



Pay per nature view

Understanding tourism revenues for effective management plans



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WWF

WWF has a long history in working with tourism issues in its field projects. It is often a threat but there is increasing evidence that it offers opportunities for nature conservation as well. Various protected areas have experienced that tourism can be instrumental to build up political support and support from local people. It can provide an additional source of income that can help to cover the costs of protected area management. WWF Netherlands is particularly interested in the latter aspect because it can open new ways to build partnerships with an important user of protected areas, the tourism sector. For the continuity of its business operations in natural areas, effective management of these areas should be a major concern for the tourism sector.

WWF Netherlands new tourism strategy focuses on the development of mechanisms that makes it possible for tourism sector to engage with the long term conservation of their green destination and build new partnerships with local businesses, NGOs and governments. As a first step WWF Netherlands has commissioned Leeds Tourism Group of Leeds Metropolitan University to make a global inventory of tourism fundraising mechanisms already in place and provide guidance for the development of the Netherlands contribution to WWF's tourism strategy. We will present the findings of the report at various occasions where tourism issues will be discussed and invite all readers to give their feedback and share their experiences with us.

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Leeds Tourism Group

Leeds Tourism Group is a small consultancy dedicated to promoting the principles of sustainability throughout the tourism sector. LTG's consultants have extensive experience in supporting tourism businesses and destinations to apply practical tools to improve their sustainability and performance; and in working with governments and international organisations to develop policies and standards for sustainable tourism.

Based at Leeds Metropolitan University in one of Europe's largest tourism departments with 1,300 students and 75 staff, LTG offers tourism consultancy and research services in tourism certification and standards; supply chain management; marketing and design of sustainable tourism products; tourism in protected areas and heritage sites; and establishment of destination management partnerships.

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Summary

Protected areas are increasingly attractive to tourists, and some protected areas raise significant funds through tourism. Tourism is growing rapidly, and the regions that are seeing the greatest growth are in developing countries with high levels of biodiversity. This report asks two main questions:

- ***what mechanisms can protected areas use to raise funds from tourism?***
- ***to what extent should protected areas raise funds from tourism?***

The report describes the six survival essentials for protected areas, and uses these as a context for analysis of the role and potential of tourism in protected areas.

The opportunities for generating revenues directly or indirectly from tourism are primarily via allocation of government revenues (from general taxation or from tourism-related taxes); fee charging to businesses based outside of protected areas for their use of protected areas (via entrance fees, user fees, and permits); and allowing businesses to purchase concessions or leases to operate inside protected areas.

The main market segments that offer potential for protected areas to raise revenue from tourism are mass tourism, adventure tourism and eco-tourism/nature-based tourism. However, without market demand, tourism has little to offer a protected area. Successful tourism in protected areas requires the ability to develop and market tourism products based on protected areas, and the ability to maintain the quality of these areas for the future.

While protected areas provide opportunities for tourism, it is the commercial tourism sector that provides the opportunities and services – through accommodation, catering and transport, as well as marketing – for tourists to visit protected areas. It is therefore vital to bring together the entrepreneurial skills and links to tourism markets that tourism businesses possess, with the conservation skills of protected area managers, in order to provide a better experience for tourists, and to gain a better contribution from tourism for protected area conservation.

Development of tourism as a source of funding for protected areas is consistent with both the Convention on Biological Diversity's Programme of Work for Protected Areas and its Guidelines on Biological Diversity and Tourism. To be successful at managing tourism and raising revenues from this, protected areas must develop and implement effective tourism management plans that integrate tourism alongside conservation management priorities and establish limits on the scale and types of tourism permitted - for example, drawing on the framework set out in the CBD's Guidelines on Biological Diversity and Tourism.

Protected areas also need to gain skills to build links and partnerships with the commercial tourism sector, to help manage and raise revenues from tourism, consistent with site conservation priorities. To do this they need to understand the economics of tourism, and the report presents a simple model to assist with this.

However, many protected areas lack the funds, staff resources and skills needed to invest in effective management of tourism, and to be able to raise significant funds from tourism. The potential benefits of tourism to any protected area have therefore to be set against the costs of providing facilities and staff to manage tourism, and any adverse impacts of tourism on site conservation goals.

Tourism will not be appropriate at all sites, both for conservation reasons and for reasons associated with the operation of the commercial tourism sector and market demand. Further work is needed to understand better at which sites tourism is most suitable for revenue raising, and to be able to differentiate the role of tourism at different sites, including matching appropriate types of tourism to particular sites, taking into account conservation goals and tourism markets.

Sites with high levels of/potential for tourism need support to build capacity for development of tourism management plans, visitor facilities, interpretation/guiding and awareness raising programmes, for building links with the commercial tourism sector, and for implementation of revenue raising mechanisms.

1 Tourism in protected areas

The report addresses two main questions:

- ***what mechanisms can protected areas use to raise funds from tourism?***
- ***to what extent should protected areas raise funds from tourism?***

To answer the first question, the report reviews the range of mechanisms that are being used by protected areas to raise funds from tourism, and considers how these might be transferred to other protected areas. It is clear that protected areas that receive high levels of visitation can raise significant funds through tourism. However, this does not mean that such an approach is practical for all protected areas, and the report therefore addresses the second question, and considers the extent to which it may be desirable and practical for protected areas to look to tourism as a source of funding for their operating costs and conservation projects.

1.1 Conservation Funding & Tourism

Protected areas were first set up during the 19th century. They were funded by governments and maintained as assets for their nations and populations. When first established, populations were smaller than today's, transport links to protected areas were generally poor, and general population pressures on protected areas were far lower than at the present time.

As populations have grown and pressures on the environment and wildlife have increased, so too the importance of protected areas, and of conserving biodiversity, has been increasingly recognised. At international level, this has led to the development and implementation of the Convention on Biological Diversity, and to an increase in the number of nationally-designated protected areas to around 100,000¹. Over the same period, pressures on protected areas have increased dramatically, and include pressures to open these areas for agriculture, forestry and oil and mineral extraction.

If the 100,000 nationally-designated protected areas each require an average of USD 500,000 per year for their maintenance, the total cost of maintaining the global network of protected areas will be around USD 50 billion per year and the cost of conservation of 25 of the top world biodiversity hotspots has been estimated at USD 500 million a year². However, very few protected areas generate sufficient income to cover their maintenance costs at present³.

Protected areas have traditionally relied on support from the government, but the costs of conservation while relatively low, represent a significant amount for governments, particularly those in developing countries and those with economies in transition, to provide. Revenue from government sources is now in short supply, and the need to balance environmental and economic requirements is becoming increasingly pressing. There is an urgent need to find ways for protected areas to be able to generate sufficient funds to make a contribution to their operating costs⁴. The CBD's Programme of Work on Protected Areas⁶ highlights the need to foster economic opportunities based on protected areas, and for development of mechanisms to help protected areas achieve financial sustainability. There are some examples of protected areas that are successful in raising substantial amounts of revenues from various

¹ WWF (2004) "Are Protected Areas Working?", WWF International, Gland, Switzerland

² Gossling, S (2002) Funds for biodiversity, Environmental Conservation, 29 (4) 411-413
Gossling, S (2002) Funds for biodiversity, Environmental Conservation, 29 (4) 411-413

³ Wells, M. & Brandon, K. 1992. *People and parks: linking protected area management with local communities*. The World Bank, WWF, US-AID.

⁴ Chase, L.C., Lee, D.R., Schulze, W.D., and Anderson, D.J. (2000) Ecotourism Demand and Differential Pricing of National Park in Costa Rica, Land Economics, 74 (4), pp. 466-482

⁵ Dharmaratne, G. S., Yee Sang, F. and Walling, L. J. (2000) Tourism potentials for financing protected areas. Annals of Tourism Research 27 (3), 590-610.

⁶ Convention on Biological Diversity (2004) Programme of Work on Protected Areas, Decision VII/28 of the Seventh Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, February 2004

non-government sources, through for example, foundations, and entrance and user fees: however, these are a minority of protected areas.

In today's world, protected areas are increasingly expected to 'pay their way', either by generating their own revenue, or by stimulating sufficient revenues at regional or national levels – for example, through the tax system – to pay for a significant proportion of their maintenance costs. In addition, where protected areas are under threat as a result of pressures to convert them to alternative resource uses, their survival can depend on demonstrating the long-term economic value of protection and conservation in comparison to competing resource uses.

