

# Towards Financial Sustainability For Protected Areas

Learning From A Business Approach

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# 1 An Introduction to Financial Sustainability

## 1.1 Why this manual?

Financial sustainability is high on the agenda of many managers concerned with biodiversity conservation. Budgetary tightening and public sector reforms in many developing countries means that single-source income from government Treasury is becoming a thing of the past for many conservation agencies.

In response, new sources of finance are fast emerging. Many organisations are already experimenting with innovative tools like user-charges or environmental taxes to increase their income. Bio-prospecting, carbon taxes and Environmental Trust Funds have sprung up as new possibilities to improve the flow of money to conservation.

There are many lessons to be learned as agencies make the change from single to multiple sources of revenue. The changes imply greater autonomy over income and expenditure for regional and local managers of biodiversity initiatives and more flexibility to deal with much greater uncertainty over the future.

Meeting this challenge should be easier with exposure to alternative tools, methodologies and shared experiences. This guide was written with the following objectives in mind:

- To help the local and regional managers of conservation agencies - primarily managers of Protected Areas and Integrated Conservation and Development Projects (ICDPs) - to learn lessons from each other;
- To expose managers to some of the tools that are commonly used in the private sector to manage finances and improve accountability.

We accept that, with only a small number of exceptions, many protected areas are not, and probably never will be, businesses. They are public agencies with established rules for how to operate. But our hope is that they may be able to learn a few useful management tricks from the private sector - and apply these to their advantage in their own special circumstances..

We also appreciate that this document is targeted towards a group of managers with a diverse range of backgrounds, experiences and expectations. We have structured it to make it as easy as possible to navigate and hope that you will use it more as a reference - to dip in and out of - rather than as a report to read from cover to cover. We wrote this paper as a companion to WWF-UK's *Project Economic Handbook - Economic Instruments in the Design of Integrated Conservation and Development Projects* which describes some of the economic tools, as opposed to management tools, that are being used to improve project sustainability.

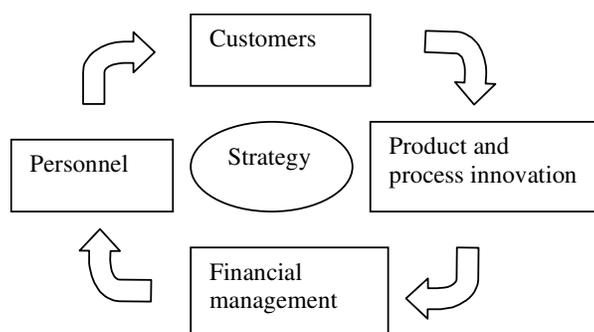
Both documents are also available on WWF's internet site on [www.panda.org](http://www.panda.org).

## 1.2 Why financial management?

Financial sustainability is the ability to secure sufficient resources over the longer term (five or more years) to meet the total costs of an organisation. Central to financial sustainability is the ability to secure baseline funds for the running of an organisation, and to have sufficient reserves to survive the variations in cash-flow that invariably arise.

Increasing the financial sustainability of any organisation means more than just increasing its income. It means building the capacity to manage resources well, to meet the needs of diverse and changing stakeholders and to do this both now and into the foreseeable future. In the private sector, people are beginning to understand that financial sustainability is enhanced by customer focus, continuous innovation, sound financial management and high quality personnel (Figure 1). Ideally, all of these need to be bound together into a tight strategy which creates a clear mandate for decision-making.

Figure 1 Financial sustainability means more than just increasing income



Financial sustainability in the public sector is more complex than that in the private sector because clear definitions of customers and products are sometimes difficult to obtain. Environmental goods and services have a wide range of values which are sometimes hard to quantify and charge for<sup>1</sup>. Environmental management institutions in the developing world must contend both with this issue, but also with the realities of poor institutional processes, lack of high quality personnel and low levels of investment. It is no wonder, therefore, that financial sustainability is rare. Building institutional capacity to develop and manage finances sustainably is a key necessity.

In considering financial sustainability, strategic reform and rationalisation of expenditure, we recognise that ICDPs face varied and multiple demands on their financial resources. Typically these might include the management and running costs of the project, the costs of community

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<sup>1</sup> A guide to economic and financial analysis. European Commission, 1998.

benefit sharing schemes and overhead charges of the parent institution (the central PA agency, for example). In addition, any income that the ICDP might receive through tourism charges, for example, often have to be returned to the State Treasury or Agency headquarters.

The allocation of resources to each of these stakeholders is an important and essential consideration, but is, unfortunately, beyond the scope of this document. Clearly, it will be highly specific to the circumstances surrounding each individual PA. It must be dependent on negotiation and careful management of local, as well as regional, national and global expectations.

### **1.3 Who should pay for environmental conservation? The economic rationale**

Historically, environmental conservation has been perceived as a public service that must be paid for by the state. For a range of economic reasons, the value of environmental goods and services are not accurately reflected by the markets. The implication is that conservation is necessary, but that no one is prepared to bear the cost directly - so society needs to act collectively to redistribute costs and benefits. This belief is now seen as too simplistic: there is a growing appreciation that environmental conservation provides direct services, and that the people and organisations who benefit are prepared to pay for those services.

This means that people are beginning to realise that, under the right circumstances, it is possible to reduce the burden of public expenditure by encouraging the private sector (individuals and communities) to capitalise on the value of biodiversity. The rationale is that, as a result, protected areas are likely to attract and retain a higher level of investment from the private sector. This enables governments to realign expenditure to activities with a higher social return - although whether this in fact happens is dependent on political economy and how public expenditure decisions are made.

#### **Public or private? A tale of two investment strategies**

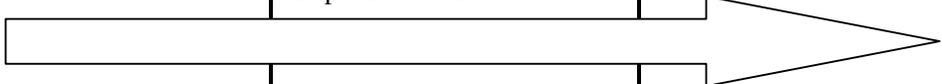
- Government intervention is commonly justified on the grounds of market failure.
- The government often aspires to obtain the highest social, as opposed to private, return on investment.
- However, state failure is also an important consideration in many developing countries.
- Furthermore, governments are seldom able to take investment risks with capital, since the legitimacy of risking public funds is questionable.
- The private sector does not face the same constraint. Innovation and risk are central to private enterprise.
- Creating economic incentives to achieve conservation is one way to improve financial efficiency in the sector.

*Who should deliver conservation services?*

The issue of who should deliver conservation services is quite distinct from who should pay for those services. At one end of the spectrum, the traditional public sector model is that government is responsible for both paying for and delivering services. In the developing world, many protected areas operate under this model. However, a broad range of public sector institutions are moving towards a ‘user pays’ model of management where government delivers a service, but people pay a fee whenever they take advantage of that service. Examples might include provisions of electricity, water, or public transport.

There is a third scenario where government sub-contracts work out to the private sector (NGO or commercial organisations). Under this scenario, government pays for a portion of the service, retains the right to regulate, but the contractor delivers the service and retains the right to make a profit. This system, if managed well, can incentivise the contractor to seek investment and increase income from a variety of user groups for the service.

<b>The spectrum between delivering services and buying services</b>		
<b>Delivering and paying for services</b>	<b>Delivering services</b>	<b>Buying services</b>
Public sector	User-pays mechanisms within the public sector	Public/private partnerships
State subsidises protected areas from taxation, protected area institution is a government department.	State delivers service, but at least some of the costs come from a fee on the public according to use, e.g. through gate entry fees.	NGO or private organisation delivers service and seeks to cover costs through user charges, government contract etc.



How are we to choose which is the best model for any particular park or protected area system? It’s important to recognise that no model provides the right answer. Any system could work given the right circumstances, training and resources. But choosing the right system will depend on at least the following factors:

- Political and social accountability and endorsement to ensure that the chosen system has credibility and support;
- A basis in law so that disputes between stakeholders can be resolved;
- The right social and financial incentives (security, resources and rights) to enable the system to evolve sustainably.

These issues are really those of good governance - which lies at the core of many development solutions.

#### **1.4 The structure of this guide**

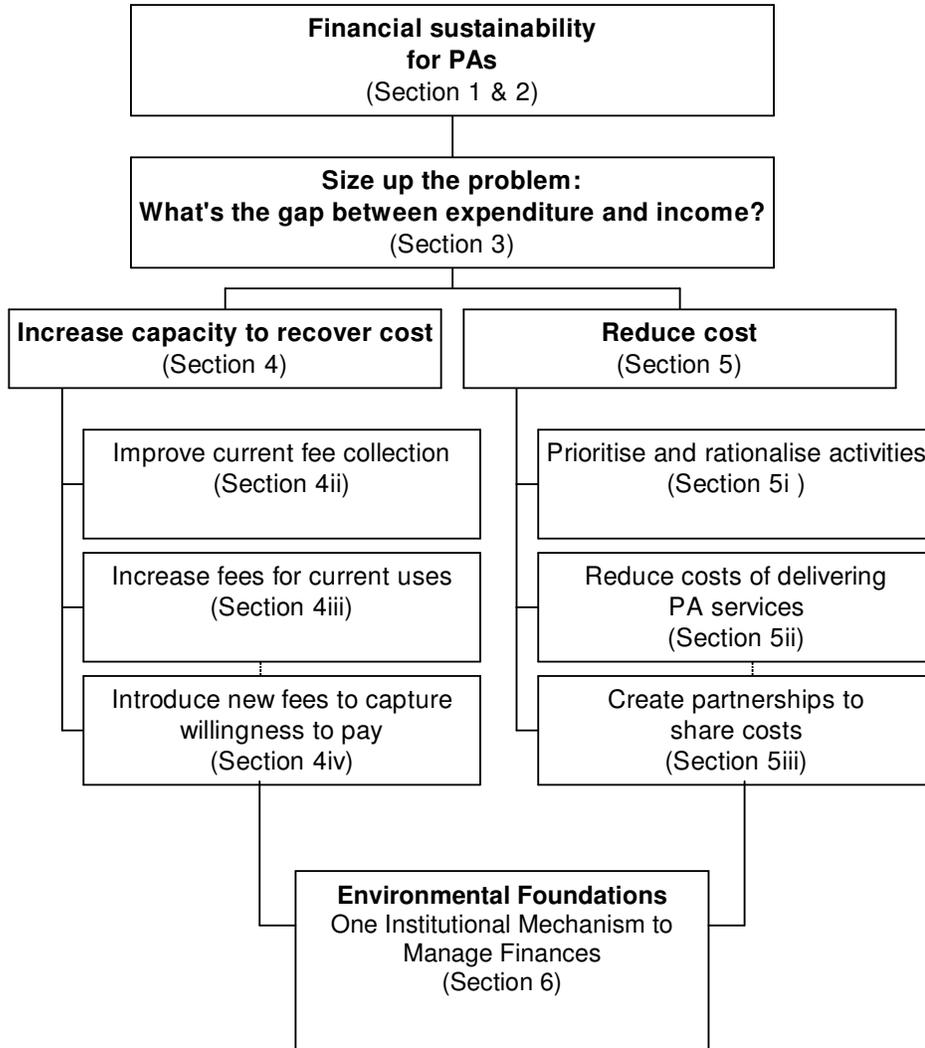
The framework outlined in this document helps to show how improved financial management can be used as a platform for enabling peoples and local institutions adjacent to protected areas to capture the real value of their resources, thereby promoting their sustainable use. Our aim is to encourage people to find innovative solutions that channel the diverse values of protected area resources to the full range of stakeholders.

