <li>• Recommend and put in place any required changes based on this evaluation.</li> </ul> <p><b>Step 7a:</b> <u>Assuming success of pilot, implement full-scale entrance fees.</u></p> <ul style="list-style-type: none"> <li>• For entrance fees, this could entail, for example, opening multiple collection points and charging several rates for different visitor profiles.</li> <li>• Begin allocation of revenues to agreed</li> </ul>	<p><b>Step 6b:</b> <u>Develop detailed Concession Fee Action Plan</u></p> <ul style="list-style-type: none"> <li>• Based on tourism zoning of protected area draft parameters for sustainable operation.</li> <li>• Consult local stakeholders</li> <li>• Protected area defines services to be promoted.</li> <li>• Develop concessionaire application form.</li> <li>• Advertise for concessionaires, requesting bids outlining acceptable fee rates, and requesting information about their operations, such as: energy sources used, waste management systems, environmental interpretation programs, number of visitors to be serviced, use of local labor, supplies, natural resources, etc.</li> </ul> <p><b>Step 7b:</b> <u>Private sector bids for concession rights and concession agreement is negotiated.</u></p> <ul style="list-style-type: none"> <li>• Concessionaires submit applications to site administration, covering the information requested.</li> <li>• Site administration reviews applications and selects concessionaire based on</li> </ul>

<p>conservation activities.</p> <p><b>Step 8a:</b> <u>Site managers monitor and evaluate entrance fee system.</u></p> <ul style="list-style-type: none"> <li>• Monitor visitor numbers through park entrance information cards, etc.</li> <li>• Monitor performance of entrance fee staff through management performance evaluations, independent evaluations, visitor surveys, etc.</li> <li>• Monitor revenue flows through annual audits, and conduct further visitor willingness-to-pay studies to determine if higher fees can be charged.</li> <li>• Monitor and assess tourists' overall experiences of the site.</li> <li>• Assess the ecological condition of and changes to sites that have been made newly accessible by the fee system.</li> <li>• Evaluate data from the above monitoring activities.</li> <li>• Implement needed changes based on evaluations. Consider: (i) increasing or decreasing the fees according to visitor responses / patterns and price responsiveness (willingness to pay studies); (ii) improving materials provided at entrance fee collection points; (iii) taking measures to prevent visitor congestion that will harm the environment and detract from visitors' experience; and (iv) taking measures to improve financial accounting systems.</li> </ul> <p>As appropriate, implement other elements of a TUF system (e.g. scuba diving permits, hotel room taxes, etc.).</p>	<p>merits of application.</p> <ul style="list-style-type: none"> <li>• Site administration and concessionaire negotiate concession agreement, including specific terms of current / future fee payments, specific provisions restricting concessionaire activity, etc.</li> </ul> <p><b>Step 8b:</b> <u>Pilot implementation</u></p> <ul style="list-style-type: none"> <li>• Carry out a limited test application of the concession fee.</li> <li>• Evaluate effectiveness of collection systems and performance of concession fee staff.</li> <li>• Recommend and put in place any required changes based on this evaluation.</li> </ul> <p><b>Step 9b:</b> <u>Assuming success of pilot, implement full-scale concession fees.</u></p> <ul style="list-style-type: none"> <li>• For concession fees, this could entail, for example, an expansion of concessionaire services.</li> <li>• Begin allocation of revenues to agreed conservation activities.</li> </ul> <p><b>Step 10b:</b> <u>Site managers monitor and evaluate concession fee system.</u></p> <ul style="list-style-type: none"> <li>• Monitor visitor numbers through concessionaire receipts, etc.</li> <li>• Monitor performance concession staff through management performance evaluations, independent evaluations, etc.</li> <li>• Monitor concessionaire fees and revenue flows through annual audits to determine whether higher or lower fees should be charged.</li> <li>• Monitor and assess tourists' overall experiences of the site, including concession business(es).</li> <li>• Assess the ecological condition of and changes to sites that have been made newly accessible by the fee system.</li> <li>• Evaluate data from the above monitoring activities.</li> <li>• Implement needed changes based on evaluations. Consider: (i) increasing or decreasing the fees according to visitor responses / patterns and price responsiveness (willingness to pay studies), concession business profits, etc.; (ii) improving materials provided at entrance fee collection points and concession businesses; (iii) taking</li> </ul>
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	<p>measures to prevent visitor congestion that will harm the environment and detract from visitors' experience; and (iv) taking measures to improve financial accounting systems.</p> <p>As appropriate, implement other elements of a TUF system (e.g. scuba diving permits, hotel room taxes, etc.).</p>
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## 2 FEASIBILITY ASSESSMENT PHASE

### 2.1 Overview of Feasibility Assessment

A feasibility study can be designed to cover anywhere from one specific TUF (e.g. entrance fee) to a comprehensive system of TUFs. In the case of site-based TUFs, typically the site will commission an expert in ecotourism to conduct an in-depth feasibility study, which often takes several months to complete, and can cost in the US\$25,000 range. More rapid, less expensive feasibility assessments can be conducted using the tools provided below, the resources listed in this Guide, and limited technical assistance. Below are generic terms of reference covering a comprehensive feasibility study of TUF options, along with 5 worksheet tools (TUF1-5) for summarizing and analyzing data collected during the feasibility study. Depending on the level of detail of the feasibility study, some of these tools may be more appropriate for use in an Implementation Phase. These tools emphasize entrance and concession fees, given their recognition as the most broadly applicable TUFs.

As indicated in the Stepwise Methodology Section above, before proceeding with a feasibility study, the planning process should begin by defining the purposes of the user-fee program. The basic orientation may be to adequately finance environmental protection; finance tourism management in the protected area; to provide installations that promote user enjoyment or economic development; to limit use while increasing revenues; or some combination of these and other factors.

Feasibility studies can then analyze key factors that may affect the success of the program and the specific fee options to be used. Feasibility assessments need to either be carried out as part of larger efforts to develop ecotourism management plans, or need to incorporate key elements of existing plans.