Development and support for appropriate tourism activities is one of the ways that protected areas may be able to use to generate revenues and to demonstrate their wider economic contribution. The CBD Guidelines on Biodiversity and Tourism⁷ identify a number of potential benefits of tourism in protected areas that include:

- Revenue creation for the maintenance of natural resources of the area;
- Contributions to economic and social development, such as:
 - Funding the development of infrastructure and services;
 - Providing jobs;
 - Providing funds for development or maintenance of sustainable practices;
 - Providing alternative and supplementary ways for communities to receive revenue from biological diversity;
 - Generating incomes;
 - Education and empowerment;
 - An entry product that can have direct benefits for developing other related products at the site and regionally;
 - Tourist satisfaction and experience gained at tourist destination.

It may also be possible through tourism for protected areas to improve relationships with stakeholders, especially local communities, private sector and NGOs, and to gain enhanced recognition as part of the national heritage. The economic effects of tourism to protected areas can provide a rationale for continued investment in their protection, and stimulate general support for conservation. Furthermore, the 'user pays' approach offers a simple mechanism for raising funds through tourism, particularly with the present trend of growing interest amongst tourists in visits to protected areas.

However while tourism may seem an attractive option for some protected areas, a variety of factors can affect the development of tourism activities as a successful tool for revenue generation. Amongst these are the seasonality and volatility of tourism demand – particularly in lesser-visited sites and in developing countries. Tourism levels can drop sharply where there are security concerns in any part of a country or region, even if a protected area is itself safe to visit. The sector is also highly competitive, and demand may drop as competing sites or destinations become available, or tourism fashions change. Thus the potential for tourism at a protected area is no guarantee of the level of tourism, or its stability, over time, as these are subject to many external influences beyond the control of any protected areas. Secondly, while the global scale of tourism is enormous, the range of travel and tourism possibilities from which tourists can select is also vast: sophisticated market-orientated product development will be necessary for a protected area to be successful in attracting a regular flow of tourists.

A third factor is whether the legal frameworks and administrative arrangements under which protected areas operate in a country, allow them to develop fundraising activities to support their management and conservation programmes. The main organizational arrangements for protected area management and their implications for fundraising through tourism are outlined in more detail in Section 2.

⁷ Convention on Biological Diversity (2004) Guidelines on Biological Diversity and Tourism, Decision VII/14 of the Seventh Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, February 2004 <http://www.biodiv.org/programmes/socio-eco/tourism/guidelines.asp>

The fourth factor relates to the ability of a protected area to manage tourism. While there are some excellent examples of protected areas that manage tourism well and raise considerable revenues from tourism, these are mostly located in developed countries and are easily accessible to large markets with affluent populations. For many protected areas, particularly in developing countries, their markets for tourism will be smaller and less secure, and the sites themselves under-funded. As a result, they may not have sufficient human or financial resources to cover the start-up or even running costs of tourism activities.

The fifth factor is the effect of tourism in a protected area on future tourism development that might affect that area. There are many examples around the world where small-scale tourism has stimulated further poorly controlled developments that result in both environmental damage and a decline in the value of an area for tourism. This can happen as much through uncontrolled developments by the informal sector – often of bars, restaurants and cheap accommodation – as through mass tourism developments. Therefore it is essential that a long-term approach is taken to tourism activities in protected areas, and consideration given to the ways in which developments can be controlled and limited to scales and types that are compatible with conservation; and to whether and how such controls and limits may be enforced effectively. This will generally require the existence and enforcement of effective planning laws, integration of tourism and conservation issues at protected areas with wider regional plans, and support from government authorities, local communities and the tourism sector.

Alongside this, there has been growing realisation that tourism – even at quite low levels – can have a number of adverse impacts on protected areas, and that these need to be managed. Adverse impacts include disturbance to wildlife, which can affect feeding and breeding success, damage to sites through trampling and erosion along footpaths and viewing sites, and impacts from solid and liquid wastes if these are not managed properly. Some species and habitats are more susceptible to these impacts than others and as a result tourism may alter the balance of biodiversity in protected areas. Management of these impacts requires staff to handle visitors and minimise visitor damage, investment in appropriate infrastructure – such as erection of trails and interpretative signs, and provision of sanitary and waste management facilities, as well as planning for the management of tourism. Protected areas therefore require funds if they are to be able to manage tourism alongside their conservation goals, and it is reasonable to look for these funds from the tourism sector.

It is also important to note that failure to manage and avoid or minimise adverse impacts from tourism also leads to costs to protected areas in the form of damage to the biodiversity that they have been established to protect.

In summary, protected areas need to consider how they may be able to:

- Cover the costs of:
 - management of tourism to avoid or minimise damage,
 - providing and maintaining appropriate facilities for tourists,
 - raising awareness amongst tourists of the importance of conservation, and of practices and behaviours that assist conservation
 - restoring damage that tourism activities may cause
- Generate additional revenues from tourism that can be used to support general conservation activities
- Demonstrate through tourism the long-term economic value of conservation both nationally and locally by generating tangible benefits for local communities – for example, by generating employment and stimulating private sector activities

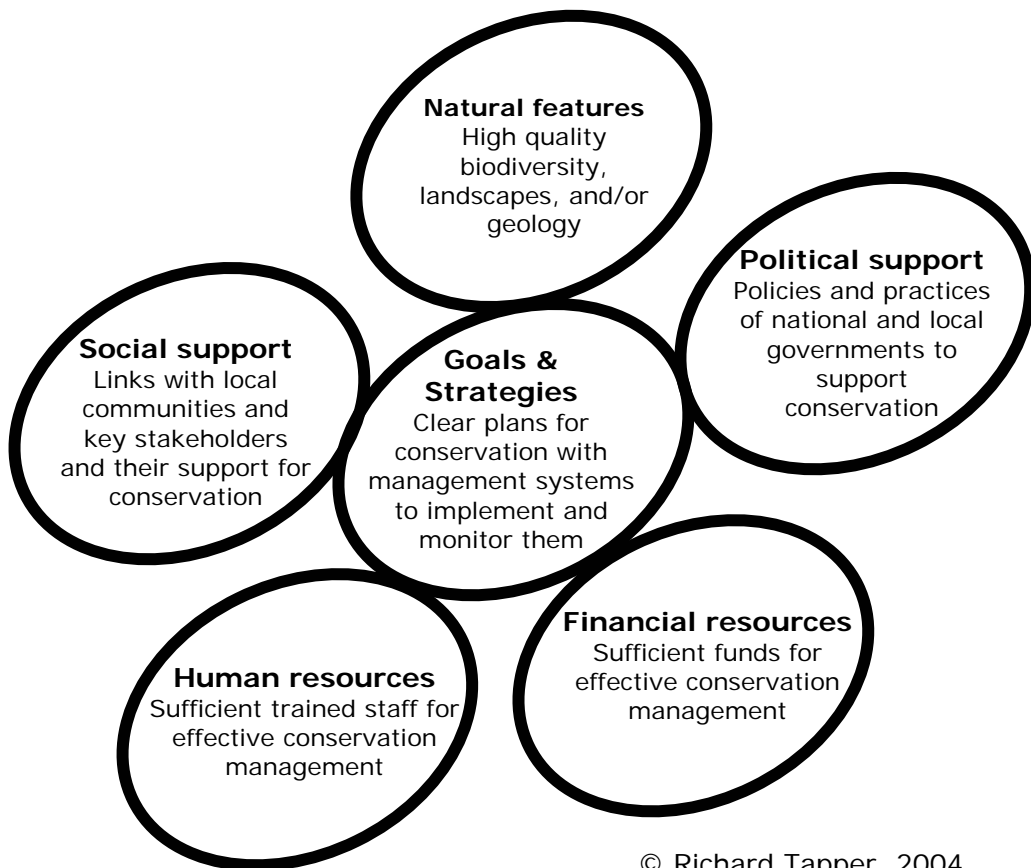
The extent to which protected areas will be able to reach these aims, depends on a variety of factors, including national legislation and restrictions that may apply to them, and the institutional structures through which they are administered and managed. Charging mechanisms and revenues generation may also be used as economic tools to assist in the management of protected areas, by using pricing as a means to assist in controlling visitor levels to different locations and for different activities within the protected area.

Six survival essentials for protected areas

The survival of any protected area depends on the quality of its natural features, support from local communities and key stakeholders, political support through government policies and practices, and allocation of sufficient financial and human resources for effective conservation management, backed by clear plans and management systems for the site (see Diagram ...). These six survival essentials are interlinked, and for successful protection of sites, need to be mutually supportive: none are sufficient one their own to ensure the long-term survival of a protected area, and to some degree they are interlinked.