Four topics stand out as being important as managers consider how best to improve their financial sustainability:

1. What are the kinds of tools and experiences that can help to better understand the gap between income and expenditure?
2. What are the experiences and opportunities for increasing alternative sources of income to recover management costs?
3. What are the experiences and lessons learned for identifying opportunities for reducing management costs?
4. What are the benefits and concerns of Trust Funds as a mechanism to deliver financial sustainability?

We have arranged these four topics in a sequence that we hope will enable the reader to navigate quickly and effectively through this document.

**A roadmap towards sustainability - the structure of this document**



## 2 Some examples of commercial opportunities for protected areas

Commercial benefits for protected areas arise from the marketing and sale of their goods and services. These have revolved around both the consumptive and non-consumptive use of natural resources:

<b>Non-consumptive use</b>	<b>Consumptive use</b>
View Tourism	Trophy hunting
Films & documentaries	Resource extraction (including timber, NTFP's, fisheries etc)
Research	Live sales
Ecosystem functions (e.g. water catchment, carbon sequestration)	
Willingness to pay	

Protected area agencies, both public and private, have focused on increasing revenue from these sources. None of them can provide all of the solutions, and they all have their intrinsic problems. Development has no 'miracle cure'. Rather, through effective partnerships, they can each make a contribution to improving the financial position of protected areas. The main income sectors are outlined below, and the conditions for their success are summarised from the existing literature.

By reading this section we hope you will:

- Better understand some of the factors of success associated with commercial development options for protected areas;
- Become more familiar with the ways in which PA managers have attempted to increase financial sustainability;

### 2.1 Factors of success for commercial development of protected area services

In each of the cases presented below, there are a few underlying themes or lessons that can be drawn out. Commercial success results from understanding that there is strong competition for PA services. Protected areas are usually competing for an international market dominated by customers (tourists, the international community, conservation NGOs) that, quite literally, have the whole world to choose from. Protected areas therefore have to provide a number of conditions:

1. **Resources:** The protected area must be in a position to guarantee a unique attraction - either the viewing of certain charismatic species, or presence of key resources. In the case of the

tourism, close proximity to diverse attractions, such as beaches or attractive landscapes is also expected.

2. **Security:** in the last decades security has become a major concern for the many industries that are dependent on protected areas, especially tourism. Poor security now effectively precludes a large number of sites from the market.
3. **Access:** Investors and developers require close proximity to national and international markets and good local transport networks.
4. **Facilities:** high levels of investment in protected area infrastructure must be achieved to improve the attractiveness of a protected area to private investors.
5. **Cost:** The deals and concessions offered by the PA must look cost-effective to commercial operators and allow them to create a profit for their enterprises.
6. **Benefit sharing and control:** Ensuring that weaker stakeholders - especially people living adjacent to or within PAs - have an effective voice and are able to benefit fairly from revenues is an essential consideration. In many PAs and ICDPs, benefits available for local development have failed to live up to expectations.

## 2.2 Tourism

Tourism, which generates over US\$3 trillion, is currently the world's largest industry (Kinnaird and O'Brien 1996, cited in Wilkie in press). Of course, nature tourism, which applies to protected areas, captures only a small proportion of these receipts. Nevertheless, nature tourism is one of the highest growth sectors of the industry and is expected to increase by over 50% between 1999 and 2006.

The significance of protected areas is that, while they may attract only a small portion of the national tourist market, they represent a market edge for the developing countries in question. For example, in 1989 the tourism sector represented the most significant contributor to the Kenya's GDP, contributing about US\$ 419 million (Norton-Griffiths and Southey, 1995). Yet, that year, the Department of Wildlife was going through a financial crisis. Nevertheless, there is no denying that the country's wildlife plays an important part in influencing people's wish to visit Kenya. The deficit in the wildlife department was a reflection of the organisation's failure to recover the true value of the services that it was providing. Subsequent measures, such as improving the capacity of the agency to retain the income it earned - by creating a new parastatal organisation (the Kenya Wildlife Service) - and increasing national park entrance fees for non-residents, redressed the financial difficulties to some extent.

One of the first protected areas to effectively capture the real demand for wildlife viewing were the gorilla reserves in Rwanda and in the Democratic Republic of Congo. Kahuzi Biega National Park (DRC) and the Parc National des Volcans (Rwanda) raised US\$ 1million after

increasing its entrance fees in 1989. Nevertheless, these cases are the exception rather than the rule. Wilkie and Carpenter (in press, a.) review some recent studies that analyse people's 'willingness to pay' for protected areas. Most of these studies suggest that the charges imposed by protected areas fall significantly short of the amounts that people would be prepared to pay. Furthermore, there are wider economic benefits that are generated through tourism as a result of the existence of protected areas, but which fail to contribute to their management costs. This again reflects the reality that PA institutions are often not able to retain the fees that they earn - instead, they have to return them to central bureaucracies.

Wilkie and Carpenter (in press, a.) cite three broad areas where revenues are generated through tourism by protected areas:

1. **Direct effects:** the economic impacts directly related to nature tourism;
2. **Indirect effects:** the expenditures incurred by a business or other entity when it re-spends its gross income on wages, operating expenses or capital items; and
3. **Induced effects:** re-spending of wages earned in businesses that benefit from direct and indirect effects.

These broad level revenues should be understood by protected area managers because an assessment of the national benefits of protected areas will greatly facilitate the leverage that protected area managers can place on competing for funds from both public and private sector sources.

*Nature Tourism: Madikwe Game Reserve, South Africa*

The North West Parks Board established Madikwe as a protected area whose primary objective is to generate economic benefits and whose secondary objective is to conserve wildlife. The development plan for Madikwe included three stakeholders: the Parks Board, the private sector and local communities. A trust fund was incorporated into the plan with the main aim of financing local community development objectives. The engines for economic growth were designed to come entirely from the private tourism sector with the Parks Board recovering its costs through the lease of concessions. In order to achieve financial viability, the development team created an economic model that included operational as well as capital and development costs, cash flow, and required income. This model predicted that, in order to meet its financing needs, a total of 15 lodges with capacity for 700 beds would need to be maintained within the PA. Even with all of this investment the financial rate of return, or financial viability, was estimated at just 5.5%. In the words of the North West Parks board,

*'this [5.5% return on investment] is obviously very low for ventures of this nature, particularly as Madikwe is a long term undertaking and, one could argue, a fairly risky one'.*

Unfortunately, Madikwe has so far not performed according to its projected financial aspirations because of land claims on the protected area which have increased the perceived risk for private investors.

### 2.3 Sport hunting

Also known as recreational or trophy hunting, sport hunting has the potential to raise substantial revenues for conservation. In the United States, an estimated 10.7 million hunters spent over 12 billion dollars on their sport (U.S. Department of the Interior, cited in Wilkie and Carpenter 1999). Hunters travelling to Africa are prepared to spend up to US\$ 90,000 for a three week safari (Laborde *pers comm*). These figures imply that hunting can provide a low volume, high return source of revenues, a proportion of which can be channelled into conservation activities.

The viability of sport hunting appears to be partly dependant on the ecological context. Wilkie and Carpenter (1999) outline the significance of dry savanna landscapes for sport hunting. Savannas are important not just because they contain charismatic large mammals that attract hunters, but also because they sometimes constitute economically marginal land: in these semi-arid landscapes conservation underpinned by profitable hunting concessions are more likely to work as a competitive land-use.

Like tourism, hunting has its spin-off benefits that contribute to the national economy. Wilkie and Carpenter present a breakdown of the financial benefits (Table 1).

**Table 1. Relative prices for 14 day trophy hunting safari (Source Wilkie and Carpenter, in press)**

	Tanzania	Benin	Cameroon	CAR	South Africa	Zimbabwe	Cameroon Forest
Airfare (US-to site and back)	\$2,000	\$2,500	\$2,800	\$2,800	\$1,800	\$1,800	\$2,800
Hunting licences and fees	\$2,100		\$800	\$818			\$800
Trophy shipping	\$1,200	\$500	\$800	1,000	\$1,000	\$1,000	\$800
Community development fee	\$62			\$272			
14 day safari price	\$17,500	15,000	\$18,600	\$19,000	\$4,200	\$12,950	\$25,000
Average trophy fees <sup>a</sup>	\$1,230	\$786	\$3,274	\$2,717	\$6,900	\$3,000	\$3,274
Avg trophy fees + elephant	\$5,230	na	\$4,911	na	na	\$13,000	\$4,911
<b>Cost to hunter</b>							
Total	\$24,092	\$18,786	\$26,274	\$26,607	\$13,900	\$18,750	\$32,674
Total + elephant	\$28,092	na	\$27,911	na	na	\$28,750	\$34,311

Sources: Web sites of safari hunting companies advertising hunting opportunities and costs. Appendix 1 shows a list of trophy fees for safari hunting nations in sub-Saharan Africa.

NB: some nations only allow elephant hunting during 21 day safaris. Elephant hunting is not permitted in Benin, Central African Republic and South Africa.

<sup>a</sup> based on 1 individual of each of the following species – bongo, buffalo, bushpig, waterbuck, duiker, kob.

While sport hunting may appear attractive given the considerable revenues that are generated, there are several caveats. These are:

- Access to and control over financial resources; and
- Ecological sustainability of harvesting operations.

#### *Access to and control over resources*

Compared to nature tourism, sport hunting enterprises tend to require a relatively small input, and generate significantly higher revenues. At first the high profit margins offered by hunting concessions appears to suggest a positive impact: the revenues are more easily accessed by national stakeholders without the requirement for high capital investments on their part. However, this situation inevitably plays into the hands of the most powerful stakeholders, leaving disempowered local stakeholders with few tangible benefits.

#### *Ecological sustainability*

There is a paucity of data on the relationship between harvesting rates and the sustainability of trophy species. As Mackenzie (1987) points out, trophy hunting was responsible for the local collapse of several mammal species in east and southern Africa during the late nineteenth and early twentieth century. The lack of sustainability resulted from a number of factors: the market value of trophies was high, an absence of regulations resulted in over-harvesting, and wildlife products, notably ivory, became one of the economic pillars of colonial expansion in the region. Many of these characteristics still apply today, although less to sport hunting than to illegal wildlife off-takes, especially in sub-Saharan Africa.

## **2.4 Sustainable resource extraction**

### *Non timber forest products.*

The interest in extractive reserves as an option for generating revenues both for biodiversity conservation and for local and national economies has grown considerably over recent years. Resource use in protected areas can cover a very wide range of activities including the extraction or diversion of water for irrigation or other users; extraction of flora and fauna and their by-products, capture fishing etc.

A seminal paper by Peters *et al* (1989) indicated that the discounted rate financial returns from exploiting non-timber-forest products (NTFPs) together with selective logging from a hectare of Amazonian forest in Peru exceeded those that could be drawn from destructive forest use, such as clear-cutting and plantation harvesting. The success of the National Council of Rubber Tappers in Brazil provided one of the first examples of the potential for local resource use to

provide a sustainable funding mechanism for conservation (Salafsky *et al* 1993). Research associated with the local use of NTFPs is now extensive (see, for example, the Hidden Harvest Series, Scoones *et al* 1992)

#### *Sustainable extraction of NTFPs in the Maya Biosphere Reserve, Guatemala*

The sustainable use of NTFPs in this region dates back to Mayan civilisation (Salafsky 1993). Today, residents continue to benefit from the diversity of resources. Three resources, in particular, have made biological products from this site exceptionally valuable: *Chicle*, a latex from *Manilkara zapota* trees, *xate*, fods from the *Chamaedorea spp.* Palms, and allspice, from the *Pimenta dioica* trees. The extraction of *Chicle* expanded dramatically in the 1930's when it began to be used as the core ingredient for chewing gum. It is during this period that P.K. Wrigley built airstrips in the district to ensure the rapid transport of the product to US markets.