### 2.2 Generic Terms of Reference (TOR) for Feasibility Assessment: Overview

[FILL IN NAME] National Park (FNP) is [FILL IN NAME] ha. in size and located in [FILL IN PROVINCE] of [FILL IN COUNTRY]. It has extensive attributes which make it attractive as an ecotourism destination, including [FILL IN ATTRIBUTES]. In order to effectively protect and manage the biodiversity and other natural resources of the park, a long-term, sustainable financing system is required. Initial planning discussions have identified tourism-based user fees (TUFs) as an important potential element in such a system. Already, modest revenues are being generated through park entrance fees. Opportunities seem to exist for raising entrance fees and putting in place a variety of other user fees. To examine these opportunities in-depth [NAME OF CONTRACTING ENTITY] is commissioning a feasibility study of a range of TUF options for financing conservation of FNP.

The study will collect extensive information and evaluate key issues and conditions influencing the feasibility of TUFs in FNP. Through on-site interviews, collection and analysis of existing data and other activities, the consultant will conduct an overall analysis of the current status of ecotourism in the area. Through extensive interviews with tourism operators and other local businesses, park staff, tourists, local

community leaders and other stakeholders, the consultant will collect and analyze relevant information and recommend specific options for viable TUFs. In addition, the consultant will interview relevant governmental officials to assess opportunities for the generation of *proprietary* income that is channeled directly into conservation activities at FNP. There may be a need for lobbying various government agencies for allocation of these funds. This should be identified in the early stages of the TUF's development ([see Bunaken case study](#)).

## 2.3 Generic Terms of Reference (TOR) for Feasibility Assessment

### OBJECTIVES:

To assess the feasibility of a tourism user fee program designed to generate long-term funding to conservation of FNP. More specifically, the objectives are to:

- Assess the current status of ecotourism and identify actions required to improve the ecotourism experience and visitor flows in support of a TUF program.
- Assess specific issues regarding the feasibility of entrance fee and concession fee programs, and recommend next steps.
- Assess opportunities for implementing other types of TUFs.

### TASKS:

#### 1. General assessment of ecotourism conditions and issues

- Describe the major ecotourism attractions (assets) and related recreational activities.
- Document current visitation volume and recent visitor flow trends; provide detailed visitor demographic data as available (e.g. % and total number of high end tourists, backpackers, other categories; % and total number of foreign and domestic tourists; age group breakdowns; % and total numbers of visitors participating in key recreational activities such as diving / snorkeling, hiking, birdwatching, etc.)
- Document acceptable limits of change from visitor impacts, and assess major environmental impact issues (e.g. identify major threats posed by ecotourism, and options for mitigating such threats).
- Summarize tourism infrastructure issues, including reliability of and access by various modes of transport, communications, accommodations, etc.
- Describe the quality and breadth of existing visitor services, and recommend measures for upgrading such services.
- Identify major obstacles to expanding visitation, and recommend measures for addressing such obstacles as appropriate (e.g. more trained guides, expansion of accommodations).
- Describe any existing TUF mechanisms, and summarize the success of such mechanisms.
- Describe support for TUFs from current tourism operators.

#### 2. Assessment of general conditions for a TUF Program

Describe and analyze key conditions required to put in place an effective TUF Program, including:

- Political conditions: Support for TUF Program of key national government ministries and local government agencies, local communities, domestic tourists, and other important stakeholder groups; support for proprietary income; support for needed infrastructure improvements.
- Economic conditions: Potential to generate significant revenues; strong willingness of foreign and domestic tourists to pay TUFs; existence or likelihood of funding for start-up of TUF Program and needed infrastructure improvements; accounting systems to track and monitor fee collection.
- Legal: Legal regime exists or could be put in place to support TUF Program (including specific fees such as entrance and concession fees) and to support proprietary allocation of income.
- Other: Organizational capacity of government to execute TUF Program, business expertise to operate concessions, ecotourism marketing expertise, overall potential for sustainable tourism to be developed, potential of tourism operators to support TUFs, required staff training.

### 3. Assess in-depth feasibility of an entrance fee program

- If an existing entrance fee is charged, summarize how the program is structured and document the revenue generation trends; assess the success of the program.
- Assess visitor demographic issues correlated with revenue projections and analyze visitor-marketing strategies (e.g. raising visitor flow versus attracting higher portions of high-end tourists).
- Conduct a “willingness-to-pay” survey of visitors to help calculate optimal fee pricing.
- Assess the optimal number and location of entrance-fee collection points, staffing resources and equipment required, and other practical issues to consider in establishing an entrance fee program.
- Assess appropriate mechanisms of entrance fee collection given the circumstances of the park.
- Evaluate the applicability and revenue potential over a 10-year period of various pricing schemes for determining entrance charges (e.g. peak load pricing, comparable pricing, marginal-cost pricing, multi-tiered pricing and differential pricing). Document key assumptions.
- Outline an entrance fee pricing scheme and rates, and project 10-year revenue flows. Draw on price responsiveness (willingness to pay) survey results and vary key parameters (e.g. visitation flows, prices, on-site income retention rates, etc. Document key assumptions.
- Recommend a pilot entrance-fee program to test the fee-pricing scheme over 1 year, following by a process for adjusting the fee to the appropriate level.

### 4. Assess in-depth feasibility of a concession fee program

- If a concession fee program exists, summarize how the program is structured and document the revenue generation trends; assess the success of the program.
- Assess current business services being provided to visitors (e.g. food, accommodations, equipment rental equipment, etc.); determine which services would be most appropriate for inclusion in a concession fee program.
- Conduct a survey of visitors to determine additional concessions required.
- Evaluate applicability and revenue potential over a 10-year period of various concession fee structures and prices (e.g. auction/bidding for licenses, flat fee, percent of gross receipts, percent of net income).
- Recommend a pilot concession fee pricing scheme and rate(s), and project 10-year revenue flows. Draw on comparable systems in operation at other protected areas and vary key parameters.

### 5. Assess feasibility of other TUFs

- Conduct a coarse assessment of the feasibility of other TUFs (e.g. licenses, permits, recreational fees) and recommend which, if any, deserve further in-depth assessment.

### 6. Financial projections and related issues

- On the basis of the above, develop 10-year revenue projections drawing from all fee mechanisms determined to be viable or particularly promising.

### 7. Next steps

Recommend specific next steps for establishing an entrance fee program.

- Recommend specific next steps for establishing a concession fee program.
- Recommend other specific next steps for implementing a TUF program, including sequencing of steps.

## **DELIVERABLES:**

1. Feasibility report. A preliminary report capturing all of the task points outlined above will be submitted to a “Review Team” for comments and discussion prior to the finalization of the report for submission to the contractor. A final report will be submitted in written and electronic form.