If there is good social and political support for a protected area, then it may be easier to obtain the financial and human resources required for its management. If a protected area can show not only that it protects high quality natural features, but that these features create economic value through tourism, as well as by providing environmental services, then political and social support for its survival is likely to be increased. It is important to recognise that the possibilities for protected areas to raise funds through tourism are just a part of one aspect of their survival. Even if these funds are not used for conservation purposes, but returned to central government, this can generate valuable political support for continued protection of the site. So too, if surrounding communities are benefiting from tourism generated around a protected area, then this can build local support for conservation, even if the income that the protected area receives from tourism is only small. In other words, tourism to protected areas generates a range of non-economic benefits that are of value to sites for their continued survival. These are difficult to quantify but may be of equal or even greater importance for a protected area than revenue generation, depending on its local relations and the way it is allowed to operate with the legal frameworks for protected area management that are set by the government.

FIGURE 1. Survival essentials for a protected area



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It is therefore important for protected area managers to adopt broad approaches in site management that take into account the six survival essentials, and to strengthen capacity in each area. Many of these were found to be weak amongst protected areas in developing countries, according to the recent WWF report "Are Protected Areas Working?", including

handling of commercial tourism, provision of visitor facilities, development and implementation of management plans, and building relationships with other stakeholders including tourism businesses. These are major constraints towards more effective approaches by protected areas to tourism and revenue raising consistent with conservation goals. The CBD's Programme of Work on Protected Areas⁸ also highlights the importance of multiple uses of protected areas, the need to improve site-based planning and management, and for active involvement of stakeholders in this. In order to prevent and mitigate negative impacts, the Programme calls for environmental impact assessments for plans and projects with potential to have effects on protected areas, and for timely information exchanges between all organisations and stakeholders that are involved.

The six survival essentials for protected areas need to be kept in mind when reading this report, which focuses on the possibilities for protected areas to raise funds from tourism.

Protected areas can be funded from a variety of sources, including government funding, multilateral and bilateral donor funding, donations from philanthropic foundations, corporations and individuals, as well as by raising revenues from people visiting or operating businesses associated with these sites. In addition there are sometimes opportunities to generate revenues through less traditional mechanisms, including through cause-related marketing⁹, biodiversity prospecting, commercial and bilateral debt-for-nature swaps, trust funds and carbon offset projects.

TABLE 1. Potential sources of revenue in protected areas ¹⁰

<ul style="list-style-type: none"> ◆ Government funding (mandatory or discretionary) ◆ Public investments ◆ Multilateral and bilateral donor funding, ◆ Donations from philanthropic foundations, corporations and individuals ◆ Revenue-raising methods: <ul style="list-style-type: none"> ○ Protected area entrance fees ○ Recreation service fees, special events and special services ○ Accommodation, transportation and guiding ○ Parking ○ Equipment rental ○ Food sales (restaurant and store) ○ Merchandise sales (equipment, clothing, souvenirs) ○ Licences, permits, and taxes ○ Licensing of intellectual property ○ Sale or rental of image rights (e.g. for taking photographs) ◆ Cross-product marketing ◆ Private sector initiatives ◆ Cause-related marketing ◆ Biodiversity prospecting ◆ Commercial and bilateral debt-for-nature swaps ◆ Trust funds ◆ Carbon offset projects
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The potential contribution of tourism to the funding of protected areas needs to be set in the context of other funding sources available to protected areas. Each funding source brings with it a degree of risk, and as with any financial package it is important to balance the risks and opportunities presented by each one. The key is to build up a portfolio of revenue

⁸ Convention on Biological Diversity (2004) Programme of Work on Protected Areas, Decision VII/28 of the Seventh Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, February 20004

⁹ In cause-related marketing a company links with and donates to a non-profit organisation, as part of a programme to promote the company's products or services by associating the company with the activities of the non-profit organization.

¹⁰ After Buckley, R. (2003) Pay to Play in Parks: An Australian Policy Perspective on Visitor Fees in Public Protected Areas. *Journal of Sustainable Tourism* 11 (1), 56-73, Van Sickle, K., and Eagles, P.F.J. (1998) Budgets, pricing policies and user fees in Canadian parks' tourism, *Tourism Management* Vol. 19 (3), pp. 225-235, with additional material

streams that are suited to the specifics of each particular protected area, and which together offer greater stability of funding flows than any one mechanism could provide on its own. The majority of the protected areas reviewed in this report combine a range of funding methods.

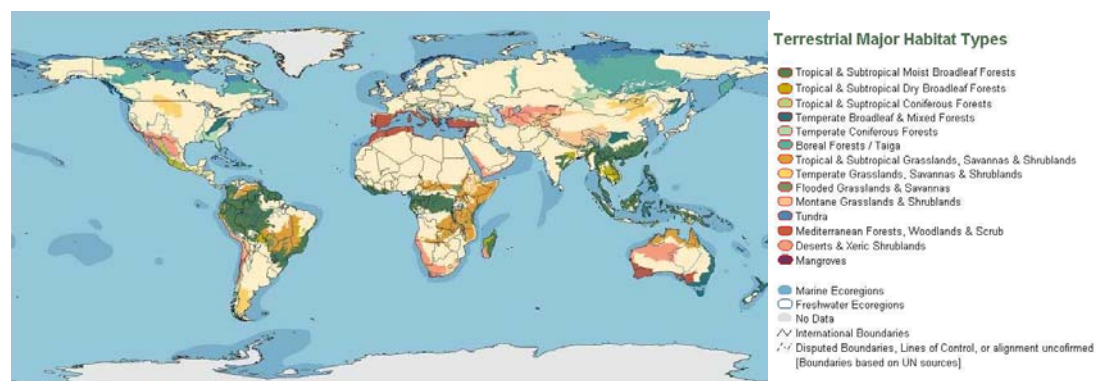
The focus of any portfolio of revenue streams will inevitably depend to some degree on the features of different protected areas. For example, generation of revenues through fees, concessions and sales is most likely to be appropriate in protected areas where visitation levels are high. Newly established protected areas may find that they can obtain bilateral or multilateral funding for their start-up phases, perhaps leading through to establishment of a trust fund, particularly if their biodiversity is of global significance. Protected areas with strong links to national heritage and culture may be better placed than others to generate funding from government taxes or levies, trust funds, and campaigns for corporate support, while areas harbouring 'charismatic' flora and fauna are well suited to raising support from the corporate sector through cause-related marketing¹¹.

1.2 Tourism Markets and Protected Areas

According to the World Travel and Tourism Council, the economic activity from travel and tourism will generate USD5,490 billion in 2004, supporting over 73 million jobs directly, and three times that amount indirectly. For the past decade, tourism has been growing at a global average of 4.5 percent, in real terms, each year, and this rate of growth is forecast to continue. Growth of tourism to some of the least developed countries is far higher than this average, and tourism is an increasingly important economic development tool for many developing countries. It requires lower capital expenditure for job creation than other industries, and generates employment particularly for women and young people, as well as providing opportunities for entrepreneurship and development of small firms.

At the same time, however, tourism also has negative impacts. In particular, tourism tends to take place in the some of the world's most fragile of environments – coastal zones and mountain regions – and if not managed properly threatens the very resources that attract tourists in the first place, as well as causing damage to the ability of these regions to provide environmental services.

MAP 1. The Global 200 Ecoregions



Forecasts for the expansion of international tourism¹² show that some of the countries expecting to grow their travel and tourism demand the fastest in the world are also home to the key Global 200 Ecoregions that have been identified around the world by WWF. This suggests that there will be both a potential for protected areas to extract some revenues from the growth of tourism in these regions, and a likelihood that the growth of tourism will put increased pressure on some of the most important sites globally for conservation.

It is important to recognise that for many of the countries where Global 200 ecoregions are located, tourism is regarded as a vital form of economic development. Most of these countries rely on tourism receipts to develop their economies while protecting their environmental resources and sustaining their social structures.

¹¹ Norris, R., 1999. Funding protected area conservation in the wider Caribbean: a guide for managers and conservation organisations, UNEP and TNC.