Whilst the use of *Chicle* has somewhat diminished with the advent of cheaper synthetic ingredients, local production of NTFPs has managed to diversify and develop alternative products. Since 1960, the collection of allspice and *xate* has expanded into a major industry for the area. The extraction of these products from the forest has been estimated to produce part or full-time employment for over 7,000 people and generates annual export revenues of between US\$ 4 to 7 million (1989).

Salafsky (1993) uses the Maya reserve example to review some of the weaknesses of extractive reserves. It is evident that one of the primary reasons why sustainable resource extraction has successfully financed forest conservation in this region, ironically, is because of the exceptionally low biological diversity of the site. There is a low tree species diversity of between 50 to 100 species per hectare, and correspondingly high abundance of key species.

#### *Accreditation schemes: market mechanisms to promote sustainable use of natural resources.*

Accreditation schemes like the Forestry Stewardship Council and the Marine Stewardship Council attempt to create incentives for businesses to harvest natural resources sustainably. They work by labelling consumer products to certify that they have come from sources that adhere to prescribed good-management practices.

Over the last six years, 15 million hectares of forest in 28 countries have been certified as 'well-managed' according to the FSC's environmental, social, and economic criteria. WWF and the World Bank have jointly set a target of 200 million certified hectares of timber-producing forest by 2005 (using the FSC's or other appropriate certification).

Some of the largest commercial suppliers of certified products (like B&Q in the UK and Unilever globally) ensure the sustained success of accreditation schemes. Further information on how to encourage accredited forests can be found from the FSC ([www.fscoax.org](http://www.fscoax.org)). For fisheries contact WWF-UK ([www.panda.org](http://www.panda.org)).

### *Bioprospecting*

Bioprospecting has recently received much attention as a potential opportunity to create revenues for biodiversity conservation. In essence, a country's PA agency (or individual PA) sells the opportunity to 'prospect' for commercially viable drugs or other biological samples.

In a landmark deal, Merck & Co., the world's largest pharmaceutical company, entered into a bioprospecting agreement with INBio, the National Biodiversity Institute of Costa Rica. In return for \$1 million, and a royalty of the sales of any successful drug that is developed, INBio collects and processes plant and insect samples in Costa Rica, and supplies them to Merck. The royalty will be shared between INBio and the Costa Rican government. (Pearce 1995, p. 134).

The Merck/INBio bioprospecting relationship is a good example of the kinds of deals that protected area agencies can strike with multinational corporations. In particular, corporations are likely to seek relationships that offer:

- Political stability and binding contractual terms;
- Strong local capacity to evaluate, manage and analyse samples.

Recent analysis of the bioprospecting industry<sup>2</sup> reveals that the probability of developing a commercially successful drug is relatively small, and that many commercial firms will rely on in vitro synthesis rather than bioprospecting. **This means that the overall amount of money available for biodiversity conservation from this source will be relatively limited.**

A good source of information on bioprospecting is the Royal Botanic Gardens, Kew (<http://www.rbgekew.org.uk>).

### **2.5 Accessing global opportunities**

During the last fifteen years or so individual protected areas have been able to break into global opportunities, including international sources of public funds and the global markets. This has partly been facilitated by an increased understanding of priorities for biodiversity conservation and by international environmental legislation formalising the tie between conservation and global markets like the Convention on Biological Diversity (CBD – [www.biodiv.org](http://www.biodiv.org))

#### *Carbon Offsets and joint implementation strategies*

One of the new potential sources of funding for trust funds arises as a result of the Kyoto Protocol (the Climate Change Convention). This treaty mandates governments in the North to reduce carbon emissions over the next 10-15 years. One way this can be done is through the Clean Development Mechanism which enables the concept of carbon trading.

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<sup>2</sup> see, for example, *Nature* 392, 535-540

Carbon producers, like energy companies or vehicle manufacturers, can pay for carbon sequestration projects (basically forests that are 'set-aside') in the developing world. A good example of one of these 'joint implementation' programmes is the Noel Kempf Foundation in Bolivia. This biodiversity conservation trust has brokered a deal with a consortium of private sector energy producers in the US to conserve a large tract of tropical forest. The deal is worth \$10m, paid as an endowment which will assure the sequestration of 15m tonnes of carbon.

It is important to note though that many of the details behind such agreements have yet to be ironed out. You can find further information on carbon offsets through the Intergovernmental Panel on Climate Change (IPCC) at [www.IPCC.ch](http://www.IPCC.ch).

## **2.6 Protected area financing in practice: The prospects for raising private capital**

The above section outlines some of the opportunities that are available to protected area managers. But what of the scope for accessing investment capital from private markets? It is instructive to review this issue from the perspective of the business community.

An good investor understands a basic relationship between risk and reward. In accepting higher risk, an investor implicitly seeks a higher return on investment (or profit). Accordingly, for a private investor based in the UK:

- UK government treasury bonds (no risk) attract 5-6% annual return.
- UK equities (some risk) attract 10-12% annual returns.
- Developing countries (mainly perceived as high risk) are expected to attract much higher returns of generally greater than 25% per annum<sup>3</sup>.

A review of the performance of 32 private reserves in Africa and Latin America<sup>4</sup> illustrates the challenges that protected area managers must face to meet the expectations of market driven investors. The study was based on qualitative and largely subjective responses to questionnaires rather than analysis of audited financial reports. One reason for this is that it is difficult to unearth management data. Most private nature reserves are just that: private. They have no obligations to reveal how they are run and how profitable they are. Preliminary assessment suggest that interpretation of profitability, assets and capital by various reserve managers are far from standard and could be misleading. Nevertheless, and given these provisos, the study came to the following conclusions:

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<sup>3</sup> *Investment Guidelines*, The Commonwealth Development Corporation, 1998

<sup>4</sup> *Economics, objectives and the success of private nature reserves in sub-Saharan Africa and Latin America*. Langholz, J (1996) **Conservation Biology** 10, 1 pp 271-280

- When profits are defined as income exceeding expenditure in the last reporting period, 19 reserves (59%) claimed to be profitable. However, 14 of these reinvested more than 60% their profits back into the business - i.e. only 5 reserves in Latin America and Africa together were in a position to offer the prospect of a reasonable dividend for shareholders.
- When considering sources of income, the reserves taken together received 67% of their income from tourism, but in second place, contributing 13% to overall income, were grants from private sources. Private donations are clearly still very important in subsidising private reserves.

*What can we conclude from these data?*

- Experience so far shows that most reserves fail to return anything like the capital that international private investors have come to accept. They are not currently a rational prospect for commercial investment. Better alternative investment options - in terms of the ratio of risk to reward - are plentiful.
- Primary justifications for private investment are likely to be concessionary (like rich individuals or corporations that simply want to have a wildlife sanctuary for its own sake) or where the costs of capital (the land) has been written off.
- **The low return on investment means that most protected areas will require partnerships between public and private investors in order to remain financially viable.**

In this section we have explored some of the experiences of protected area managers as they have attempted to improve the financial viability of reserves. In the following sections we move on to review some of the more practical tools and methodologies that have been used to help managers to plan and monitor financial transactions.

### 3 Size Up The Problem: What Is The Gap Between Income And Expenditure?

Planning for the future is difficult at the best of times. Increasingly, protected areas are facing funding constraints and uncertainty. Paradoxically, it is at these times that planning becomes more important. The objective of this chapter is to help managers to identify their current situation and identify possible trends in the future so they can set in place a plan to meet the challenges that lie ahead.

**This section deals primarily with the practical issues of managing finances. By working through it, we hope that you will be in a better position to:**

- Understand the financial status of the protected area
- Identify current sources of income and quantify how income will change in the future.
- Assess the real cost of providing protected area services.
- Begin to identify opportunities for increasing revenue and reduce costs.

#### 3.1 Factors that make or break protected areas: some basic background

Financial sustainability is achieved when a protected area is able to secure sufficient resources over the long term to meet its total costs. This means that the protected area's total income must meet or exceed its total expenditure. The **break-even point** is the point at which income exceeds expenditure. It is the protected area manager's responsibility to ensure that the break even point is consistently exceeded.

A first step is to understand the factors that influence the relationship between income and expenditure. A number of variables, represented in the graph below, determine this relationship. The main variables are the fixed and variable costs of the organisation, the number of chargeable units (for example, number of tourists or number of concession operators) and the income per unit.

**Fixed costs** are the shared organisational costs. These include all of those costs that are difficult to allocated to any one activity or service. These might include the protected area managers time and salary and some administrative and operational costs like routine maintenance. They might also include core benefit sharing activities with local communities.

**Variable costs** are the costs that are incurred as a direct result of running a particular activity. For example, a protected areas decision to allow trophy hunting might create two activities - monitoring of animal populations and procedures to certify new hunting concessionaires.

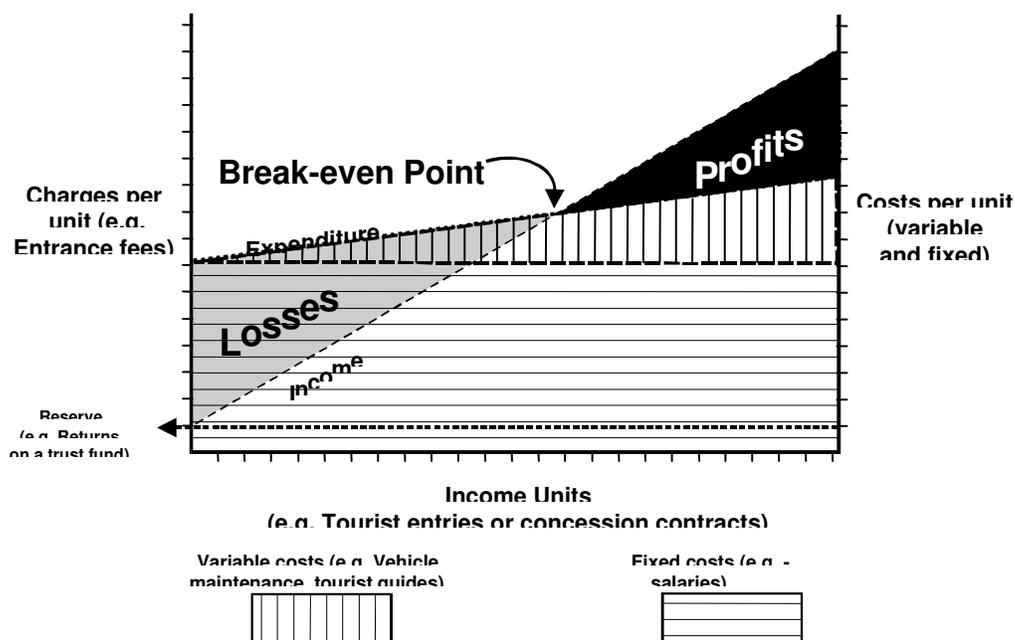
The ratio of fixed to variable costs has important implications for **cash flow** (see Step 4 of this section):

- Organisations with high fixed costs incur the same level of expense regardless of the demand for their services - they therefore need to have a high level of core funding throughout the year;
- Conversely, organisations which contract in support as needed only incur cost as a result of demand by consumers, so income and expense can be more easily managed. The requirement for core funding is reduced.

For many enterprises, and especially in the tourism sector, income varies by season and is strongly influenced by global economic trends. This high variability is often the death knell of enterprises with high fixed costs since they are unable to meet their recurrent expenses over the short term when demand declines. So, in order to achieve financial sustainability two key goals of managers are to:

- Reduce the level of fixed costs as far as possible; and
- Incur costs 'on-demand' by contracting in support only when demand is high.