2. Contact list. List of key contacts (name, title, address, email, phone number) will be attached to final report.

3. Briefings. Concluding briefings will be provided in [LIST CITIES] to summarize preliminary results for contractor and other interested stakeholders.

### **STAFFING AND TIMETABLE:**

The project will be implemented during the period [FILL IN]. A preliminary report will be due on [FILL IN DATE] and a final report will be due on [FILL IN DATE]. The level of effort will require a total of [FILL IN #] consultant days. [IF A TEAM OF CONSULTANTS:] The consulting team will consist of: [FILL IN NAMES, BREAKDOWN OF DAYS AND ROLES].

## **2.4 Worksheet Tools for Carrying Out Feasibility Assessment**

Six worksheets have been developed to assist the feasibility stage. Instructions for how to use these tools, followed by images of the worksheets, are provided below. These worksheets are intended as generic tools to help summarize and analyze relevant information gathered during the feasibility stage. They will need to be customized to some degree for every site.

The worksheets file is in Microsoft Excel format. To edit and change them for your use, it is recommended to first save the file to your hard drive.

[Click here to link to TUF Worksheets](#) (this will open Microsoft Excel. Click "Enable Macros" when prompted. To edit and change the worksheet for your use, it is recommended to save it first to your hard drive.)

### **Instructions for TUF1 ("Conditions" see next page): Summary of analysis of key conditions for successful TUF Program**

TUF1 is designed to help analyze the key conditions needed for a successful TUF Program.

1. Review the general structure of the worksheet, including data input categories (columns and rows) provided as defaults; modify as needed.
2. Column 1 lists a variety of conditions under the general headings: political, economic, legal and other. For each condition, assign a relative ranking score (1-5 scale, with 5 being the highest) in the appropriate column to the right.

In analyzing these conditions for success, the following key analysis questions should be answered:

- Are there some conditions which are particularly important in this local setting? What are their scores? How could these conditions be improved if necessary?
- Are there a sufficient number of medium (3) or higher scores, suggesting a good likelihood of success?



	A	B	C	D	E	F	G	H
1	<b>WORKSHEET TUF1: SUMMARY OF ANALYSIS OF KEY CONDITIONS FOR SUCCESSFUL TUF PROGRAM</b>							<b>HELP</b>
2								
3			<b>VERY LOW</b>	<b>LOW</b>	<b>MEDIUM</b>	<b>HIGH</b>	<b>VERY HIGH</b>	
4	<b>CONDITIONS</b>		[1]	[2]	[3]	[4]	[5]	
5								
6	<b>Political Conditions</b>							
7	Support for tourism industry (tour operators, hotels, guides, tour agencies, etc.) within: <b>Finance Ministry</b>							
8	Support within <b>Tourism Ministry</b>							
9	Support within <b>Sectoral Ministry</b> (e.g. Fisheries)							
10	Support for TUF Program of local communities							
11	Support for TUF Program within local government agencies							
12	Support for TUF Program of domestic tourists							
13	Support within government for proprietary treatment of income							
14	Political support exists (or can be secured) for needed infrastructure improvements							
15	Political stability (to support ecotourism)							
16	Support of local, national and international tourism industry							
17	Other							
18								
19	<b>Economic Conditions</b>							
20	Existing or potential tourism demand can generate significant revenues							
21	Viable options exist for capturing more of the net economic benefits of ecotourism							
22	Foreign tourists indicate strong willingness to pay new or higher TUFs							
23	Funding exists (or can be secured) for start-up of TUF Program (staff, infrastructure, research, etc.)							
24	Funding exists (or can be secured) for needed infrastructure improvements basic/optimum							
25	Accounting systems exist or could be put in place to track and monitor fee collection							
26	Other							
27								
28	<b>Legal Conditions</b>							
29	Legal regime exists, or could be put in place quickly, to							

### Instructions for TUF2 ("Total 10-year revenues"): Worksheet for calculating revenues from a TUF Program

TUF2 is designed to help calculate potential revenues over a 10-year period from a comprehensive TUF Program.

1. Review the data input categories (rows) provided as defaults; modify as needed.
2. Total number of visitors and total revenues from various sources can be entered manually in the appropriate cells for years 1-10. However, the real power behind this worksheet is found in TUF3. TUF3 acts as a control panel that enables users to enter key park visitation and entrance fee parameters which will automatically calculate the numbers of foreign and domestic visitors and entrance fee revenues for TUF2. **Be aware that if you enter amounts directly into the number of visitors and entrance fee cells, you will eliminate the underlying equations and will need to download a new version of the worksheet to re-gain them.**
3. Other revenue categories found in the first column of TUF2 such as **concession fees** and **permits and licenses** are not automatically generated from other worksheets. You should enter revenue estimates covering Years 1 – 10 directly into these cells based on feasibility study research, pricing recommendations, and best estimates. Leave the "total" rows blank for now. Formulas are embedded in the worksheet to automatically calculate total revenues from the

various fee mechanisms (e.g. total entrance fees). Also, formulas are embedded to automatically calculate the % of total revenues generated by individual income rows. Document key assumptions on page 2 of the worksheet.

In analyzing this information, key questions to consider include:

- Which mechanisms offer the greatest revenue potential over time?
- Which mechanisms offer the greatest revenue potential in the near-term?
- What portion of total protected area funding needs could be met through a TUF Program?