¹² <http://www.wttc.org/2004tsa/frameset2a.htm>

TABLE 2. Tourism development in key ecoregions ¹³

Country	WWF Global 200 Ecoregions present (Ecoregion Code Numbers)	International Tourism - Annual average growth rate (percent) 1990-2000
Laos	(22), (25), (54), (144)	35.86
Vietnam	(22), (23), (25), (54), (144)	23.95
South Africa	(105), (118), (124), (164), (209), (211)	19.28
Cuba	(37), (62), (179), (236)	17.92
Brazil	(44), (45), (47), (48), (58), (59), (93), (101), (141), (147), (148), (152), (153), (154), (178), (205), (238)	17.15
Nigeria	(2), (89), (97), (135), (155), (163)	15.65
El Salvador	(63)	15.15
Peru	(40), (43), (44), (46), (57), (108), (109), (133), (142), (147), (152), (183), (210)	12.47
Turks and Caicos Islands	(236)	12.28
Madagascar	(10), (51), (125), (137), (162), (234)	11.68
Tanzania	(7), (8), (9), (88), (98), (104), (136), (182), (233)	11.61
China	(22), (23), (67), (70), (79), (80), (96), (110), (111), (112), (144), (149), (173), (181), (191), (203)	11.53
Costa Rica	(38)	9.78
Indonesia	(12), (13), (14), (15), (26), (30), (36), (52), (106), (138), (140), (165), (174), (187), (188), (218), (219), (220)	8.80
Dominican Republic	(37), (62), (179), (236)	8.60
Cook Islands	(49), (226)	7.94

Tourism comprises a variety of market segments. The main market segments that affect protected areas are mass tourism, adventure tourism and eco-tourism/nature-based tourism.

Mass tourism

Mass tourism is the largest component of the international tourism market. Mass tourists are looking for relaxing holidays often based around with 'sun, sea and sand' and entertainment. Most mass tourism holidays are sold to tourists as holiday packages that comprise flights, local transfers, accommodation and meals, and which are organised and marketed by tour operators. As part of their holidays, mass tourists may choose to go on one or more excursions to visit local attractions. These may be local towns, shopping areas, or theme parks, but also may include visits to famous sites, many of which may be in protected areas. Mass tourists tend to be more likely to visit cultural sites rather than natural sites, but some excursions incorporate visits to natural sites to view wildlife, to enjoy the surroundings, or to participate in hiking, boat trips, snorkelling or scuba diving. Within the mass tourism segment, there is a growing demand for excursions, and consequently where protected areas located near to mass tourism resorts, there may be opportunities to work with the tour operators to develop excursions that visit linked to protected areas.

¹³ (Based on biodiversity hotspot countries with high levels of tourism growth identified in "Tourism and Biodiversity: Mapping Tourism's Global Footprint" (Table 1) published by Conservation International, with added ecoregion data from WWF from http://www.panda.org/about_wwf/where_we_work/ecoregions/global200/pages/home.htm)

Adventure tourism

Adventure tourism is a growing segment of the speciality tourism market, and involves strenuous outdoor activities, and in some cases potentially dangerous activities¹⁴ such as mountain biking, trekking, white-water rafting, or paragliding. This can involve travel in remote areas, some of which may be protected. The prime motivation for travel is adventure rather than to enjoy nature. Many outdoor activities engaged in by adventure travellers are potentially damaging to site conservation. For example, mountain biking can cause serious damage to paths and trails in fragile habitats, as well as general disturbance to wildlife. It is therefore important for protected areas to manage any adventure tourism activities to keep them away from the most sensitive parts of sites, and to limit the amount and timing of adventure activities; and to raise awareness amongst adventure travellers of ways to minimise their impacts and of the main conservation activities on the site.

Ecotourism/nature-based tourism

The primary objective of ecotourism/nature-based tourism is to visit and see attractive natural environments and their wildlife. Examples are birdwatching, whale watching, game viewing, scuba diving, botanical tours and nature photography. According to World Tourism Organisation (WTO) surveys¹⁵ in key tourism generating markets, ecotourism enthusiasts are mostly people from relatively high social brackets, high levels of education, over 35 and women slightly outnumber men. In Germany, the market potential for ecotourism probably lies in the region of some 14.5 million travellers (total market 48.4 million), while the current demand is estimated between 1 and 3 million. These tend to be people in their 40s, highly educated people with an income between 1,500-2,500Eur (50% market), and above 2,500Eur another 50% of the market. The German profile is similar to that of the UK, France and Canada, while the Spanish, Italian and US markets are slightly younger and lower spending. From the WTO surveys in 2001, the US ecotourism market is now estimated to be smaller and lower spending than first predicted, and financial decisions based on this market should be reconsidered.

Ecotourism and nature-based tourism in general have been tipped as the key segments of the tourism sector that will generate and spread benefits into conservation. However, in order to gain any benefits from this type of tourism, it is necessary for policy makers, conservation managers and protected area administrators to understand these tourism markets and how to use these to attract tourists.

1.3 Managing tourism in protected areas

While tourism can be a source of benefits for protected areas, in many cases, protected areas may not have the resources or access to investment that is needed to turn these potential benefits into a reality, and may not be sufficiently equipped to control and manage tourism so that it remains in balance with conservation goals. Additionally, any adverse impacts that are caused as a result of tourism are a cost to protected areas. The first priority for protected areas is therefore to find ways of working with the tourism sector to reduce the impacts of tourism and costs to a site of managing tourism, before exploring the potential of using tourism to raise revenues that can contribute to protected area management.

¹⁴ Eagles, P.F.J. 1995 Understanding the market for sustainable tourism, pp. 25-33 in S.F. McCool and A.E. Watson (compilers) "Linking tourism, the environment and sustainability" Proceedings of a special session of the annual general meeting of the National Recreation and Parks Association, 1994 October 12-14, Minneapolis, MN, Gen. Tech. Re. INT-GTR-323, US Department of Agriculture, Forest Service, Intermountain Research Station, Ogden, UT, USA.

¹⁵ WTO, 2001. The British Ecotourism Market, World Tourism Organization, Madrid; WTO, 2001. The German Ecotourism Market, World Tourism Organization, Madrid.

To help protected areas and national authorities address such concerns, the Convention on Biological Diversity has adopted a set of Guidelines on Biodiversity and Tourism¹⁶. These are designed to provide a framework for the management of tourism within protected areas, consistent with the conservation and sustainable use of biodiversity. The CBD Guidelines on Biodiversity and Tourism address market issues and tourism trends at all levels, as well as key factors for management of tourism in protected areas, such as establishing limits of acceptable change, zoning and control of tourism, impact management measures, and promotion of responsible behaviours by tourists visiting protected areas.

The Guidelines are applicable to all forms of tourism and tourism activities, and stress the importance of effective planning controls on tourism development, and of public education, capacity building and awareness raising concerning tourism and biodiversity. They also stress the importance of collaboration between protected areas, the tourism sector, indigenous and local communities, national and local government authorities, and NGOs, in order to plan and manage tourism. In particular, the World Commission on Protected Areas notes that¹⁷: “The operation of a protected area tourism industry requires the cooperation of both the public and private sector. Neither can do the job alone. Each is fundamentally dependent on the other.” Protected areas provide opportunities for tourism, while the commercial tourism sector provides the opportunities and services – through accommodation, catering and transport, as well as marketing – for tourists to visit protected areas. By combining the entrepreneurial skills and links to tourism markets that tourism businesses have, with the conservation skills of protected area managers, it is possible to provide a better experience for tourists, and to gain a better contribution from tourism for protected area conservation.

Successful tourism in protected areas requires the ability to develop and market tourism products based on protected areas, and the ability to maintain the quality of these areas for the future. The tourism potential of any protected area depends on a wide variety of factors, that include location, accessibility, market demand, proximity to popular tourism destinations, publicity, presence of local tourism businesses and infrastructure (accommodation, catering, guiding, etc.). The ability of a protected area to manage tourism depends on the implementation of clear management strategies, the scale of demand for visits to the site, the staff and resources available for management of tourism, and the legal and political environment covering wildlife protection in the countries in which they are located. These factors vary considerably amongst protected areas, and it is therefore important for tourism and conservation strategies to be developed for each protected areas, so that they can be tailored to their specific circumstances.

A simple economic model of tourism and protected areas

Figure 1 shows a simplified model of the monetary flows associated with tourism and protected areas. Protected areas are able to receive funds from three main sources: through government funding, by charging entrance fees to visitors, and by charging businesses that operate within the boundaries of protected areas. At the same time, funds flow out of protected areas in several ways, including via payment of staff costs, procurement of the goods and services that protected areas require in order to operate, and as a result of damage that may be caused to a protected area.