Clearly, a managers capacity to do this depends political as well as institutional issues. These important considerations must be taken into account when thinking about undertaking reforms.

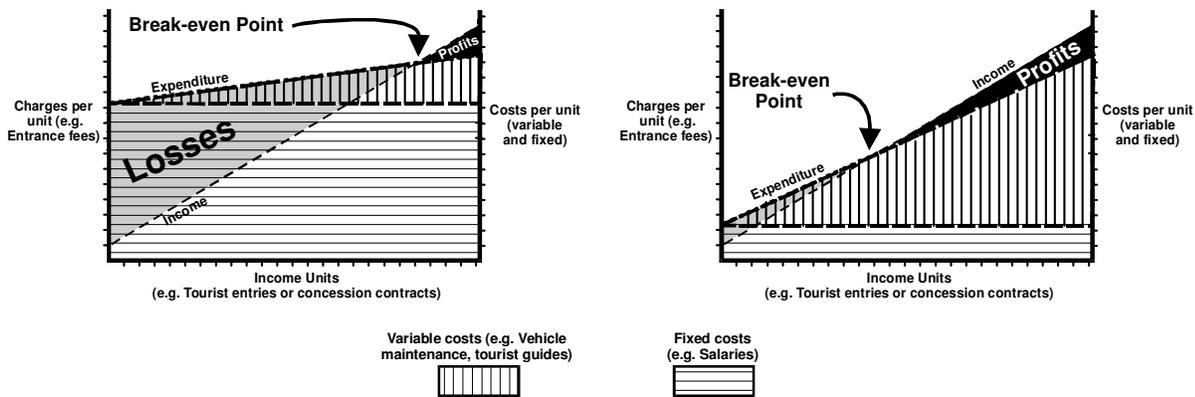


a. **A protected area that invests 'in-house':**

This results in a much higher proportion of *fixed costs*. This means that a high number of unit costs, such as tourist entries, must be guaranteed to absorb the fixed costs. Such a system is likely to lead to potentially disastrous cash flow difficulties, especially in a volatile sector such as the tourism industry

b. **A protected area that contracts out:**

When a protected area contracts out work to outside agencies (NGOs or the private sector), it significantly lowers its fixed costs. This means that it can more easily meet recurrent expenditure despite fluctuations in income.



### 3.2 Strategies for ensuring that the break-even point is regularly exceeded:

A. **Increase the income rate:** the income rate is the relationship between the income units and the charge per unit. For example, for many protected areas, the income rate is determined by the number of visitors and amount that is charged as an entrance fee. Increasing the entrance fees is easily done, but will probably cause a decrease in the number of visitors. Thus, the relationship between the two represents a strategic decision by the protected area managers. Alternatively, a more creative approach is to identify new means of charging for the services that protected areas offer, such as charging for user rights for resource use, or exclusive corporate rights to certain sectors of the protected area.

- **Practical measures:** *Improve visitation levels through promotions with local tour operators/industry*

*Improve current fee collection (Section 4.1)*

*Increase current fees charged (Section 4.2).*

*Diversify the sources of income by introducing new fees linking with the private sector (e.g. hunting concessions) (Section 4.3).*

**B. Reduce the fixed costs:** the fixed costs are those that are incurred through having to maintain the permanent infrastructure and functions of the protected area.

- **Practical measures:** *Prioritise and rationalise activities and encourage staff incentives (Section 5.1)*

*Contract out fixed costs so that expenses are demand driven (Section 5.3)*

*Create partnerships with NGOs, local communities and the private sector (Section 5.4)*

### **3.3 Steps towards a strategy for sustainable finance**

A frequently cited problem with protected area management (and with the public sector in general) is that costs are not accurately monitored. Thus, this section begins with an overview of the standard procedures used to *monitor financial transactions*. Monitoring financial transactions provides a basis for understanding the financial status of a protected area.

However, there are various hidden costs that are not always represented in balance sheets, and therefore the break even point will be spuriously low, giving a false sense of security. This section will outline an *activity cost model* approach that will help to provide an accurate representation of the real costs of protected area management.

#### *Step 1: Monitoring your transactions*

Book-keeping is universally recognised as a somewhat tedious process that wildlife managers are obliged to complete. Nevertheless, accurate book-keeping may be a legal requirement in the country in which you operate, and even if it is not, it must be considered an absolute priority. An effective book-keeping system will help you more than anyone else. The procedures provided in this manual cannot be undertaken successfully without a thorough approach to book-keeping. **Initially, it is wise to get advice from a qualified accountant, as this may reduce your dependence on experts in the long run.**

The financial information that you are likely to have and will need is as follows:

<b>Book-keeping for financial sustainability</b>	
<b>The budget</b>	An estimate of forthcoming income and expenditure, usually for the year.
<b>The receipts and payments account, and the income and expenditure account</b>	Accounts used to give a realistic picture of income and expenditure, monies owed and owing.
<b>The balance sheet</b>	Provides vital information on the current value of the organisation on a particular day (usually the end of the financial year). It is calculated as the difference between liabilities (money owed) and assets (what is owned). It is the acid test of sustainability.
<b>Cash flow forecast</b>	Forecast of when income will be received compared with planned spending.

### ***Book-keeping***

1. **Records:** Accurate book-keeping is primarily about maintaining accurate records. As such, you should maintain files on the following items:

- A file for all invoices, if you have clients such as tour companies, resource users, entry fees etc.
- One for all purchase invoices from your suppliers;
- One to keep track of your petty cash transactions in your day-to-day management of the PA;
- One for all tax payments which are refundable;
- A file for all bank statements

2. **Maintain a Cash Book:** the cash book is the most important item to maintain as it enables you to see how you stand financially at any given time. This is important if you are going to monitor your performance and control your cashflow. The cash book summarises your daily receipts and payments, names the parties involved and details the method by which each transaction was settled. The following structure is useful for a cash book:

a. Receipts

Date	Client	Notes	Bank	Cash	Sales Receipts	Other Receipts

b. Payments

Date	Supplier	Invoice Notes	Cheque No.	Bank	Cash	Item type

*Step 2: Create an income model for the PA*

Why create an income model?

An income model is a useful first step for increasing revenues. The model will help to identify and quantify all of the sources of income for the protected area and the services that protected area management provides to justify that income. An income model should have the following key characteristics:

- A review the current position. How stable has this source of income been in the past?
- A prediction of how each source of income is likely to change in the future. What is likely to happen and what is it dependent on?
- An indication of action needed to achieve our target income. Can we protect or extend it through better marketing or negotiation?

**Example of an income model showing trends in income**

<b>Income</b>	<b>Current position</b>	<b>Prediction of trends</b>	<b>Action needed</b>
Government grant	40% of income annually reviewed	Will decline to 0% within two years	Identify actual loss to core activities. Seek alternative sources of income?
International funding from donor agencies	20% of income from 2 research project 'contracts'.	Unsure. Do they cost more than we think?	Analyse costs and review pricing policy.
User fees - tourism	20% of income	Will probably stay at this level with little effort.	Do we need to explore opportunities to increase fees charged?
User fees - resource contracts with private sector timber concessions.	10% of income	Will remain at this level	Can we increase fees without losing clients?
Public donations	10%	Likely to remain at this level with little effort	Do we need a fund raising strategy?

*Step 3: Build an activity cost model for the PA*

Why build an activity cost model?

Although a prerequisite for donors and institutional reporting, traditional budgets, based on balancing the overall bottom line for an organisation, hide vital information which is useful to a manager. Changes in funding arrangements and increased use of specific projects within organisations has led many agencies to move away from the traditional budget and towards one which more accurately shows the full costs of specific activities and services.

Several factors have contributed to the new approach in financial management: annual budgets are deemed limited because they do not show the costs of all activities. Thus, as funders have wanted to become more project based, there is an increased recognition of the need to understand all project components. Finally, there is an urgent need to properly cost and price contracts and services in order to explore opportunities for increased income from user charges.

Its important to recognise that activity based costing will need to take place *in addition to* budgetary reporting to donors and others. It requires some considerable effort in both time and management resources - so it should only really be embarked upon by PAs with relatively large annual budgets (in excess of \$250,000). Below this level, the pay-off, in terms of improved management information, is unlikely to be worth the additional effort.

The following example shows how a traditional budget often follows a simple format:

Income	Expenditure
Government grant	Salaries
Donations	Administration
Subscriptions & membership	Building costs
Fundraising	Project expenditure
Sales	
TOTAL	TOTAL

The purpose of the activity cost model is to uncover the true costs of the services that the protected area provides to its various constituents. This information has two primary uses:

- To ensure that the real costs of providing various services is better understood. This helps us to allocate resources better in the future.
- To enable comparison of costs and income for each service performed by the PA.

#### *Components of an activity cost budget*

The cost centred budget attempts to allocate as much cost as possible to specific activities performed by the protected area. **Central to creating a cost centred approach is the differentiation between direct and indirect costs.** This is the first step towards identifying the difference between fixed and variable costs that we highlighted as the key issue affecting cash flow and financial viability in Part One of this section.

**An example of an activity based budget**

Cost centre and activities	Direct costs	Indirect costs	Total
Monitoring and enforcement programme <i>Monitoring services</i> <i>Boundary maintenance</i>	Costs of staff salaries, proportion of building and vehicle costs, maintenance, materials use, etc.	40% 20% 30% 10% Costs that cannot be attributed to specific activities and allocated on a proportional basis estimated by senior staff. Examples may include management overhead, financial reporting, etc.	
Sustainable harvesting services <i>Monitoring services</i> <i>Accreditation and regulatory services</i>	Costs of staff salaries, proportion of building and vehicle costs, maintenance, materials use, etc.		
Benefit sharing programme <i>Consultation meetings</i> <i>Auditing and monitoring</i>	Costs of staff salaries, proportion of building and vehicle costs, maintenance, materials use, etc.		
Research Services <i>Project supervision and support services</i> <i>Maintenance of special equipment</i>	Costs of staff salaries, proportion of building and vehicle costs, maintenance, materials use, etc.		

*Guidance notes to creating the activity cost model*

- 1. Identify which cost centres to use:** Cost centres work best when they are based on specific services that the organisation provides to its clients (governments, the public, or international agencies). Examples of services might include research facilities, tourism (roads, security, accommodation), trophy hunting or other resource contracts.
- 2. Allocate costs to distinct activities and services wherever possible:** Be sure to capture all of the costs of individual activities. For example, in order to provide project support to international donors, 'hidden' costs might include costs of food, fuel, vehicle maintenance, and supervision - all of which might not be accounted for.
- 3. Estimate proportional costs:** Where costs of large capital items are shared between activities (like vehicles for example), use an indicator (like the mileage log book) to estimate proportion of time spent on each activity. Large costs like 'insurance' can often be split up and allocated to specific activities (like research equipment, or vehicles).
- 4. Don't split hairs on cost** - concentrate on large items of expenditure, not small ones (as a guide, focus on items that are greater than 5% of the total annual budget in the first cut. You can always refine the model later).
- 5. Be sure to capture all management overheads and indirect costs:** Costs that are often ignored include: start up costs, marketing costs, costs of democracy and governance,

research and development costs, cash flow costs, management and administrative costs, replacement and repair costs, contingency costs, close down costs, opportunity costs of holding capital.