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>TUF2: SUMMARY WORKSHEET FOR CALCULATING REVENUES FROM A TOURISM USER FEE PROGRAM</b>											Entrance Fee calculat	<b>HELP</b>
2												Detailed Entrance fee	
3												calculation	
4													
5	<b>YEAR</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>totals</b>	<b>Notes / Comments</b>
6	<b>Total visitors</b>	<b>2300</b>	<b>2346</b>	<b>2393</b>	<b>2441</b>	<b>2490</b>	<b>2539</b>	<b>2590</b>	<b>2642</b>	<b>2695</b>	<b>2749</b>	<b>25184</b>	
7	Foreign visitors	1500	1530	1561	1592	1624	1656	1689	1723	1757	1793	<b>16425</b>	Visitation numbers come from
8	Domestic visitors	800	816	832	849	866	883	901	919	937	956	<b>8760</b>	Entrance Fee calculator (Mex
9													
10	<b>Total revenues</b>	<b>22640.00</b>	<b>23092.80</b>	<b>23554.66</b>	<b>24025.75</b>	<b>24506.26</b>	<b>24996.39</b>	<b>25496.32</b>	<b>26006.24</b>	<b>26526.37</b>	<b>27056.90</b>	<b>247901.68</b>	
11	Total entrance fees (mid-range)	<b>22640.00</b>	<b>23092.80</b>	<b>23554.66</b>	<b>24025.75</b>	<b>24506.26</b>	<b>24996.39</b>	<b>25496.32</b>	<b>26006.24</b>	<b>26526.37</b>	<b>27056.90</b>	<b>247901.68</b>	-
12	Foreign tourists	22000.00	22440.00	22888.80	23346.58	23813.51	24289.78	24775.57	25271.08	25776.51	26292.04	<b>240893.86</b>	-
13	Domestic tourists	640.00	652.80	665.86	679.17	692.76	706.61	720.74	735.16	749.86	764.86	<b>7007.82</b>	-
14	Total concession fees	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
15	Concession 1 (Lodging)											<b>0.00</b>	
16	Concession 2 (Restaurant)											<b>0.00</b>	
17	Concession 3 (Gift shop)											<b>0.00</b>	
18	Total permits and licenses	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
19	License 1 (Sports fishing)											<b>0.00</b>	
20	License 2 (Hiking)											<b>0.00</b>	
21	License 3 (Camping)											<b>0.00</b>	
22	Total Other fees	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
23	Scuba diving fees											<b>0.00</b>	
24	Local airport fee											<b>0.00</b>	
25													
26	<b>As % of total revenues</b>												
27	Entrance fees	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
28	Foreign tourists	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	
29	Domestic tourists	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	
30	Concession fees	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
31	Concession 1 (Lodging)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
32	Concession 2 (Restaurant)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
33	Concession 3 (Gift shop)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
34	Permits and licenses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
35	License 1 (Sports fishing)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
36	License 2 (Hiking)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
37	License 3 (Camping)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
38	Other fees	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
39	Scuba diving fees	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
40	Local airport fee	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
41													
42													

### Instructions for TUF3: The "Entrance Fee Calculator"

Worksheet TUF3 is a powerful "control panel" that enables users to calculate entrance-fee revenues by entering data for up to 10 key park visitation parameters. Highly detailed revenue scenario spreadsheets are generated based on the user's best estimates of such variables as visitation levels and entrance fees. The resulting potential revenue streams can then be viewed in much greater detail (and further refined) in worksheets TUF2 and TUF4. TUF3 in combination with TUF2 and TUF4 can be used to help calculate and analyze potential revenues from an entrance fee program, and help decide on the most appropriate fee rates.

The 10 parameters that users can manipulate (**as illustrated on the following page**) are:

- A. different levels of pricing for the four types of visitors (domestic vs. foreign; standard vs. student)
- B. the rate of fee increase (for example **5%** per year)
- C. the time period between rate increases (for example the rate increase occurs once every **3** years)
- D. three alternative pricing options (Low, mid-range, and high-range)
- E. seasonal price changes (high-season prices and low-season prices)
- F. total number of years of revenue forecast (1-20 years)
- G. number of visitors (separate estimates can be made for the four types of visitors)
- H. rate of annual increase of visitors (separate estimates can be made for the four types of visitors)
- I. retention rate (the percentage of entrance fees that the park keeps)
- J. three different visitation levels (high, medium, and low visitation levels)

When you open the tourism worksheets you will be directed to TUF3 (the spreadsheet tab at the bottom of screen is named "EntranceFee-start"). Parameters A – J are set to default values at opening. You can reset all parameters to zero, or reset them to the starting sample data using the gray shaded buttons at the bottom right of the spreadsheet. **Be aware that once you start entering your own data, clicking these gray sample data buttons will reset all the parameter values and you may lose your input data!** It is highly recommended that you save a copy of the worksheets to your hard drive and **save your data frequently**.

Start by familiarizing yourself with the layout of this spreadsheet. Users will note that there are many cells with small red triangles in the top right corner. If you hover your mouse over these red triangles comment boxes will open that provide further explanations.

There are two key areas where you can enter data: the "ENTRANCE FEE" levels on the left-center of the screen and the "VISITATION LEVELS" on the right-center. You can begin exploring this tool by entering new data in the orange colored fields. You will replace the default values which are entered only as examples. Pale yellow fields for prices will change automatically according to a pre-set formula (e.g. foreign students total 1/5 of standard visitors, domestic visitors account for 1/10 of the foreign), but these pale yellow fields can also be overwritten by the user.

1. Enter new numbers for the entrance fee prices (**A**). Ideally these estimates would be based on price responsiveness (willingness to pay) surveys. Note that as you change the entrance fees the "potential total revenue" amount in the box at the bottom of the sheet will change accordingly. (note: you can change the category names for the visitor types to suit your needs).
2. Next try changing the number of visitors per year for each of the four types of visitors (**G**). You will see that the potential total revenue will again change as well as the "total visitor" displayed above it. You can set an annual percentage growth rate for visitation levels through input (**H**).

- The default setting for the potential total revenue box shows the results for only **one** year. However, in the green-shaded area is a drop-down box **(F)** where you can define the number of years to display the total revenue results. For example selecting "5" will display the "potential total revenue" over 5 years.

**A.** visitor prices    **B.** % fee increase    **C.** frequency of fee increase    **D.** 3 pricing options    **E.** seasonal prices

The screenshot shows the 'ENTRANCE FEE CALCULATOR' interface. It includes a title bar with 'TUF 3: ENTRANCE FEE CALCULATOR' and 'Worksheet for entering data and displaying results'. There are zoom controls (Zoom Large, Zoom 100%, Zoom 85%) and a HELP button. A 'Go to total revenues' button is also present. The main area is divided into 'Inputs' and 'Outputs'. The 'Inputs' section includes 'ENTRANCE FEE' (with fields for % fee increase, frequency of increase, and rates for Foreign and Domestic tourists) and 'VISITATION LEVELS' (with fields for visitors per year and annual visitation increase). The 'Outputs' section shows 'Total revenue for 1 year' and 'Potential total revenue (\$)' which is 22,640. There are also several radio buttons for options like 'Show Retention Option', '2 Seasons (Low/High)', 'Show 3 Pricing Options', and 'Show 3 Visitation Scenarios'. Callouts A through J point to specific elements: A (visitor prices), B (% fee increase), C (frequency of fee increase), D (3 pricing options), E (seasonal prices), F (number of years to calculate), G (number of visitors), H (rate of visitor increase), I (park retention rate), and J (3 visitation levels).