This model is subject to several considerations. First of all, where protected areas are run as a part of government public services, they may be subject to strict budgetary limitations and rules. These often include limits on the amount of funds that protected areas are allowed to raise by charging for access and services, and may also include requirements that any

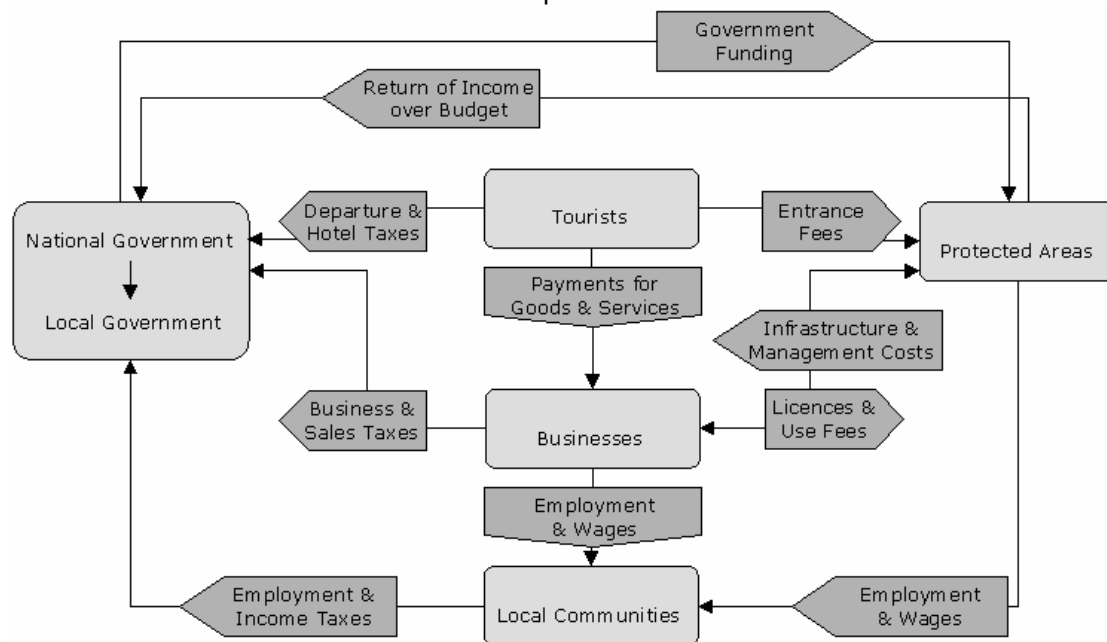
¹⁶ Convention on Biological Diversity (2004) Guidelines on biodiversity and tourism, Annex to Decision VII-14 of the Seventh Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia

¹⁷ p. 126, World Commission on Protected Areas (2002), Sustainable Tourism in Protected Areas: Guidelines for Planning and Management, Best Practice Protected Area Guidelines Series No. 8, authors: P.F.J. Eagles, S.F. McCool, and C.D. Haynes, published by IUCN

additional funds raised by protected areas be returned to central government. Such limits and requirements may be set out in legislation or government regulations, and if so, are likely to be difficult to change, particularly if changes have to be debated and approved by state or regional legislatures.

Secondly, where protected areas are able to charge tourists and businesses for access to and use of these sites, there are costs involved in collecting the charges and in providing the necessary infrastructure – even if it is only basic – and in managing tourism in protected areas. It is important to remember that for tourism to provide net financial benefit for the management of a protected area, the inflows of funds from tourism will need to exceed the costs that are incurred by protected areas in providing necessary infrastructure and in managing tourism. If the tourism-associated costs incurred by a protected area are greater than the inflow of funds it receives from tourism, then that protected area is essentially subsidising tourism.

FIGURE 1. An economic model of tourism in protected areas



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This basic economic picture holds true in all circumstances, even though protected areas may vary considerably in their ability to control tourism in and around their sites. For some protected areas, their geographical remoteness may keep visitor numbers low, and well below levels that would start to cause problems. But where protected areas are located close to centres of population and tourism resorts, visitor numbers are likely to be high and difficult to control. While the basic economic picture is the same in each case, these protected areas – differing only in location and accessibility to tourists - would need to use very different strategies for management of tourism. In the case of remote protected areas, there may be a desire to increase the number of tourists within defined limits, in order to raise additional funds. In the case of heavily visited protected areas where tourism is difficult to control, a main focus may be to find ways of reducing adverse impacts from tourism so as to reduce the drain on funds, rather than to raise additional funds. In a few cases, groups of protected areas with varying levels of visitation have been formed in an effort to reduce visitation at the most popular sites, by encouraging tourists to visit other sites in the group: a proportion of tourism revenues may also be pooled for use by less visited sites.

The economics of protected areas are also closely linked to political factors. At a local level, communities in and around protected areas, particularly where populations are growing, may

seek access to these areas to support their livelihoods through agriculture and resource extraction. To counter these pressures, it is important for protected areas to demonstrate an economic value to local communities, for example, by employing community members to assist with conservation and management, and by supporting development of alternative livelihood options, of which tourism may be one, which are less damaging and have potential to improve local incomes. In the absence of employment and alternative livelihood options, local communities are more likely to use protected areas illegally and in damaging ways, including small scale logging and resource extraction, land clearance and settlement.

At national level, governments regularly come under pressure from developers and major investors to open up protected areas for a variety of purposes, including timber, oil and mineral extraction, and development of tourism resorts. Unless governments can clearly see and understand the long-term benefits that protected areas provide, it is likely that they will support schemes involving inappropriate activities and development in protected areas. By showing that they have an economic as well as symbolic value when they are managed sustainably, and by building local level support, protected areas will be in a stronger position to counter pressures for major developments and resource extraction. This can include showing that the viability of national tourism sectors, and the revenue that these can provide for national governments, is linked in part to the existence of well-managed protected areas which are valued by international tourists as well as by local communities.

These political factors mean that it may be appropriate for protected areas to encourage and support suitable and controlled tourism activities for the political benefits they can generate, even if they do not provide net financial benefits.

In reality, few of these potential sources are actually exploited within the protected area system of any one country, highlighting the potential for protected areas managers to increase their income by utilising a much broader range of revenue management options. To take advantage of these opportunities, protected area systems need to build capacity in a variety of ways. Factors crucial to building a financially sustainable system include skilled personnel who can analyse financial needs and opportunities, and select approaches appropriate to each area; infrastructure for the management and visitor services needed, including accommodation, communications, and transportation; an enabling policy environment in which necessary actions (such as dedicating revenues to the system) can be accomplished; clarity over where and how fees are used; and developing systems for community participation.

Strategies for increasing income from tourists must be underpinned by a strong market orientation, and include raising entry or user fees according to market demand or willingness to pay, increasing the range of products and services and improving their quality, improving marketing campaigns, and encouraging higher-spending visitors. Also, methods of revenue collection and accountancy must be improved, for example by setting up transparent systems to track use of funds, hypothecation of funds, governance and institutional strengthening.



**Eschrichtius
robustus Grey
whale
surfacing,
tourists
watching from
small boats.
Baja California,
Mexico**

**© WWF-Canon /
Gustavo
YBARRA**

2 Structures for Protected Area Management and implications for financing

Directly or indirectly, government departments have responsibilities for the administration of the majority of protected areas. However, factors such as shortages of government funds, lack of sufficient trained staff, and demands within governments and by donors for more efficient and 'business-like' management of protected areas, for their greater accountability, and for greater participation of key stakeholders – including local communities - have led to the emergence of a variety of other approaches to the management of protected areas. The pros and cons of each management approach are considered in the following section. Case studies can be found in section 5. These include management by:

- government departments or agencies
- parastatal bodies
- NGOs
- community organisations
- the private sector
- a combination of these.

2.1 Government departments

The most common form of protected area management is management by government departments. Protected areas are generally administered through Ministries of Environment, or Natural Resources, and frequently through specific sub-departments of these ministries. In systems of federal government, responsibilities for protected areas may be allocated to either state or federal governments, or split between the two levels of government. The local government level may sometimes also have some limited responsibilities for protected area management.

Funds for protected areas managed by government departments depend almost entirely on allocations made by government from the national budget. In most developing countries where there are severe budgetary constraints, the amount of government funding available for protected area management is likely to be very low. Furthermore, some countries have legal restrictions that prevent government departments from generating their own incomes – for example, by selling concessions to businesses – and / or which require any revenues raised by government departments to be returned to the national exchequer. Restrictions of this type may prevent protected areas from supplementing their government funding with other sources of income.

In consequence, protected areas that are managed through government departments are often under-funded. In addition, protected areas managed in this way may be subject to changes and uncertainty associated with political matters at national level – for example, where protected area managers and policies are changed following changes of government – and as a result may not be responsive to local issues and the concerns of communities located in or around protected areas. Local communities are often concerned that they see little if any of the benefits generated by protected areas managed by government departments (for example, where any income from protected areas is returned to national government), while experiencing disadvantages from the presence of protected areas locally (such as restrictions on grazing, livestock numbers, or access to resources which they have used traditionally). Some countries have introduced policies that help compensate local residents where they are affected by establishment of protected areas, by allocating them some of the

income raised by tourism in these sites: for example, Kenya aims to share 25 percent of revenue from entrance fees with communities bordering protected areas¹⁸.