6. **Decide how to treat capital (land, buildings and equipment):** The treatment of land and other infrastructure costs is likely to be highly area-specific. In some cases, these costs may have been written off by government or, more rarely, private investors. In other cases, these costs can have a fundamental impact on the sustainability of the PA - especially if there are alternative local claims on the land (for example, see the MADIKWE example in Section 2.2). Either way, the best course of action is to ensure that all stakeholders are aware of the value of the land and that appropriate measures are taken to ensure that all associated costs are met.

#### *Step 4: Forecast cash flow*

Why build a cash flow model?

Cash flow forecasting is one of the most important tools that a manager can use. It is about ensuring that there will always be sufficient cash in an operating account to meet anticipated expenditure. Unanticipated delays in budgeted income or capital expenditure are one of the primary reasons that lead to project failures. The inability to meet staff wages, due to late payment from a donor, can have devastating consequences on morale.

Although it is extremely difficult to predict accurately exact income and expenditure in the future, the purpose of a cash flow plan is to:

- Demonstrate that the impact of cash flow has been considered.
- Show how cash flow will be managed.
- Ensure that the protected area will have sufficient reserves of working capital to meet its needs.
- Help managers to understand patterns of cash flow including seasonal ups and downs.

There are a number of questions that it is useful to consider when forecasting cash flow:

- Are there likely to be any points when outgoings will exceed income?
- How much working capital is necessary to pay for expansion and development?
- What are the options for quickly increasing cash flow in an emergency?

## An example cash flow projection

Sample cash flow projection for a small protected area (£)													
Opening cash balance		500	20980	16120	17220	10520	5920	2420	20920	20220	13820	15620	12820
INCOME	12 mths	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Government grant	30000	15000						15000					
Local council grant	25000	10000						10000			5000		
Project income	14000			6000					4000			4000	
Gate fees	25700	2000	1700	1500	1500	5000	3000	1000	1000	5000	3000	500	500
Facilities hire	6500	900	700	500	300	100	100	200	1000	1500	1000	100	100
Other contributions	5140	400	340	300	300	1000	600	200	200	1000	600	100	100
<b>Total income</b>	<b>106340</b>												
Monthly income		28300	2740	8300	2100	6100	3700	26400	6200	7500	9600	4700	700
EXPENDITURE													
Salaries	43920	3220	3300	3500	3700	4000	3700	3700	3700	4000	3700	3700	3700
Building costs	14200	1500	1000	1200	1300	1000	1000	2000	1000	1000	1000	1200	1000
Admin	19300	2000	1600	1500	1400	2400	1500	1200	1300	2300	1500	1300	1300
Special events	6000					2000				4000			
Projects	7600	700	1300	500	600	800	300	200	500	700	1000	600	400
Equipment	9200	400	400	500	1800	500	700	800	400	1900	600	700	500
<b>Total expenditure</b>	<b>100220</b>												
Monthly expenditure		7820	7600	7200	8800	10700	7200	7900	6900	13900	7800	7500	6900
<b>Closing cash balance</b>		<b>20980</b>	<b>16120</b>	<b>17220</b>	<b>10520</b>	<b>5920</b>	<b>2420</b>	<b>20920</b>	<b>20220</b>	<b>13820</b>	<b>15620</b>	<b>12820</b>	<b>6620</b>

The closing cash balance is:

The opening balance plus monthly income less monthly expenditure

The opening balance for the next month is:

The closing balance for the previous month

*Step 5: How well are you doing? Benchmarking financial performance*

Once data are in place to describe the status of the organisation, the next step is to understand **financial performance** better. By doing this, managers can compare current performance against performance in the past, and can compare the performance of one protected area against another.

In the business world, a large number of performance ratios are used to analyse and compare operation within and between businesses. Most of these ratios are focused on profit - since creating maximum profits from minimum investment is the primary objective of most businesses. In the public sector, because profit is not the primary motive, other performance measures are more appropriate. One very basic and commonly used measure is the expense ratio - the relationship between operating expenses and income. It is particularly useful for comparing the performance of divisions within a PA, or at a basic level for comparing performance of different PAs:

$$\frac{\text{Operating expenses}}{\text{Income received}}$$

Divisions with greater economic efficiency have higher income and lower operating expenses. The objective of PA managers is to reduce their expense ratios. This creates operating surpluses which can be invested in development or as a buffer to protected against variations in cash flow.

### **3.4 Ten financial questions to consider**

1. Do we have sufficient working capital?
2. Do we know what it costs to operate?
3. How do we price our work?
4. Can we control the patterns of cash flow?
5. How much does it cost to take on donor projects?
6. Is the balance between direct and indirect costs right?
7. Are we managing our income as well as our expenditure?
8. What sort of reserve fund do we need?
9. How will we replace capital items that depreciate over time?
10. Do we have sufficient financial skills?

**The steps taken so far should have enabled you to:**

- To improve the capacity for the protected area to plan for expected changes in income and expenditure.
- To improve the capacity for the protected area to charge its customers more appropriately for its services.
- To identify opportunities for reducing costs effectively and efficiently.

## 4 Increasing Capacity To Recover Costs

There are only a few real sources of potential revenue for protected areas. Primarily, protected areas can earn revenues from:

- Tourism;
- Resource utilisation including bioprospecting;
- Ecological services like carbon sequestration; and
- Existence values - from charging for film and other media rights and from the national and international community.

Protected areas can often recover some of their costs through charges on people that use protected area services - so called 'user pays mechanisms' (see table below). Users might include tourists and commercial resource harvesting companies (like timber companies or fisheries). But they might also include governments, the international conservation community and energy utility companies seeking to offset their carbon emissions. In essence, recovering costs is about *diversifying* the sources of revenues.

### User-pays mechanisms to recover costs of managing PAs

- User charges: Entrance fees, permit fees, and concessions for access and resource usage.
- Taxes: Fees, fines and levies charged on activities that are a potential threat to biodiversity like logging or mining.
- Willingness to pay: through charitable donations, subscriptions, lotteries etc. from local, national and international sources.

Key issues to think about when establishing charges are:

- What flexibility do you have under current legislation to create and improve charges for the PA? Often, the IUCN PA category may determine the sorts of options that will be open to you.
- How can increasing income enable you to lobby for greater budget allocations or negotiate to retain the extra income that you have created?
- Who will you charge, and how will you ensure that social and environmental values of PAs are re-allocated back to local people who might bear the costs of living adjacent to PAs?

In this section we will examine three principal ways for a PA manager to recover costs through user-pays mechanisms. **By working through this section, you should be in a better position to:**

- Become more effective at collecting fees from current users;
- Charge current users more appropriately for activities within the PA; and
- Introduce new charges for PA services and activities.

Probably the most logical course of action is first to make the most of existing fee earning activities (improve fee collection and increase current fees) and next to explore new ways to diversify income.

#### **4.1 Improving fee collection from current users**

At the most basic level, many PA's can have an immediate impact on their cash flow by being more vigilant about how they collect fees from tourists and other users. Simple steps to improve revenue could include:

- Improving visitor monitoring by stationing rangers at all access points.
- Random spot checks to ensure correct compliance of PA users with current fees.
- Increased daily patrols within the PA.
- Provision of information in the form of visitor leaflets to hotels and tour operators on the facilities available and applicable charges.

These basic steps sound straight-forward but, as the example below illustrates, they can deliver remarkable results!

#### **CASE STUDY**

Watamu Marine reserve, Kenya, is a tourist destination on the coast that typically receives 2000-3000 visitors a year. People come to the area for snorkelling, diving, fishing and other water sports.

In January 1999, simple measures were taken to increase vigilance and monitoring of tourist numbers by the PA staff - along the lines outlined above. As a result, in the course of just two months, the PA was able to record a more than **doubling of visitor numbers** and a **52% increase in revenues!**

The initial success of the programme has led to an increase in staff morale, and a justification for further training and investment in the PA. Priorities highlighted for continued improvement were:

- Increased investment in monitoring and patrols;
- Staff development and training - especially in financial management, Human Resources, and motivation;
- Development of marketing and promotional initiatives.

Although this example is simple, it shows what can be achieved, very quickly, through implementing some of the basic procedures described in this manual.

*Source: N. Inamdar, The Watamu Conservation Group, Kenya (1999).*

#### **4.2 Charging current users more appropriately**

Current users of Protected Areas are often extremely diverse and may be willing to pay differing amounts fees for the activities that they do. Instead of charging a single fee on entry to all users, PA managers could introduce the following options:

- Differential charges that take into account willingness to pay. For example, at the most basic level, commercial users and international visitors could be charged at a higher rate than local visitors;
- Charges to regulate demand for PA services. PA's could increase fees during peak periods (during vacations or weekends, for tourists, for example) and lower them at other times. This would have the effect of increasing revenues and regulating user numbers;
- Differential charges linked to promotions through operators, discounts for block bookings and season tickets. All of these mechanisms serve to diversify the income-base and take full advantage of the different types of consumers for PA services.

#### **Case Study: The Charles Darwin Foundation, Galapagos Islands - Capitalising on willingness to pay for conservation**

The Charles Darwin Foundation maintains a small gift shop on the grounds of the Charles Darwin Research Station (CDRS) in the Galapagos Islands. All profits generated by this shop are assigned to conservation and environmental education projects run by the CDRS, mainly to finance under-funded projects and administrative costs not covered by other sources, and scholarships for Galapagos students interested in pursuing biology studies in mainland Ecuadorian universities.

Tourists are encouraged to support conservation in the Galapagos Islands by joining a number of sibling organisations known collectively as Friends of Galapagos (FoGs). Visitors to the Charles Darwin Research Station Visitor Centre receive a small talk which emphasises the research and conservation work that is currently being done, and the need for financial support. They are encouraged to make a small contribution by joining FoGs.

The objective of Friends of Galapagos is to provide funds and other support for the conservation work in Galapagos, managed by the Charles Darwin Foundation, which was set up in 1959 to advise the government of Ecuador on conservation and science in the islands. They also aim to provide support for the Galapagos National Park Service which works closely with the Charles Darwin Research Station carrying out the conservation programmes

With a contribution of \$25 or more, visitors can join Friends of Galapagos and receive the following benefits:

- A one-year subscription to "La Carta", our English-language newsletter;
- Annual subscription to "Noticias de Galapagos", the English-language scientific journal of the Charles Darwin Research Station;
- An annual science review, published by the Charles Darwin Foundation;
- Participation in private lectures and other educational fora of Galapagos conservation.

These FoGs organisations have been established in Europe and the USA and any contribution given to them is exempt from taxes.

*Source: M. Guerra, The Environment and Development Group, Oxford (1999)*

### **4.3 Identifying new opportunities to increase and diversify PA revenues**

People use PAs for a broad variety of reasons and may be willing to pay additional fees on the basis of different activities. For example, visitors to a marine park could be charged on a differential basis for each of the activities that they do, such as diving, snorkelling or yachting, as opposed to a single one-off fee for park entry. New user-pays mechanisms (see table below) can be an important source of revenues for PAs especially if managers can identify a broad spectrum of stakeholders at local, national and international levels.

**Examples of fees and charges to available to recover costs for protected areas from local, national and international users.**

<b>Collection Mechanism</b>	<b>Local</b>	<b>National</b>	<b>International</b>
<b>User fees and royalties</b>	Gate entrance fees	Sustainable timber concessions	Premium entry charges, film location fees.
<b>Taxes and levies</b>	Water charges	Unsustainable & destructive extraction, eg. Mining	Carbon permit sales to energy utility/oil companies.
<b>Willingness to pay</b>	Obtain subscriptions to protected area Club or Association from local, national and international NGOs and large private sector organisations. Foundations at national or international levels		

The following details are modified from and administrative order issued by the government of the Phillipines.<sup>5</sup> They are a good example of some of the mechanisms to diversify and capture revenues for PAs.