**F.** number of years to calculate    **G.** number of visitors    **H.** rate of visitor increase    **I.** park retention rate    **J.** 3 visitation levels

- Parameter **(B)** enables users to set a regular percentage increase in the park entrance fee(s) and parameter **(C)** lets you define how often that increase is applied, for example every year, every other year, once every 5 years, etc. Changing these parameters as well as **(H)** will effect total revenues for multi-year projections.
- As you familiarize yourself with entering this data continue to check and see how these changes affect the detailed revenue sheets of TUF2 and TUF4 (more details about TUF4 are found in the next section).

The complexity and level of analysis of TUF3 can be significantly expanded through the use of the "radio buttons" labelled **(D)**, **(E)**, **(I)**, and **(J)** found on the lower right side of the screen above. The default setting for these buttons (as shown above, and when you open TUF3) is the simpler of the two available options. Choosing the more complex alternative in each case will open up new data entry windows in TUF3. The image below shows TUF3 with **(D)**, **(E)**, **(I)**, and **(J)** set to the more complex options. You can experiment working with each of these options one at a time, or work on several at once. In the beginning it is recommended that you work on one variable at a time to fully understand the impact it has

within TUF3 as well as on TUF2 and TUF4. Note: If you use the radio button to return to the simpler option, for example show only one scenario rather than three, you will not lose the more complex levels of data you entered.

TUF 3: **ENTRANCE FEE CALCULATOR**  
Worksheet for entering data and displaying results

Zoom Large | HELP | Go to total revenues  
Zoom 100% | Detailed Entrance Fee calculation  
Zoom 85%

**Inputs** (Enter or choose data in the orange fields, pale fields have defaults but can be changed; summary results will change automatically)

ENTRANCE FEE			VISITATION LEVELS			RETENTION			
% fee increase: 20			visitors per year			annual visitation increase			
frequency of increase (every X years): 15			Low-season High-season			Low-season High-season			
Rates (\$)			Scenario			% %			
Low-Season High-Season			Low High			%			
Foreign tourists	Standard	Low	10	20	500	1,000	1	1	80%
		Mid-range	20	30	1,000	2,000	2	2	
		High-range	30	40	2,000	4,000	10	10	
Domestic tourists	Student	Low	2	4	50	100	1	1	<input checked="" type="checkbox"/> Show Retention Option <input type="checkbox"/> Hide Retention Option <input checked="" type="checkbox"/> 2 Seasons (Low/ High) <input checked="" type="checkbox"/> Same Price all year <input checked="" type="checkbox"/> Show 3 Pricing Options <input type="checkbox"/> Only show Mid-range pricing <input checked="" type="checkbox"/> Show 3 Visitation Scenarios <input type="checkbox"/> Show only 1 Scenario
		Mid-range	4	6	500	1,000	2	2	
		High-range	6	8	1,000	2,000	10	10	
Domestic tourists	Standard	Low	1	2	100	200	0	0	
		Mid-range	2	3	200	400	2	1	
		High-range	3	4	400	8,000	4	4	
Domestic tourists	Student	Low	0.2	0.4	200	400	0	0	
		Mid-range	0.4	0.6	600	1,000	2	1	
		High-range	0.6	0.8	1,000	2,000	4	4	

Total revenue for 1 year

Scenario 1: Low-range Visitation	Scenario 2: Mid-range Visitation	Scenario 3: High-range Visitation
2,250	6,700	20,400

Pricing Option	Retention	Potential total revenue (\$)		
Pricing Option Low-range (\$)	100%	25,640	55,320	110,600
	80%	20,512	44,256	88,480
Pricing Option Mid-range (\$)	100%	41,080	88,640	177,200
	80%	32,864	70,912	141,760
Pricing Option High-range (\$)	100%	56,520	121,960	243,800
	80%	45,216	97,568	195,040

Go to detailed table 1 | Go to detailed table 2 | Go to detailed table 3

Sample data: Set all to zero  
Sample data: Mid-size park

- Click the "Show 3 pricing options" button (D). The spreadsheet will automatically create data input areas for **low**, **mid-range**, and **high-range** entrance fees and insert default values for these three options for the four types of visitors. Note that the "mid-range" price option for each category of visitor is the same previous default setting. Once again, you can enter data in the orange colored field and it will calculate values for the pale yellow field, but you can change all of these default values. The potential total revenue window now displays all 3 pricing options.
- Clicking the "Show 3 visitation scenarios" button (J) opens up new data input windows (low, mid, and high-range) for each visitor category. Changing these numbers will affect the potential total revenue accordingly. Total number of visitors for each of the scenarios is also displayed.
- Clicking the "2 Seasons" button (D) will double the data inputs for the ENTRANCE FEE and VISITATION LEVELS windows. You will now have the ability to define low and high season entrance fees, low and high season visitor levels and even differentiate low and high season annual visitor growth rates.
- Finally, radio button (I) enables users to define the park's entrance fee retention rate. This represents a percentage of all entrance fees that is available for local conservation activities by the park. This option is important, as parks frequently cannot keep all of the fees they collect, but must return some percentage to a central government budget. You can re-set the retention rate to any appropriate percentage. The potential total revenue box will display the numbers for the retention rate you define and compare them to an ideal retention rate of 100%.

## Instructions for TUF4 ("Entrance fee revenues"): Worksheet for calculating detailed revenue projections from a TUF Program

As noted, the values entered in TUF3 will be carried over into TUF4. TUF4 can show revenues at a much greater level of detail than the "potential total revenue" box in TUF3. Familiarize yourself with the structure of TUF4. Note that cells in orange are carried over from TUF3 and should be changed via TUF3. Cells in pale blue are calculated based on the values in the orange cells, but can be changed manually, although this will overwrite the embedded formula for that cell.