It is possible for all these factors to be addressed, but where government resources of staff and funds are stretched, making necessary improvements in protected area management is generally a low priority alongside the number of more immediate issues that governments need to deal with.

2.2 Parastatals

A parastatal is essentially a public sector organisation with some elements commonly found in private sector organisations. The main advantages of parastatals include their flexibility to set fees and charges, establish funding mechanisms such as concessions, and respond to customer needs; their ability to retain the money they earn which gives a resulting incentive to generate funds through greater entrepreneurship; and their freedom to implement staffing policies based on efficiency and market salaries.

Parastatals are also less tied to political changes than government departments, and are able to operate more independently as a result. This is particularly important to their success, as they are less affected by changes of government policy and priorities (for example, following a change of government).

Parastatal agencies have been established in countries where institutional arrangements inhibit protected areas from themselves providing the diversity and quality of tourism opportunities from which revenue flows back into the protected area. In various countries, including Kenya, Tanzania, South Africa, Indonesia and some Caribbean countries, the response has been to establish parastatal agencies, which function like companies within the public sector, and which operate at 'arms length' from governments. Some African parastatal agencies were found to have some 15 times as much funding as did government run protected area authorities¹⁹. In Indonesia, the emergence of parastatals is in keeping with moves towards decentralisation that has been taking place since the end of a heavily centralised political regime in 1998.

Ideally, parastatal agencies should be managed by a Board of Directors who are experts in various aspects of tourism, business and protected area management. These members create vital links to the commercial world, thereby enhancing the potential financial gain by the protected areas themselves. However, parastatals do not have as much autonomy and flexibility as true private sector organisations because they are responsible for public resources and therefore remain accountable to the public. They are unable to make decisions strictly on the basis of business criteria because they need to maintain non-profitable protected areas as well as the profitable ones, and they should provide benefits to local communities. Their Boards are usually appointed by the government and may be based on political or other vested interests rather than ability, commitment, etc. The public will often continue to regard them as public sector organisations and may object to their paying higher salaries, entering into business contracts, deviating from government procurement processes, etc. There is also a risk that since government underwrite the budgets of parastatals, they may not apply the same rigour to business decisions in comparison with private companies, and may therefore operate less efficiently than an equivalent private company.

2.3 Private Sector

In a small number of cases, governments have transferred management of specific protected areas to companies in the private sector. Transfer agreements between the governments and private companies concerned, specify the obligations of private company managers to ensure protection of the site, while providing flexibility to allow companies to develop revenue streams that can be used to fund protected area management and to generate profits – generally, through wildlife-related tourism, and establishment of tourist lodges.

¹⁸ Lindberg, K. and R.H. Huber, Jr. 1993. Economic Issues in Ecotourism Management. Pp. 82-115 in *Ecotourism: A Guide for Planners and Managers*. K. Lindberg and D.E. Hawkins, eds. North Bennington, VT: The Ecotourism Society.

¹⁹ Eagles, P., McCool, S. & Haynes, C. (2002) Sustainable tourism in protected areas: guidelines for planning and management. Gland: IUCN

In addition, a number of protected areas have been established by privately-owned companies on privately-owned land, particularly in Southern Africa. These protected areas operate on a commercial basis, and generate funds through tourism. Several have been established on land of previously limited wildlife interest – for example, on farmlands – and have built up good wildlife populations through reintroductions, breeding programmes, and effective conservation management.

Provided that they can show the commercial value of operating protected areas and associated tourism activities, the private companies involved are able to raise any additional finance that may be needed for management improvements through investment via the financial markets.

2.4 Community Organisations

In community-based management of protected areas, management is transferred to one or more communities with a recognised association with the protected area. The communities to which management is transferred are identified as having either current or previous ownership or settlement of the protected areas concerned, or usage rights over those areas. This approach has been used particularly in Southern Africa – for example, to return land in protected areas from which communities were evicted under the apartheid regime in South Africa, or to manage common lands as in Zimbabwe.

Community-based management schemes have advantages in that the benefits resulting from sustainable management of protected areas can be shared by the communities, and these communities are able to manage their use of the land, its wildlife and natural resources in an integrated way. This therefore avoids conflicts that can often arise between communities and protected area managers under other forms of protected area management. Against this, communities will generally lack the skills and capacities that are required for successful conservation and management of protected areas, and depending on the specific ways in which individual community-based management schemes are set up, may be free to undertake a wide range of potential activities on the land concerned, of which conservation and protection is just one option. They are also unlikely to have the skills to develop and market more than basic types of tourism.

These aspects can generally be addressed by providing technical and capacity building support to communities involved in community-based management of protected areas, by setting legal limits on what uses and types of management are allowed in the areas concerned when community-based management schemes are set up, and by negotiating management agreements with communities under which management of some areas is leased to other organisations which pay fees for the right to use specific areas under conditions that are set out in a contractual agreements with the communities concerned.

For community-based management of protected areas to succeed, the following elements are necessary:

- External support, capacity building and awareness raising provided by protected area administrations and managers
- Demonstration that the economic benefits that communities can derive from conservation are at least as good as those obtainable from other uses, both for the community as a whole (e.g. Provision and maintenance of schools, health facilities, etc.)
- Integration of community requirements into the protected area management approach (e.g. Letting the community decide how to balance potentially conflicting uses, such as grazing, alongside protection)
- Realistic development and pricing of revenue raising activities (e.g. Matching prices to market demand within the target segment(s); limiting development to a scale that can be sustained by the target market and which does not exceed local carrying capacity / limits of acceptable change of the environment and wildlife of protected areas)

- Effective decision-making and management structures within communities, with decisions being taken democratically with the participation of all community stakeholders, and transparency and accountability in the management of revenues derived from protected areas

2.5 NGOs

In some cases governments have transferred responsibilities for protected area management to suitably qualified and experienced NGOs. As with transfers of protected area management to the private sector, such transfer agreements between governments and NGOs specify the obligations of the NGO managers to ensure protection of the site, while providing flexibility to allow NGOs to develop revenue streams that can be used to fund protected area – generally, through wildlife-related tourism, or sale of concessions to private businesses.

If management is transferred to a large international NGO, then that NGO may be able to draw on fees and donations from its members to help support protected area management. NGOs may also be able to attract donations from visitors to the sites that they manage. However, the financial security of arrangements for management of protected areas by NGOs depends on the size and management of the NGOs involved.

NGO management of protected areas can potentially operate in a wide range of settings, including in areas where there are limited possibilities for development of revenues streams from tourism or other commercial activities, and where management by private companies would therefore not be possible. However, delegation of management of protected areas to NGOs may be a sensitive issue both for governments – particularly where the NGO concerned is foreign – and for local communities who may regard management by NGOs as more distant and less desirable than management by government agencies.

2.6 Hybrid arrangements & partnerships

In many cases, management of protected areas involves balancing of a wide range of interests, including the legal responsibilities of government departments and agencies for planning and protection of sites, the interests of local communities and the private sector, and of NGOs concerned with conservation. None of the structures outlined above incorporates all these interests, or is able on its own to encompass the full range of expertise that is available across these different types of organisations. To address this, some protected areas have developed structures – such as advisory boards and liaison committees – that are designed to bring together these different interest groups, and to provide a channel for them to input to plans and decisions on protected area management. These boards or committees may be established on an informal basis, or through more formally constituted arrangements, some of which may involve government approval or legislative changes: they provide complementary structures to assist site management. Their benefits include bringing additional expertise and capacity into protected area management, establishing channels to raise funds that are returned for use in conservation (if these are collected are administered by non-government bodies), and for building better links with local communities and businesses.

Hybrid arrangements and partnerships also provide important routes for raising funds for protected areas, particularly where protected areas are prevented from raising significant revenues themselves – for example, because of restrictions on public sector bodies, and/or because of limited revenue raising opportunities. Fundraising partnerships are generally based around non-profit Foundations or NGOs, which are able to raise funds by various means, including through donations and, in the case of NGOs, some business activities such as sale of products and services. Fundraising activities are generally explicitly linked to the protected areas where funds will be used to support conservation activities, and the Foundations or NGOs involved will generally have some form of agreement with the protected areas concerned, over both use of funds raised, and use of the names and logos of protected areas for fund raising purposes.