**Types of fees:**

1. **Protected Area entrance fee** - fee paid to enter a protected area for recreation and other purposes.
2. **Protected Area User fee** - fee paid for use of man made facilities inside a PA.
3. **Resource User fee** - fee paid for the sustainable commercial use of a specified quantity of resources within a protected area over a specified period of time.
4. **Concession charge** - is paid for the use of land or other resources. Is for a specified period of time and for a specific nature of development.
5. **Development fee** - is for the use of land or other resources for undertaking development for whatever purpose. Paid for a specified period of time and for a specific nature of development.
6. **Royalty** - a fee paid based on the gross output value or gross sales from products out of resources derived from a PA.

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<sup>5</sup> Guidelines and principles in determining fees for access to and sustainable use of resources in protected areas, NIPAP, Manila, 1998

*Bonaire Marine Park - an example of diversifying income through new charges on existing users*

BMP was first established in 1979 with WWF funding, supplemented by both local and Dutch government subsidies. In 1991 the Marine Park was revitalised utilising Dutch Government "MJP" (Meerjarenplan funds). The Dutch Government pledged Naf 224,000.00 per annum for a maximum period of 3 years subject to certain conditions. The Marine Park had to have an acceptable institutional structure and had to become self supporting within the period of the grant funding.

Many different funding options were originally considered including a system of franchises for local dive operations, a general "nature tax" and a system of admission fees for selected users. In January 1992 a diver admission fee was introduced which was set by law at \$10.00 per diver per calendar year. BMP no longer receives any government subsidy.

The diver admission fee has proved a very successful method of generating funding. Tickets and tags are sold to dive operators on a weekly basis - dive operators then sell them on to their clients. The monies therefore come directly to the Marine Park with no delay and administrative charges deducted. What these funds can be used for is laid out in the legislation: they can be used for maintenance, information and education, research and monitoring and law enforcement. Park users therefore have the assurance that the monies they pay in admission fees are used for nature conservation.

In the beginning the dive industry was sceptical about the introduction of admission fees for divers as they felt that divers were being unfairly targeted and that Bonaire as a destination would be less competitive. In fact the \$10.00 fee is now used as a positive marketing tool demonstrating as it does Bonaire's strong commitment to marine environmental protection. Divers have never expressed concern at the \$10.00 fee and in fact, according to a 1991 survey, they would be willing to pay up to \$25.00 per annum in admission fees.

User fees are sufficient to cover salaries and operational expenditure only - all other overheads, particularly special projects (e.g. research projects, yacht mooring programme), have to be financed through grant funding or donations. Therefore in the medium term BMP will have to either find another source of funding (e.g. by charging other user groups such as snorkelers, windsurfers and yachtsmen) or increase the diver admission. On the island the first solution is by far the most acceptable.

Grants and donations are also a good source of income for the Park. These amounted to \$10,000.00 in 1994 from AKZO for the public yacht mooring programme. WWF Holland has also funded 5 projects to date. BMP has traditionally requested funding for research projects from WWF. Souvenir sales proved disastrous in 1993/4 with the BMP barely breaking even due to stock being taken on consignment and not being paid for.

*Source: Bonaire Marine Park*

#### 4.4 Key Considerations for diversifying income

When considering how best to diversify income and increase revenues perhaps the most important thing to think about is the economic efficiency of any new operation. Will the financial income from any new activity exceed the costs associated with developing and collecting the fees? Start-up costs of any new operation are always difficult to estimate - but this is what a good PA manager will try to do in order to be sure that all of that extra effort will bring real financial results. There are two important consideration:

- **Market research to discover the potential for capturing new revenues; and**
- **Transaction costs to understand the effort you will have to invest in developing any new charging mechanism.**

##### *Step 1a Market Research*

Market research will help you to understand who the main users of the protected area are and how much potential there is for the protected area to earn revenues from each user group. A thorough market analysis should also help to uncover new opportunities for creating revenue and focusing management attention on those activities that are likely to provide the highest returns on investment. The basic pieces of information needed are:

- Who currently uses the PA - is there a broad range of visitors or only one predominant type of user?
- What do people currently pay to reach and access the PA? Costs of travel, special equipment (camera's etc) are good indicators of expenditure. How do costs change during the year?
- What would people be prepared to pay for access to PA resources? This can be quite difficult to discover but undertaking a contingent valuation study may help.

A useful framework for understanding the market for PA services might be to look at local, national and international user-groups (as illustrated in the table below). This type of stakeholder analysis can greatly clarify decision-making and priority-setting.

**Market research: an example from a marine protected area**

<b>Market</b>	<b>Local</b>	<b>National</b>	<b>International</b>
<b>User groups</b>	Subsistence fisher folk	Commercial fisheries	Tourists
<b>Total number of users</b>	<100 groups	<20 large vessels	>200 divers per year
<b>Financial turnover</b>	Low	High	High
<b>Capacity to generate revenues</b>	Low – this group should in fact be compensated for lost opportunities	High	High
<b>Revenue generating mechanism</b>	None – enter into resource management contracts	Entry charges, taxes on unsustainable resource use, royalty charge on sustainable resource use.	Entry charges
<b>Key considerations</b>	Transaction costs of collecting revenues, and managing relationships. Ensuring that revenues are re-invested to the benefit of user groups.		

*Step 1b. Market testing*

Market testing is good practice that enables you to establish whether or not a service will actually work through a controlled and small-scale experiment before launching a fully developed initiative. It simply involves working with a prototype service over a short period of time to see how the public will react. For example, at Bonaire Marine Park, a new user charge for divers could be tested at a high price for only a sub-set of tourists during the course of one or two months. The results of the test will inform you whether or not divers would be tolerant of higher charges and whether they accept the charging mechanism that has been developed. As the manager, you could then take a better informed decision over whether and how to roll out new charges in the forthcoming season. Market testing enables you to refine and improve the product or service and ensure that it will be viable.

*Step 2: Understand Transaction costs*

Transaction costs are the management costs associated with performing an activity - like collecting fees. They are often ignored but critical to success. The transaction costs associated with improving current activities (like monitoring tourist numbers) are often much lower than those associated with developing a new charging system. This is because, as we have seen above, developing a new mechanism requires a good understanding of the market (so you have to invest in market research) and often involves the creation of new charging mechanisms.

Choosing the most cost-effective mechanism requires judgement based on likely revenue earned, political acceptability of the type of fee and costs of collection the charges. A good example is the transaction costs associated with collecting revenue from individual users of a water supply through metered charging as opposed to a less accurate, but less costly, levy on suppliers. In this case, the transaction costs for collecting the user fee directly from individuals would be the expense of installing meters, hiring and training staff to read the meters and collect the fees, and finally the cost of processing and auditing the revenues earned. A levy on suppliers might only involve agreeing a charge with utility suppliers, establishing a standard

payment schedule, and auditing the revenue. So, in this case, the transaction costs for the levy on suppliers is much lower than the direct user charge.

**The steps taken so far should have enabled you to:**

- Optimise current resources and improve revenue collection;
- Enhance income and control demand for PA services by capitalising on the variety of users;  
and
- Understand that any opportunity has a transaction cost associated with its development so its important to work out what activities are likely to give the highest return on your investment.

## 5 Identifying Opportunities To Reduce Costs

Managers of PAs will be aware of a number of options that exist to reduce their costs. Many of the opportunities for doing so should have already been identified and clearly quantified in the activity cost model described in Section 3.3.

Reducing costs is about prioritising management activities and aligning them tightly to the protected area's strategy and goals.

Starting with the big costs that we identified in our activity cost model (Section 3.3), in this section we work through four processes that have been used to reduce the costs of protected area management:

- Prioritise and focus activities;
- Motivate and encourage staff development;
- Try to find ways of carrying out necessary activities but reduce fixed costs: contract-out services if appropriate;
- Share costs and benefits of PAs through alliances and partnerships with NGO, private sector and local community organisations.

### 5.1 Prioritise activities by developing a strategic approach to costing services

A strategy is about defining the goals, objectives and activities of an organisation. This is especially important if you cannot currently balance the books. Clear strategic intent gives a group of people a sense of direction and helps to focus effort towards achieving an objective. A good strategy helps managers to decide what to do, but equally importantly, it helps them to decide what not to do. The best strategies help people prioritise activities so that they do not waste time and resources on things that are not a priority.

The first thing to recognise in developing a strategy is that you cannot do everything! This is an obvious point, but it is often overlooked in the rush to increase income for a PA. Activities like eco-holidays and trophy hunting are often mutually exclusive because, for example, few bird watchers wish to be associated with gun-totting hunters. Whilst some PAs will be suitable for sustainable harvesting of resources, others will not.

The emphasis in this process is to start thinking of a protected area as a bundle of services for which different stakeholders, or customers, are prepared to pay.

A strategy for costing protected area services ensures that the resources will be available to undertake those functions that cannot create revenue (like benefit sharing schemes with local

communities). In order to do this, it is helpful to think through three kinds of services that a PA performs:

<b>Three different approaches can be taken to costing services that protected areas deliver to the public</b>	
Cost- plus	Charges set so that income exceeds expenditure creating a cash surplus to enable growth or cross-subsidy to loss leaders. Examples might be gate charges to international tourists.
Cost recovery	Charges set so that income matches direct and indirect expenditure. Examples might be fees to scientific or NGO research staff wishing to work in the PA.
Loss leader	Charges set deliberately low (or no charges whatsoever) in order to deliver services to people that cannot afford it, or to enter a new market. An example might be a PA benefit sharing scheme or services to local rural communities.

## **5.2 Motivate and encourage staff development**

The lack of financial resources available does not always mean that protected areas are understaffed. Indeed, it can be the case that protected areas are over-staffed, leading to low and irregular payment of wages, followed by the inevitable collapse of staff morale and low or even counter-productive performance. Personnel management is intricately linked to financial sustainability because of the significant labour input that is required for protected area management. There are a number of symptoms of poor staff morale that will have a catastrophic effect on effective management, and which a protected area manager must look out for:

- Low productivity
- Absenteeism
- Poor time-keeping
- High staff turn-over
- Poor quality work
- Complaints by visitors
- Inflexible attitudes to change
- Inter-personal conflicts within the team and bad relationships with other agencies (often dismissed as 'conservation politics', to the detriment of the higher objectives of managing the protected area)

All of these factors can, and must, be addressed, or they can cause the financial collapse of the protected area. The manager can take a number of measures:

#### *Effective delegation*

It is the protected area manager's responsibility to ensure that the right staff member is allocated the right work. Managers who are unable to delegate sufficiently will be losing money if the work that they are doing could have been done by someone else on a lower salary. On the other hand, imposing excessive responsibility on unqualified staff will destroy their confidence and is likely to lead to ineffective work.

#### *Rewarding good performance*

To improve the motivation of individuals in your team, you need to develop a clear idea of what they expect from their work. Increasing wages will usually improve morale and performance but this is not often an option for protected area managers. It is increasingly recognised that pay alone will not necessarily improve staff morale. Often there are non-financial advantages that can have an important impact on morale and performance. This plays into the hands of a good protected area manager with a limited budget. Find out what motivates your team. *Ask them.*

- good wages?
- the prospect of promotion?
- fringe benefits (perks)?
- unofficial fringe benefits (security for themselves and their families)?
- satisfaction of doing work that is considered of local, national or international importance?
- the prospect of developing new expertise?
- gaining personal status?
- good working conditions?
- social relationships developed through work?

The answers to these questions are critical to how you allocate scarce financial resources to your staff.