1. These worksheets will display entrance fees, visitation levels and their corresponding revenues for a period of 20 years. Note that upon opening this worksheet data is shown for years 1 – 10 in the pale blue cells and a total figure is given for the full 20 years. Gray colored cells in the top right of the screen enable users to expand the worksheet and show details for all 20 years.
2. In the open worksheet at the top of the screen **entrance fee prices** are broken down and displayed for: the four categories of visitors; low vs. high season; and the three pricing scenarios.
3. Towards the bottom of the screen are three control buttons that will open up worksheets that display highly detailed **revenue projections**. These three control buttons correspond to the three visitation levels (low, mid-range and high-range). You can open up these worksheets one at a time to explore and work with them.
4. Explore the Scenario 1 (low visitation) worksheet by clicking the "Show Scenario 1" button. Notice that the starting amounts and growth rates correspond to the figures in TUF3. Embedded formulas will automatically calculate values for Years 2 – 10. You can input specific values of your choice in any given cell that represents a yearly figure. Doing so will impact the values of the years that follow. Again, overwriting the formula in a cell will remove the embedded formula. You can restore the formula by highlighting the cell to the left (assuming that cell's formula is still intact) and dragging that cell from the BOTTOM RIGHT CORNER where a small black box appears. Save your work frequently to your hard drive, if you ever make a mistake you can't correct, you can revert to your last saved data set.
5. Finally, notice that the revenue sheets also display the revenues that would result from four possible entrance fee retention rates: 100%, 75%, 50%, and the retention rate that you have defined on TUF3.

In analyzing this information, key questions and principals to consider include:

Three principal factors in determining entrance-fee levels:

- Price responsiveness (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.
- A comparison of fees charged at other similar sites in similar circumstances. Remember to allow for differences in natural / cultural attractions, infrastructure development, etc.
- The need to cover costs associated with provision and maintenance of recreational opportunities. A minimum level of revenue to be generated from entrance fees and other user fees should be at least enough to properly finance costs incurred by area management in providing ecotourism opportunities.

Questions to consider include:

- How significant are the differentials in revenue generation between Scenarios # 1, #2, and #3.
- Under the different visitation scenarios, in order to meet revenue targets, how should pricing and retention rates be adjusted, including over time, to take into account visitor flows?
- How will the optimal entrance fee change over time?



TUF4: WORKSHEET FOR SUPPORTING ENTRANCE FEE PRICING DECISIONS												Zoom Large		Show only every 5th year		Go to total revenues																			
Data entered here will override those entered on START												Zoom 100%		Show all years in first 10		Go to Input & Summary																			
Orange - data are best entered on Start page												Zoom 75%		Show all years																					
blue - data are calculated based on orange data, can be changed manually for subsequent years																																			
YEAR																																			
% fee increase												1		2		3		4		5		6		7		8		9		10		20		Notes / C	
ENTRANCE FEE PRICE																																			
Foreign tourists	Standard	Low	10	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	12.0													
	Low-Season	Mid-range	20	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	24.0												
		High-range	30	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	36.0												
		High-Season	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	Student	Low	2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4												
		Mid-range	4	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.8												
		High-range	6	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.2												
	High-Season	Low	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
		Mid-range	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
		High-range	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	Domestic tourists	Standard	Low	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2												
		Low-Season	Mid-range	2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4											
High-range			3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.6												
High-Season			0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
Student		Low	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
		Mid-range	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
		High-range	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
High-Season		Low	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2												
		Mid-range	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5												
		High-range	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7												
High-Season		Low	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
		Mid-range	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	High-range	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													

**Instructions for TUF5 ("Concession fees"): Worksheet for supporting concession fee pricing and structure decisions**

TUF5 is designed to help calculate potential revenues from a concession fee program (comparing four pricing schemes: auction/bidding; flat fee; percent of gross receipts; percent of net income) and to help decide on the most appropriate scheme.

1. Review the general schemes and data input categories (rows) under each scheme provided as defaults; modify as needed.
2. Under the auction / bidding scheme, input the estimated winning bid for the concession and enter that figure in Year 1 in the corresponding row. An embedded formula will automatically calculate 3% annual increases in this fee for each of the next 9 years to account for inflation. You can change this calculation as needed. For example, you may want to build in higher fees for license renewal in future years.
3. Under the flat fee scheme, input the three fee rates in the Year 1 column (low, medium and high rate). An embedded formula will automatically calculate 3% annual increases in this fee for each of the next 9 years to account for inflation. You can change this calculation as needed. For example, you may want to build in much higher flat fees in future years.
4. Under the percent of gross receipts scheme, input the estimated total gross income in the appropriate row. Embedded formulas will automatically calculate 3% annual increases in gross receipts for each of the next 9 years, and will automatically calculate revenues based on 2%, 5% and 7% of gross in the three rows below this. If you decide to change these percentages, make corresponding changes in the formulas built into each cells for these rows.
5. Under the percent of net income scheme, input the estimated total gross income and operational costs in the appropriate row under Year 1. Embedded formulas will automatically calculate total



net income, and 3% annual increases for each of the next 9 years. Also, formulas will automatically calculate revenues based on 2%, 5% and 7% of net in the three rows below this. If you decide to change these percentages, make corresponding changes built into each cells for these rows.

6. Document key assumptions behind your data.

In analyzing this information, key questions to consider include:

- Which pricing schemes offer the greatest revenue potential over time?
- Which schemes offer the greatest revenue potential in the near-term?
- How might revenues fluctuate as concessionaires grow their businesses?

	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>TUF5: WORKSHEET FOR SUPPORTING CONCESSION FEE PRICING AND STRUCTURE DECISIONS</b>											
2												
3												
4												
5												
6	<b>PRICING SCHEMES</b>											
7	<b>Auction/bidding for licenses</b>											
8	(Competitive, open bidding for permits)											
9	Expected range of winning bid		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	<b>Flat fee</b>											
11	(Fixed annual fee, derived from gross receipts, operational costs, etc.)											
12	Fixed fee 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Fixed fee 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Fixed fee 3		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	<b>Percent of gross receipts</b>											
16	(Share of gross income)											
17	Total gross income		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	2% of gross	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	5% of gross	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	7% of gross	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	<b>Percent of net income</b>											
22	(Share of total receipts less operational costs)											
23	Total gross income		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Total operational costs		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Total net income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	2% of net	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	5% of net	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	7% of net	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	<b>Optimal pricing scheme:</b>											
30												
31												
32												
33												
34												

[Click here to link to TUF Worksheets](#) (this will open Microsoft Excel. Click “Enable Macros” when prompted.) To edit and change the worksheet for your use, it is recommended to save it first to your hard drive.)