Some protected areas have themselves joined together to pool their resources to market the tourism they offer, and through this to try to direct tourism to lesser visited sites and away from areas that are already saturated by visitors. Some heavily visited sites may also allocate a portion of the revenues generated by tourism to assist conservation and tourism projects at less visited sites.

**Tourists on Elephant's back
watching a tiger in a pool Corbett
National Park, India Project**

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3 Funding Methods

Protected areas that plan to raise funds from tourism will need to select and implement suitable funding raising mechanisms for this. The main mechanisms that protected areas use to raise funds from tourism are covered in this section, with case studies in section 6, and are:

- Entrance fees
- User fees
- Concessions and leases
- Direct operation of commercial activities
- Taxes
- Volunteers and donations

The suitability of these mechanisms for any particular site will depend on a variety of factors, including the scale of tourism at the site, where tourism takes place within the site, access points, and the way in which the commercial tourism sector interacts with the site. These factors are further considered in Section 4.

3.1 Entrance fees

Entrance fees – fees charged to visitors for entrance and access to protected areas

Setting an appropriate protected area entrance fee - one that covers the protected area's capital costs and operating costs, and ideally even the indirect costs of ecological damage - is one of the best and most used ways for management agencies to capture a larger share of the economic value of tourism in protected areas and protected areas. One in two protected areas use some method of fee system, but few currently generate substantial revenues from this²⁰, and generally the charges do not reflect the service and product offered by the protected area. There has been reluctance to charge the full cost of running the protected area for various reasons: traditionally, protected areas have been funded from the national treasury as a public good; a collection and accounting mechanism may be difficult and expensive to set up; and there may be a fear of resistance from users.

However, studies have shown that visitors are willing to pay more if they know their money will be used to enhance their experience or conserve the special area they are visiting, and that visitors are often willing to pay higher entrance fees than those currently charged, particularly for protected areas with a high level of demand. For instance, in 1989 Botswana raised its protected area entry fees for foreigners by 900%, but foreign visitor numbers increased by 49% in the two years after this. The resulting increase in revenues meant that government funding was no longer necessary²¹. Obviously, there has to be an element of market pricing here in that people will pay more for a unique attraction, and the protected areas have to show a high level of good management. It has also been found that visitors are more inclined to respect their surroundings if they have to pay for to enjoy them^{22 23}. Tourists are far more willing to accept and pay entrance fees where it is clear that they are being used by protected areas to improve the quality of services provided to tourists and for conservation purposes, than if it is remitted.

Entry fees are sometimes literally collected at the point of entry to the protected area, with a set amount per car or per individual. In some cases 'point of entry' collection may be difficult because of the size of the protected area or if there are multiple entry points. In such cases, it will be easier and more effective to levy user-fees at the point of activity, for example with

²⁰ Walpole, M.J., Goodwin, H.J. and Ward, K.G.R., 2001. Pricing Policy for Tourism in Protected Areas: Lessons from Komodo National Park, Indonesia. *Conservation Biology*, 15(1): 218-227.

²¹ Lindberg, K. and Halpenny, E., 2001. Protected Area Visitor Fees: Country Review. Vermont: The International Ecotourism Society.

²² Buckley, R., 2003. Pay to Play in Parks: An Australian Policy Perspective on Visitor Fees in Public Protected Areas. *Journal of Sustainable Tourism*, 11(1): 56-73.

²³ Laarman, J.G. and Gregersen, H.M., 1996. Pricing policy in nature-based tourism. *Tourism Management*, 17(4): 247-254.

diving or car-parking (see section on User Fees). The entrance fee may include an immediate tangible 'good' in the form of a map and/or information on the protected area.

Establishing a policy on entry fees begins by defining the purposes of the fee program. Pricing policies are generally set at national level. In some countries, it may be decided that each protected area should then use these policies to set their own prices, while in other countries centralised governmental control may be necessary to provide an overview of relative pricing between protected areas at national level or so that, for example, it would be possible to implement a visitors' pass system for access to several protected areas.

Many protected areas have begun with a single level of admission fee and gradually developed a differential or tiered pricing system²⁴. This more sophisticated pricing approach allows protected areas to charge visitors according to a number of factors including the time of year, the level of service provided and the income or place of origin of the visitor²⁵. For example, a lower price may be charged to domestic visitors to encourage their interest in conservation, and to reflect the ability of domestic visitors to pay, while enabling higher fees to be charged to international tourists from high income countries. Many protected areas now adopt such a system - for instance, foreign visitors to Ras Mohammed, in Egypt, pay \$5 while Egyptians pay \$1.20. Other tiers are possible, for instance allowing lower fees for students, senior citizens or groups. Differential pricing however is anything but straightforward.

In some countries, conservation legislation does not allow implementation of a two-tiered pricing system. For example, in Indonesia²⁶ entrance fees for most protected areas are only \$0.25 (even less for nature reserves), with some protected areas and reserves enforcing the use of tour guides to increase revenue.

In theory, admission fees can be used as a tool to keep the number of visitors within an ecosystem's carrying capacity or to limit growth rates, so that planning, management and control are not outpaced by development^{27 28}. In practice, developing country protected area authorities in particular may lack the skills to assess and manage tourism flows in this manner, particularly if there is pressure from the private sector to allow increased visitation.

The costs of collecting fees have to be assessed where a pricing policy is considered. The direct costs include salaries and the installation and maintenance of toll-booths, with additional administrative costs of accounting and control, data processing and reports, and indirect costs such as personnel training, security, and public relations. Because of such costs, in protected areas with few visitors it may not be worth collecting entry fees.

An important market consideration is that more unique destinations can charge higher prices²⁹. For instance, the Galapagos National Park makes a major contribution to national revenues and is reported to have recouped nine times its management costs in admission fees since, given its unique characteristics, uncommonly high entrance fees can be charged³⁰. The Mon Repos National Park in Queensland, Australia, is a further example of where tourists are willing to pay relatively high admission fees for the rare opportunity of viewing sea-turtles³¹. The National Parks Service in the US has set up a demonstration project under which 20 percent of the entrance fees from heavily visited protected areas are transferred to a

²⁴ Green, E. and Donnelly, R., 2003. Recreational Scuba Diving In Caribbean Marine Protected Areas: Do The Users Pay? *Ambio*, 32(2): 140-144.

²⁵ Van Sickle, Kerry and Paul FJ Eagles. 1998. User Fees and Pricing Policies in Canadian Senior Park Agencies. *Tourism Management* 19(3): 225-235

²⁶ Ross, S. and Wall, G. (1999) Evaluating ecotourism: The case of North Sulawesi, Indonesia, *Tourism Management* 20, pp. 673-682

²⁷ Gosling, S., 1999. Ecotourism: a means to safeguard biodiversity and ecosystem functions? *Ecological Economics*, 29(2): 303 - 320.

²⁸ Lindberg, K. 1991. *Policies for maximising nature tourism's ecological and economic benefits*. WRI (World Resources Institute), Washington DC.

²⁹ Dharmaratne, G.S., Yee Sang, F. and Walling, L.J., 2000. Tourism potentials for financing protected areas. *Annals of Tourism Research*, 27(3): 590-610.

³⁰ Walpole, M. J., Goodwin, H. J. and Ward, K. G. R. (2001) Pricing Policy for Tourism in Protected Areas: Lessons from Komodo National Park, Indonesia. *Conservation Biology* 15 (1), 218-227

³¹ Tisdell, C. and Wilson, C. (2002) Ecotourism for the survival of sea-turtles and other wildlife, *Biodiversity and Conservation* 11, pp. 1521-1538

fund that is used to support investment in lesser visited protected areas that have very limited potential to raise their own funds from visitors.

While fees can be set according to market principles based on elasticity of demand and willingness to pay, political considerations also have to be taken into consideration. In general, the level of fees will be a blend of cost-based and market-based elements and political acceptability, reflecting the ability and willingness to pay of the user, the cost of service delivery, the quality-price ratio for the service received, and policy aims such as providing low-cost recreational facilities for nearby town-dwellers or a high-quality product aimed at maximising revenue from overseas visitors. A conservation management element has to be included. This may mean that fees charged (either by protected area-owned operators or by licensees) may be higher than for similar services outside the protected area (for example in the case of accommodation or diving). In this case, information should be given to end-users as to why the higher price is being charged.

Where tour operators are involved entrance fees can be added to the tour package price in advance. However, when fees are raised there may often be complaints from tour operators that their competitiveness will be affected, but it has been found in practice that although visitor numbers may decline, increased revenues allow higher spending on conservation and encourage higher-spending visitors willing to pay more for better quality resources. An important consideration is that tour operators prepare their brochures and prices at least 12 months in advance, and where they offer a tour package, are not generally able to add surcharges to reflect price increases for components of that package. It is therefore essential to notify entrance fee increases well in advance to all tour operators who may be affected by this.