### **5.3 Reducing fixed costs through contracting-out services, where appropriate**

As we have highlighted in previous sections, contracting out services is one way that an organisation can reduce its fixed costs and increase its financial viability.

There are not many well known examples of contracting-out agreements between governments and the private or NGO sectors in the developing world. This is still a relatively untested area with few case studies in which experiences have been shared, but this is now changing. At the moment, The Nature Conservancy in Indonesia is assisting the government to develop contracted-out procedures with the private sector, and in the Seychelles Cousin Island is managed by Birdlife Seychelles through a form of contracting out agreement.

Many Conservation Trust Funds are also effectively contracted-out agreements because they are managed by autonomous Boards comprising different sectors of society. One way or another, contracting out is set to become an extremely important force in nature conservation during the next decade.

**There are a small number of key considerations related to contracting out:**

- Will the State pay an external contractor to deliver a service?

*Contracting out is common in some countries but contrary to the culture of many others.*

- Are there contractors in the NGO or private sector who would be interested and capable of running protected area services?
- What laws or regulations need to be changed in order to increase private sector involvement?
- What rights and legal power do contracted operators have to enforce restrictions and rules?

*This is often the primary concern of external contractors: a common threat to protected areas is excision or illegal harvesting, sometimes sponsored by powerful national figures. Contracted protected area management need to have the authority to challenge infringements, even at the highest levels of government. Is this realistic under your circumstances?*

- Can regulations be established that ensure that the private sector meets its obligations to the protected area whilst at the same time retaining the capacity to enhance their profits?

It should be noted that the quality of PA management could be compromised through poorly designed contracting-out agreements. It is important to ensure that all parties are clear about their obligation and responsibilities and that contracting-out is developed as a **partnership** between contractor and contractee, rather than as an adversarial relationship. This requires effective and well structured negotiation.

## *Procurements*

Contracting-out will mean that PA managers have to manage procurements and purchasing more actively. As with other management functions, there must be a clear policy laid down. Entering into any contractual relationship is complex, and should be done only in consultation with appropriate legal and operational authorities. However, at one level, contracting-out for PA services is little different from managing any other type of supplier.

Following open, transparent and competitive procurement procedures will help managers to ensure that they are achieving the best value for money. Procurement procedures are well established by many large international and bilateral agencies. The following is a useful guide for agencies thinking about how to establish contracted-out agreements with third party service providers:

- Selection should be based on competition among pre-qualified providers;
- The competing agencies should be provided with the same information about the services and deliverables required as well as criteria used for selection and asked to submit written proposals; and
- Criteria for selection should include both technical characteristics (competence, history, staff, capabilities) as well as price.

### **5.4 Building effective alliances and partnerships**

Effective partnerships - where mutual benefits can be achieved by all stakeholders - are an essential and important component of financial sustainability. Partnerships rely on reciprocal relationships which can often evolve into robust and extremely cost-effective management agreements. Partnerships and co-management agreements have become much more common institutional arrangements to manage protected areas.

Partnerships can take many forms but their advantage is that they create **platforms of negotiation (see Box)** to bring together *different* groups that are interested in achieving *similar* goals. In creating a partnership, a PA manager is able to leverage the strengths of individual parties to achieve commonly held goals rather than entering into an adversarial relationship. Key characteristics of good

#### **Platforms for negotiation**

In Brazil, much of the country's biodiversity is owned and managed by private and non-governmental agencies. These agencies, in conjunction with the government, established FUNBIO - an independent environmental foundation that encourages participation between NGOs, the private sector and academic institutions. FUNBIO is instrumental in establishing regional conservation priorities and funding for biodiversity projects proposed by all sectors of society.

partnerships are highlighted in a recent DFID publication<sup>6</sup>. In summary, we can list the following as important pre-requisites:

- **Having a shared goal** - and being honest about what your personal objectives towards that goal are.
- **Entering into negotiation and being prepared to compromise** - and being clear about what you are not prepared to compromise over. Its important to set out expectations early so that all participants are sure that they want to be involved in the partnership.
- **Empowering participants** - to be able to benefit from and contribute to the partnership in an equitable way.
- **Understanding the costs and benefits of participation in the partnership** - and accepting that different stakeholders may measure benefits in many different ways, not just in terms of finances.

Reducing the costs of partnership arrangements like benefit-sharing schemes is a high priority for many PA managers. One approach that is increasingly gaining support is the microfinance model. We explore this, and some other partnership approaches, below.

#### *Partnership mechanisms - microfinance as an example*

Microfinance can be a cost effective service delivery mechanism for benefit-sharing schemes because of the fact that it is designed to recover many of the costs associated with managing it. If you are interested in developing the ideas presented here, be sure to follow up the contacts at the end of this section and thoroughly research the abundant literature on this important topic.

- Micro-enterprise schemes are small-scale credit agencies, normally offering local businesses loans of, say, less than \$500. The potential for these schemes to generate substantial incomes for the poor has been demonstrated in a number of countries, not least Bangladesh, where the Grameen Bank grew to serve hundreds of thousands of people.
- The potential of micro-enterprise and other co-operative credit schemes has yet to be extensively tested in the biodiversity sector. But there are no reasons why they might not be as successful for enterprise-based approaches such as CAMPFIRE in Zimbabwe or butterfly farms in the Philippines.

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<sup>6</sup> *Shaping Forest Management*, DFID, 1999

### **Micro-enterprise - How to do it**

- A commonly used model is the *solidarity group model*, in which five to fifteen individuals pursue their own enterprise activities and provide joint guarantees for each person's loan. The groups must be self-selecting.
- Access to credit relies on the collective responsibility of all those in the group. No member may receive additional loans until the group resolves payment problems. The responsibility for management of loans is placed primarily on the group members: this tends to build ownership and success of the programme, whilst reducing the administration cost.

Many extensive guides and courses exist on microfinance. This is a short overview of some of the first steps that are important when thinking about establishing a micro-enterprise scheme.

Note that micro-enterprise schemes do not have in-built environmental restraints. However, through establishing some agreed criteria with local users, it should be possible to encourage businesses that use biodiversity sustainably.

- For further information contact UNDP Private Sector Development Programme, One United Nations Plaza, New York, NY 10017, USA. If you have access to the internet, visit the Virtual Library on Microcredit ([www.soc.titech.ac.jp/icm](http://www.soc.titech.ac.jp/icm)).

### *Partnerships with the Private Sector*

Considerable work is currently underway to review how best to improve partnership arrangements with the private sector. Business Partners for Development is a World Bank initiative<sup>7</sup> that is working with NGOs, the private sector and governments to improve the development impact of industries based on natural resources - like oil, gas and coal.

In drawing on the resources of the private sector, it is important to recognise the incentives for private companies to invest in protected area administrations. There are generally three reasons why the private sector organisations might be interested in collaborating with protected area managers:

- **Legislative compliance:** Environmental impact assessments and other regulatory requirements are often the impetus for private sector companies to invest in the environment. Oil and mining companies may be obliged to create or fund protected areas to mitigate against environmental damage. For example, Exxon, a global oil company is currently investing in a social and environmental Foundation in Cameroon to offset the environmental impacts of its development project.

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<sup>7</sup> email BPD@uk.care.org

- **Cost savings:** protected areas often have access to a number of resources that may be of interest to potential private sector investors. These include local networks, road building, maintenance and security services.
- **Reputation enhancement:** various benefits can accrue from association with biodiversity conservation including differentiation in the market place (competitive benefits) and improved staff morale.
- **Direct vested interests:** Offered the right incentives, forestry, tourism and other natural resource industries have a powerful vested interest in sustainably harvesting or utilising resources.

The key issue with private sector partnerships, as with all partnerships, is to look beyond the stated *positions* of the parties and resolve to their core *interests*. Structured, honest and effective negotiation can open considerable opportunities for increased resources or substantial cost-savings through partnership agreements.

Ultimately, partnerships with NGO's, the private sector or local communities can be an extremely effective way of achieving cost-effective conservation. However, partnerships are ultimately about compromise. It is important to be clear about the goals of the partnership and to be honest about what aspects of control you will be prepared to compromise to achieve a sustainable relationship.

**The steps taken so far should have enabled you to:**

- Prioritise PA activities and reduce wasted manpower;
- Understand some of the issues related to contracting-out; and
- Review some of the advantages of building partnerships with NGOs, local communities and the private sector.

## 6 Environmental Trust Funds as One Mechanism to Deliver Financial Sustainability

No document on financial sustainability for Protected Areas would be complete without formal consideration of Environmental Foundations or Trust Funds. In this section we review some of the latest developments in this field and evaluate some of the benefits and concerns of how Funds have performed.

During the 1990s, environmental trust funds have emerged as a promising vehicle to ensure the sustainable financial management of biodiversity conservation. About \$500m is invested in more than 40 environmental funds globally, most of which are endowments. Trust Funds have a number of strengths that make them particularly attractive, but it is important to recognise that they are not a panacea. They have associated establishment costs that make them inappropriate under many circumstances, especially if alternative existing institutional mechanisms are available.

In essence, a trust fund is an institutional mechanism that tries to encapsulate many of the principles and practices of financial management set out in the previous sections of this manual. Trust funds can be tailored to meet the specific needs of donors and beneficiaries. The appropriate structure will be different in each case, depending on the social and political situation of the country or region and the role and powers of existing agencies.

Some benefits of trust funds are that they:

- Leverage other funds by providing a relatively secure institutional structure for investment.
- Enable resources to be captured and targetted at specific biodiversity objectives.
- Provide a platform for negotiation between different stakeholders
- Bring funding solutions to a local level.

### 6.1 What is a Trust Fund?

Trust funds are essentially a financial mechanism with three basic components:

1. A set of assets, or money that is invested to produce an income.
2. A set of laws that limit and define how the money in the trust will be spent and on what.
3. A board of trustees that allocate expenditure. The trustees may be drawn from a variety of stakeholders including local communities, funding agencies and government.

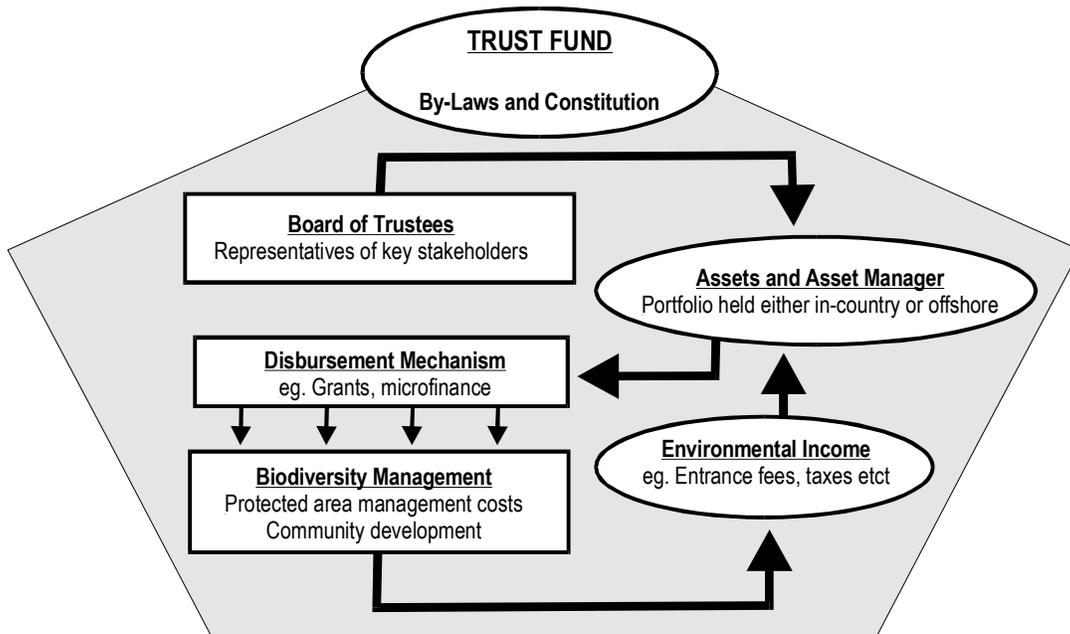
Four basic forms of trusts can be distinguished: endowment funds, sinking funds, revolving funds and umbrella funds.