### 3 IMPLEMENTATION

If the feasibility assessment concludes that TUFs are indeed viable, then the major actors enter into an implementation phase, which can take several months to complete. The key implementation steps are outlined in the Stepwise Methodology (Steps 4 – 10) above. Worksheets TUF2-5 provide some practical tools for pricing and structural decisions for entrance and concessions fees. TUF6 below provides a practical tool for organizing the major steps in a TUF Program.

Note: There may be additional steps required prior to actual implementation of the TUFs, including major stakeholder consultation (particularly with the tourism sector operating in the park, whose support is essential) and stakeholder socialization, lobbying government for allocation of funding (this can take considerable time). Additionally, it is important to implement a pilot phase of TUF implementation to

assist socialization of the process, as well as to test different assumptions and fine tune the implementation process. In most instances it will be better to start with a slightly lower fee, not to raise the expectations of those receiving revenue from the fees (in many instances government will require a percentage of the revenues from the fees). This fee can be adjusted following the pilot phase of implementation.

Instructions for TUF6: Worksheet for organizing TUF Action Plan

TUF6 is designed to assist a methodical approach to implementing a TUF Action Plan, organized around key actions, assignments, deadlines, status and other information.

1. Review the general data input categories (rows and columns) provided as defaults; modify as needed.
2. Under each action (row) for entrance and concession fees, fill in information for the deadline, the lead person/entity assigned to the action, the current status and any other relevant notes.
3. Update the information on a regular basis and use the worksheet as an agenda for planning meetings.
4. Insert relevant actions (rows) for any other user fees being brought on stream, and follow similar steps as those described above.

	A	B	C	D	E
1	<b>WORKSHEET TUF6: WORKSHEET FOR ORGANIZING TUF ACTION PLAN</b>				
2					
3	<b>ACTIONS</b>	<b>Deadline</b>	<b>Assignment</b>	<b>Status</b>	<b>Notes</b>
4					
5	<b>Entrance fees</b>				
6					
7	Determine pricing scheme and fee rates				
8	Establish accounting system to track/analyze financial flows				
9	Establish auditing procedure, hire independent firm				
10	Decide on fee collection sites				
11	Develop personnel plan (specify hiring of new staff vs. redeploying existing				
12	Construct/install new facilities and special attractions (specify)				
13	Purchase necessary equipment/supplies				
14	Hold meetings with tourism agency; develop marketing plan				
15	Implement and oversee 6 month, small-scale test				
16	Roll out full implementation of entrance fee program				
17	Develop monitoring and evaluation program, and start implementing				
18					
19	<b>Concession Fees</b>				
20	Determine pricing scheme and fee rates				
21	Establish accounting system to track/analyze financial flows				
22	Establish auditing procedure, hire independent firm				
23	Develop concessionaire application				
24	Advertise for concession bids				
25	Review concessionaire proposals and select concessionaire				
26	Draft concession agreement and negotiate final language				
27	Construct/install new facilities and special attractions (specify)				
28	Implement and oversee 6 month, small-scale test				
29	Roll out full implementation of concession fee program				
30	Develop monitoring and evaluation program, and start implementing				
31					
32	<b>Other fees</b>				
33	Insert similar steps as appropriate				
34					

## 4 RESOURCES

### 4.1 Bibliographic References

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- Solano, P. 2001. *Concesiones Para Ecoturismo: Ecnegocios para el Uevo Mulenio – Alcances Legales y Propuestas*. Sociedad Peruana de Derecho Ambiental ([www.spda.org.pe](http://www.spda.org.pe))

[Steck, B., Strasdas, W. and Gustedt, E. Tourism in Technical Cooperation. 1999. A guide to the conception, planning and implementation of project-accompanying measures in regional rural development and nature conservation. GTZ \(1999\).](#)

[Québec Declaration on Ecotourism, 2002](#)

## 4.2 Web Sites

- **Ecotourism Club CC- the Ecotourism Portal** <http://www.ecotourism.cc/> Comprehensive search engine and links for ecotourism information.
- **The International Ecotourism Society** <http://www.ecotourism.org/> Ecotourism publications from the International Ecotourism Society. Information for prospective ecotourists and professionals in the field, with information for the latter categorized according to research, conservation, and business.
- Documents specific to user fees can be found at: <http://www.ecotourism.org/retiesselfr.html>
- **The Inter-Sectoral Unit for Tourism, Organisation of American States** <http://www.oas.org/TOURISM/home.htm> Information in Spanish on tourism issues in the Americas.
- **The Nature Conservancy** <http://nature.org/ecotourism/> Information about The Nature Conservancy's ecotourism program, including publications on visitor use fees.
- **Planeta.com:** Eco-travels in Latin America <http://www.planeta.com/> Clearinghouse for practical ecotourism, with scholarly reports, online forums, and conferences.
- **Kenya Wildlife Service.** <http://www.kws.org/newtariffs.htm> Information about Kenya's system of park entrance and other tourism user fees. **You may have to cut and paste this link into your web browser.**

### 4.3 Case Study References

- **11 African Countries** – Comparison of pricing and entrance fee policies in [Krug \(2000\)](#). Comparison of organised safaris see page 12 in [Inamdar/Merode \(1999\)](#).
- **Malaysia** – See [Stecker \(1996\)](#)
- **Belize/Mexico** – See detailed analysis of tourism management case studies in several protected areas and recommendations in [Strasdas \(2000\)](#).
- **Costa Rica** – Price elasticity for international visitors demonstrated for several parks in [Lindberg 2001](#), Table 1.
- **Australia** – A recent (2000) review of entrance, camping, and other fees conducted as part of the Nature Tourism National Review project is summarized in [Lindberg \(2001, Annex 3\)](#).
- **New Zealand** – National system of concession fees, facility & service charges: (See pages 49-51; [Phillips, A. Financing Protected Areas: Guidelines for Protected Area Managers. IUCN \(2000\)](#)).
- **US, Canada, Costa Rica, Belize** – A study of visitor fee experience in these countries: [Brown \(2001\)](#).
- **Canada** – Thorough analysis of user fee policy issues in Eagles 1999).
- **South Africa** – The Natal Parks Board system of income generation from visitor accommodations: <http://www.wildnetafrica.co.za/kwazulunatalparks/profile/contrust.html> , see also Eagles 1999)
- **Ecuador** – Visitor use fees and concession systems in protected areas: [Galápagos National Park Case Study](#) - 04-2001

TNC Ecotourism Program Case Study Technical Reports:

- [Results of The Nature Conservancy's Members Ecotraveller Survey](#) - 09-2000
- [ECOTOURISM IMPACTS MONITORING: A Review of Methodologies and Recommendations for Developing Monitoring Programs in Latin America](#) - 05-1999

## 4.4 Case study Summaries

**Nepal – entrance fees:** Sagarmatha National Park (which contains Mt. Everest and is a World Heritage site) has set up a system whereby 30% of the money collected by the park from mountaineering expeditions into the Everest is re-invested into the protection of the park. Since the mountaineering fees can be substantial (it costs about US\$50,000 per expedition, with a total of about 5 expeditions per year) this system has helped generate some US\$400-500,000 per year for activities to conserve the park. Annapurna Conservation Area has obtained agreement from the Nepal government (by means of a special law to this effect) that the money collected from entry fees to the Conservation Area will be channeled directly to the conservation of the area via a local NGO, the King Mahendra Conservation Trust. Every visitor to the Annapurna Conservation Area pays an entry fee of US\$12 which, in 1996, generated some US\$400,000 for the conservation of the Annapurna, more than enough to cover the costs of maintaining the site. As a result of these experiences, the Nepal government is re-evaluating how it uses the entry fees collected at other parks (Mountain Institute, 1997)

**Ecuador: Entry fees and donations in Galapagos National Park.** The Galapagos Islands in Ecuador are one of the most visited and recognized World Heritage sites in the world. Because of the islands' popularity as a tourist destination, the Galapagos National Park finds it relatively easy to finance a large part of its operations by charging a high entry fee and obtaining donations from visitors to the islands. The islands attract around 60,000 foreign tourists per year, each of whom pays a US\$100 park entry fee, thereby generating about US\$5 million per year. In addition, tourists spend around US\$390 to fly to the Galapagos from mainland Ecuador, and a minimum of US\$1000 for a typical 8-day boat trip to visit the islands. Most visitors stay on a cruise ship or charter live-aboard boats. In addition, each of the two main tour boat operators now **guarantees** a minimum of US\$100,000 in tourist donations per year from their passengers to support Galapagos conservation projects. If the tourists do not make the donations themselves, tour companies pay the difference. In the Galapagos, the law which raised park entry fees also required that all revenue from this fee be used to pay for costs associated with operating the park. The law is very specific on the use of the funds. It requires that "40% of the revenues collected from entry fees must be used to pay for salaries and other direct expenses of operating the park; 30% must go to local government authorities for, e.g. construction of sewage treatment facilities; 10% must go to a Galapagos development institute; 5% for operating an inspection and quarantine system; 5% to the navy for patrolling the park; 5% for the Galapagos marine reserve; and 5% to the national parks agency for expenses of managing the national park system as a whole." (For more information: See [Benitez, 2001](#) ).

**Bonaire: Marine park scuba diving fee and WTP survey.**

Bonaire is a small island (288 km<sup>2</sup>) situated in the Southern Caribbean. It is surrounded by fringing reefs that are easily accessible and have provided the island with a valuable resource for the tourism industry, the island's economic mainstay. About 50,000 tourists visit the island each year, half of them scuba divers. To protect these important resources for the tourism industry, Bonaire Marine Park (BMP) was established in 1979. The park covered the area from the high-water mark down to 60 meters, including all 2700 hectares of coral reefs, mangroves and seagrass beds. It is a multiple use park with fishing and diving restricted in certain zones. The park was started with initial four-year funding and administration assistance from National Parks Foundation of the Netherlands Antilles (an NGO), which enabled a mooring system to be installed. The park functioned until the NGO's funds ran out, when, although supported by dive operators, it became little more than a paper park. BMP was revitalized in 1991 with bilateral assistance from the Dutch Government under the conditions that the park had to be self-financing within a new 3-year term of funding. Self-financing was achieved by the end of 1992 when a US\$10 diver fee was introduced following a willingness-to-pay survey (see below). This is the system under which the park currently operates. The fee is collected through the dive operators, who are required to participate in annual courses. All revenues from fees collected through the park are used only for the management of the park. The income generated through the sale of the diver badges (tags) covers the salaries and operational costs of the park. The BMP staff includes a manager, four full time rangers and three shared administrative staff with the Washington-Slagbaai terrestrial park. Operational costs include boat and vehicle maintenance and running costs, the maintenance of the 70 public dive moorings, research and monitoring programs and educational activities for the local children and teachers. For specific projects, the Park has to look to grant funding agencies for support. Income from divers has gradually increased as the number of divers has been increasing, while the US\$10 fee has remained in

place. Early and recent studies showed that it could be increased, and that tourists would still be willing to pay. However, there has been a great deal of opposition on behalf of the dive industry to increase this fee. The park is now considering fees from other tourism services – for guided snorkeling, windsurfing and yacht visits, as well as a US\$350 fee for private moorings.

*Source: Scura and van't Hof (1993) and Kalli DeMeyer (personal comment).*

#### Assessing the user fees in Bonaire Marine Park through “Willingness to Pay” (WTP) surveys

In 1991, a WTP survey was conducted to assess users’ willingness to pay for Bonaire’s for non-consumptive use of Bonaire Marine Park (BMP). The results of the survey were as follows:

- An overwhelming 92 percent of visitors surveyed agreed that a user fee system should be set up, and said that they would be willing to pay the proposed rate of US\$10 per diver per year.
- Approximately 80 percent of visitors surveyed said that they would be willing to pay at least US\$20 per diver per year, while 48 percent said they would be willing to pay at least US\$30 per diver per year and 16 percent said they would be willing to pay US\$50 per diver per year.
- Using this information, an average WTP of US\$27.50 was calculated (excluding those unwilling to pay a fee).

*Source: Cesar, H., Westmacott, S., Emerton, L., and Wells, S (Draft, 2000) *Economic Benefits of Marine Protected Areas in the Western Indian Ocean*. Paper prepared for the Coastal Zone Management Centre of the Netherlands Ministry for Transport and Water Resources*





# NOTES

# NOTES



*The mission of The Nature Conservancy  
is to preserve the plants, animals and natural communities  
that represent the diversity of life on Earth  
by protecting the lands and waters they need to survive.*



**[nature.org/ecotourism](https://www.nature.org/ecotourism)**