**Funds may take a variety of different structures**

- **Endowment funds** - capital is invested in perpetuity and only the accumulated interest is spent each year.
- **Sinking funds** - the interest and a portion of the capital is spent each year until the fund is exhausted over a period of 15-20 years.
- **Revolving funds** -the trust acts as a vehicle to retain income from user fees and taxes. Some portion of this income may be invested into an endowment.
- **Umbrella funds** - the trust acts as an umbrella organisation for a series of sub-accounts, each with its own governance structure.

*What does a Trust Fund look like?*

The example in the diagram below illustrates a *revolving fund* where the income from biodiversity conservation services is re-invested into the fund.



- The decision about which structure to adopt depends on how much money there is to invest, and how high expenditure from the trust is expected to be. Endowment funds tend to have high capital and relatively low outgoings.
- A revolving fund may be more appropriate for capturing and retaining annual income.
- In addition to the management structure, trusts can also disburse their funds through any of a diversity of mechanisms. They can give grants directly to NGOs or individuals, operate as a bank and lend money, or buy equity in small or medium sized businesses.
- Funds can be local, national or regional and their scope can be broad or narrow. The TFs in Bwindi and CAR are focused on single protected areas. But in Belize the whole protected area system is supported by a revolving TF which accrues income from a \$3.75 tax on foreign visitors into the country. In the Philippines a national TF disburses its funds through local NGOs and to local communities.
- In general, though, experience over the last few years tends to suggest that small, focused funds will be more successful.
- As with any new institution, the credibility of the fund is of key importance. Funds tend to be most successful if they are seen to represent the local conservation interest, rather than any single NGO or government agency. The effectiveness of the fund relies on it operating as an accountable, honest and unbiased institution.
- Some funds have been expensive to establish and administer. Trust funds often need considerable donor support in their preliminary stages due to the expense of public consultation to assess demand and appropriateness of the mechanism. In addition, the process of attracting sufficient investment for the fund can be costly in itself.
- The return of investment after expenses is often pitifully low. For example, in its early years, the Bwindi Trust Fund consumed 74% of its annual income on administration, leaving only 26% to be allocated as grants. Cost-effectiveness is clearly a important concern for trust funds - a point highlighted in the recent GEF review of environmental funds. This review concluded that 'best-practice' environmental funds should aspire for a target expense ratio of less than 25% of the total annual income from the endowment<sup>8</sup>.

*Funds can operate in different ways*

- Grant giving organisations that disburse income or capital to meet conservation objectives.
- Banks or micro-credit facilities that make small loans to enterprises that meet environmental criteria.

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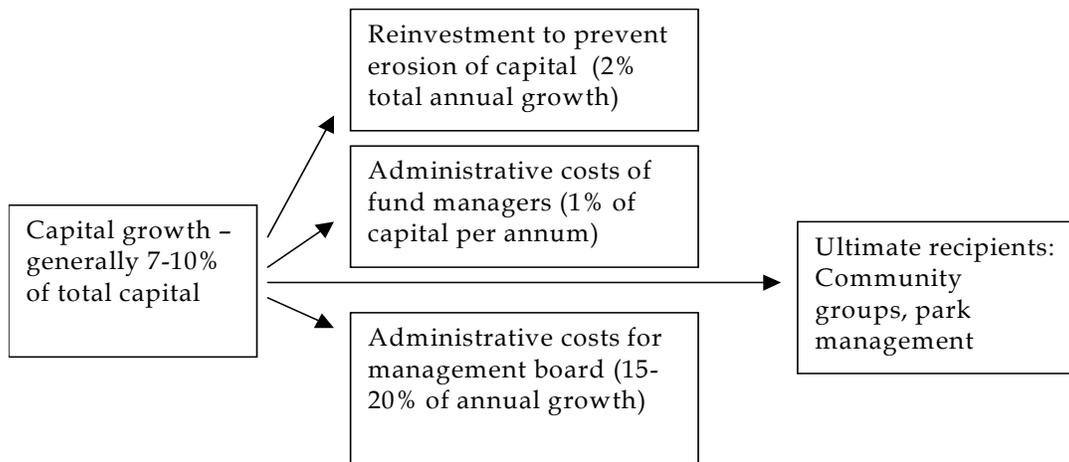
<sup>8</sup> Evaluation of experience with conservation trust funds. GEF Secretariat, Nov. 1998

- Venture capital firms that invest in businesses that are environmentally sustainable.

It is important to realise that Trust Funds are not a panacea. They are expensive to establish because they require legal as well as institutional and financial management expertise. Trust funds are expensive because they involve asset managers, lawyers and boards. It is important to be clear that these costs are justified before embarking on such a project.

Equally, as the figure below shows, the income available for disbursement from a trust fund tends to be relatively low, after costs of reinvestment and administration are taken into account.

**Example of how expenses and re-investment affect the amount available for disbursement from an environmental Fund.**



**6.2 Characteristics of Trust Funds/Foundations**

*Assets*

Where does the money come from?

- Sources of income for trust funds include debt-renegotiation, donor funding (for example, from the GEF), and taxation. User charges, such as income from national parks, could also be invested as is the case in Belize.

Who should manage it?

- The assets held in trust need to be professionally managed so that they create the maximum return without compromising risk. A number of avenues exist to do this, but selecting an international asset manager through a competitive process is likely to produce the best results.

- A good financial manager will help to predict how much money will be made available for disbursement under different management regimes and for different asset values. Some typical rates of return are between 7-18% per annum. However, it is prudent to use a relatively low rate of return (5-9%) when developing budgets for expenditure, as it is difficult to predict stock market growth in the future.

Where should the money be invested?

Assets for trust funds can be held either within the country of operation or on any of a number of international exchanges. The decision on where to invest will depend on the laws of each individual country. The type of asset holding will also depend on whether the fund is established as a revolving or endowment fund. Offshore holdings may offer a greater level of security, enabling the fund to attract additional investors.

#### *Articles of Association and By-Laws*

What do the Articles of Association and By-Laws do?

- The trusts articles and by-laws determine the structure of the fund and the rules over how the money will be spent and on what. They are legally binding to ensure that money is directed towards specific objectives.

How should the by-laws be established?

- Establishing the by-laws depends on two things
  1. Consultation with local lawyers to determine how the trust can be established, and the rules that govern trusts (they are different for different countries).
  2. Consultation with all relevant stakeholders to establish criteria that will be used to determine how the money is spent.
- Trusts can be formed in the law of another country (such as Switzerland). This may be more costly, and may or may not be necessary depending on the efficacy of the legal framework and possibility that the Fund will be appropriated by a national government.
- Other things to consider with lawyers are how to ensure that the criteria are flexible enough to meet changing priorities without compromising environmental objectives.

#### *Board of Trustees*

What do the trustees do?

- The trustees use criteria written into the Articles to determine how to allocate income from the fund.

- In trust fund at Bwindi in Uganda (MBIFCT), for example, the trustees review applications for grants and make payments according to the criteria.
- This procedure is, however, expensive. An alternative may be to allocate income to be disbursed through a microfinance scheme which uses the same criteria but undertakes to cover its administrative costs. It is important to be sure that this type of mechanism will be appropriate to the circumstances. (see Part 4.2).

Who should be a trustee?

- The make-up of the board of trustees should enable all relevant stakeholders to be represented without bias. A mix of representatives from local communities, government and the donor community generally ensures that conflicting interests are balanced and must be negotiated. The number of trustees should be kept as small as possible, but the capacity to replace members at intervals could be retained.

How should trustees take decisions?

The voting arrangements for the trustees are an important consideration. It is necessary to ensure that clear and accountable methods are set in place to ensure that differences of opinion can be resolved. It is common for Boards to be made up of odd numbers of people (5,7,9) to minimise the opportunity for voting dead-locks.

### **6.3 Lessons learned about the design and management of Trust Funds**

- *Strategic focus:* Clear definition and alignment on a small set of clearly defined objectives is central. Sufficient investment is necessary to clarify ownership, partnership and priorities of the fund before it is established. Small, locally based Funds have generally been most successful in achieving their objectives.
- *Stakeholder engagement:* Substantial consultation is essential to ensure that funds meet local demand. Representation of trustees on the board and clear criteria on how to resolve decisions and conflicts of interest is critical.
- *Strong financial management:* Some funds have under-performed the market due to poor financial management. This has led to low yields and/or erosion of capital. Important considerations are residence (local/international), tax status and risk (financial and political).
- *Monitoring social and environmental returns on investment:* This is often overlooked, but is essential. It is important to monitor the administrative costs associated with managing the fund and ensure that it does not exceed established targets. The GEF recommends that, in the case of Funds with more than \$5m, administrative costs should be maintained at less than 25% of annual income from the Fund. In addition, clear targets and indicators for the social and environmental objectives of the fund must be established and monitored.

#### **6.4 Further sources of information**

The Inter-agency planning group for Environmental Funds, UNDP, New York

*Experience with Conservation Trust Funds*, Evaluation, UNDP, 1998. The Global Environment Facility, [www.undp.org/gef](http://www.undp.org/gef)

IUCN's website <http://www.nciucn.nl/trp/proje0998.html>

Financing biodiversity conservation: The Potential of Environmental Funds, 1998, IUCN-US (mimeo report)

## 7 Conclusions

The tools, experiences and examples illustrated in this guide show how, in recent years, managers responsible for ICDPs and Protected Areas have begun to move towards financial sustainability. What they demonstrate is that, despite considerable obstacles, there are a growing number of successes. Individuals and institutions are taking on challenging circumstances to develop new and imaginative solutions for financing their activities.

Ultimately, improving financial sustainability depends on a different way of thinking about priorities and problems. Innovation, negotiation, compromise and flexibility are the key sets of skills that make the best managers. Together, they make it possible for people to respond, quickly and appropriately, to the unique challenges that they face.

But having these characteristics is not enough. True sustainability of solutions comes when managers are consistently provided with incentives that reward them for following innovative ideas, and the resources to achieve their ideals. This institutional support still has a long way to go in many countries, but it is becoming increasingly common. We hope that the material presented in this guide is one small step towards helping this transition to happen.

## 8 Acknowledgements

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As always, the opinions expressed and any errors remaining in this guide are ours alone.

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## 9 Further Reading

### **General**

NGO Funding Strategies - an introduction for Southern and Eastern NGOs, Bennet & Gibbs, ICVA INTRAC, 1996.

Striking a Balance, Alan Fowler, Earthscan, 1997.

Towards Greater Financial Autonomy, Vincent & Campbell, IRED, 1989.

The Complete Guide to Business and Strategic Planning for Voluntary Organisations, Alan Lawrie, Directory of Social Change, 1994.

### **Protected Areas**

The Values of Protected Areas, IUCN, 1998

Financial Self-Sufficiency for Protected Areas, IUCN, 1998

Mobilizing broader support for Asia's biodiversity, IUCN 1999.

### **Other**

MicroStart - A guide for planning, starting and managing a micro-finance programme. UNDP, 1997.