In some protected areas, such as the Monteverde Cloud Forest Reserve in Costa Rica, the Galapagos National Park of Ecuador, and the Volcanoes National Park, in Rwanda, large amounts of tourism income can be generated to pay for all costs of running and maintaining these sites. However, for most protected areas the income obtained from admission fees does not cover maintenance costs³². For example, fee revenues collected at US parks are equivalent to 5-6% of the expenditure of the park's agency³³.

It is important not to be too optimistic about tourism's potential to generate revenues to cover a significant proportion of the costs of protected areas. For instance, the optimism of a 1991 consultancy report on the Dzanga-Sangha protected area in the Central African Republic regarding tourism revenues was not borne out, and a later study of the same area concluded that "tourism's contribution to a funding mechanism for the Park and Reserve is likely to remain nominal"³⁴. Reliance on other forms of income, especially government funding and international donations, is therefore likely to continue.

Challenges to successful implementation of entrance fees include inefficient fee collection, which results in losses of entrance fee revenue from protected areas. There is also a risk that scarce personnel resources will be redeployed towards collection of fees rather than protection of resources. In addition, corruption and bribery at entrance gates are common features. This can be avoided by a good and transparent system of accounting for revenues and expenditure, or by designing a cash-free system of entry at gates. For example, in an attempt to overcome corruption, the Kenya Wildlife Service (KWS) has introduced an electronic debit card system for paying for entrance to a protected area. Visitors charge their card by paying cash at KWS headquarters in Nairobi where it is efficiently collected and accounted for. Then, on visiting the protected areas the cards are 'swiped' in machines at the gate that reduce the credit on the card by the amount of the entrance fee. This system seems to be working well to increase overall takings.

³² Op cit 27

³³ Op cit 23

³⁴ Blom, A., 2000. The Monetary Impact of Tourism on Protected Area Management and the Local Economy in Dzanga-Sangha (Central African Republic). *Journal of Sustainable Tourism*, 8(3): 175-189

3.2 User Fees

User fees – fees charged to visitors for undertaking specified activities or for use of specified facilities within protected areas, subject to compliance with protected area regulations (eg. for parking, camping, fishing, hunting, boating, diving, hiking, recreational programmes, sports, photography, etc.)

As already mentioned, in some cases it will be difficult to collect a literal 'entry fee' due to geographical factors or because it is more appropriate to levy management and conservation contributions from users of facilities within a protected area. User fees may be charged for use of facilities such as car-parks, campsites, visitor centres, mountain huts, or canopy walkways, or for carrying out activities in the protected area such as fishing, hiking or mountain climbing, sailing, or hunting. Two of the most lucrative forms of user fees are for scuba diving and trophy hunting. It is important to encourage tourists to be willing to pay user fees, particularly by showing how the fees are used to support conservation and management in protected areas.

In many countries, such as Indonesia, dive fees have generally been developed on a case by case basis, rather than through central planning at national level. Some parks in Bahamas, Netherlands Antilles, Mexico, Venezuela and Belize charge divers while other national parks in same countries do not. Only in the British Virgin Islands (BVI) and Turks & Caicos are all divers charged to access all Marine Protected Areas (MPAs), directly in the former and indirectly in the latter through boat charges levied on dive operators. 17 MPAs in eight countries across the Caribbean and Pacific coast of Central America generate between \$1 and 2 million annually through these types of tourism fees, but research suggests that far more could be generated. For instance, fees of \$2-3 per dive are common, while willingness-to-pay data suggests an average of \$25³⁵, while by no means all marine parks implement a fee system.

Reluctance to implement fees may be due to the cost of introducing and maintaining a fee collection system and, in some areas, political or socio-economic factors. However, dive tourism is growing and in many of the more popular places the theoretical recreational carrying capacity of MPAs is being reached, while many suffer from a shortfall in financial resources. There is therefore a strong case for converting diver willingness to pay into higher fees that could make a significant contribution to conservation of marine protected areas.

3.3 Concessions & leases

Concessions and leases – contracts between protected areas and businesses or individuals under which those businesses or individuals are permitted to operate within a protected area and to use certain land or facilities owned by a protected area for a specified period in exchange for making payments to the protected area and subject to compliance with protected area regulations

Traditionally, protected area attitudes to the private sector encompassed a range of approaches including trying to keep them out or ignoring them, marketing to them, licensing or restricting them, competing with them, and forming partnerships with them (Buckley, 2002). However, in the current climate of shrinking funds for management of protected areas, coupled with increased awareness of the value of managed market forces, there is now a trend towards greater cooperation with the private sector. Governments increasingly recognise the value of providing an enabling environment for the private sector to operate within protected areas.

Around one in five protected areas use some form of concession or licensing system, and the increasing privatisation of service delivery in protected areas will increase their popularity.

³⁵ Op cit 24

Depending on the legal framework of the country, any function or privilege of the state from operation of individual facilities to management of the entire protected area can be contracted to a concessionaire.

Concessions and leases cover a range of permits, leases and licences. Common features are that they allow private companies or individuals to run commercial operations within a protected area while generating financial benefits for the protected area. Activities may include tour guiding, trekking or diving operations, accommodation provision, restaurants, souvenir shops, sport fishing or hunting trips, horse-trekking, hire of kayaks or mountain bikes and the hire or sale of other sports and recreational equipment. A concession or lease may consist of a set fee paid to the protected area authority over an agreed length of time (either annually or in advance), or the amount may relate to the income of the concessionaire, or the fee may include elements of both. In many cases, there may be an overlap between the operation of concessions and user fees: for instance, hikers may book a tour through a private operator but pay a per capita fee to the protected area for access to hiking trails.

Concessions or licenses can be granted to private companies, community groups, or NGOs or other not-for-profit enterprises, and can offer a way of ensuring that communities living in and around the protected area can benefit from it economically.

Concessions management necessitates a balance between resource protection and visitor needs. Government policy and regulations may require that management of visitor services provided by concessionaires and leaseholders take into account public opinion, provide employment for local people and other elements of benefit to local communities, and include regular monitoring of environmental impacts.

The principal rationale for use of concessions and leases is that private operators bring expertise to protected areas of tourism, which protected area managers traditionally have little experience of, and the system can bring mutual benefits. The concessionaire or leaseholder acquires – in exchange for a contract with and payments to a protected area – the right to run a business in an attractive location that is a potential honey-pot for tourists, and the protected area gains extra revenue. Concessions and leases also help to balance demands from the private sector for development in protected areas, by allowing a limited amount of controlled business activity.

The private sector is generally better able to adapt to changing markets and product innovations than the public sector, and as long as the licensee is successful, it is likely that the protected area will receive an ongoing source of revenue. Another advantage is that the system is more acceptable to tourists as they are generally not aware of paying a fee for the use of the protected area, since it is part of the product price.

The negative aspects of concessions concern the success of the business venture. If it is not successful then less revenue will be generated for the protected area. The concessionaire may ignore contractual requirements, constructing more facilities than permitted or expanding the scope of their business. Employees may be poorly trained or lack conservation awareness, or the corporate culture of the operator may militate against observing proper conservation safeguards.

A particularly difficult aspect is arriving at a balance between the amount that the concessionaire will earn by exploiting the resource, and the amount that will be returned to the protected area or the state. In the US, this figure is about 2-3% of concessionaire earnings, while the New Zealand Department of Conservation levies 3-7.5%, depending on the activity; the higher figure is for guided tours. Some businesses may try to negotiate payment of a 'capped' fee, limited to a maximum amount.

Licenses and permits can be sold through auctions. Auctions work best when administrative structures are efficient and honest, access to protected areas can be controlled, visitor numbers are restricted, and revenue considerations rank high among pricing objectives³⁶.

It is essential for the protected area authority to retain ultimate control over the concessionaire's operations to assure that resources are not over-exploited or damaged, and that conservation is not neglected in favour of profit-making. Also, although concessions can

³⁶ Op cit 23

be a very useful revenue-generating tool, all profit made by the concessionaire is in fact income lost by the protected area agency itself. This may lead policy-makers to consider alternative protected area management structures to the traditional, non-commercial model such as parastatals, as they are more flexible and adaptable (see Section 2.2).

A significant issue is the length for which a concession is granted. The private sector will generally want a long licence period in order to ensure sufficient return on initial outlay. The risk for the protected area agency with a long concession is that the business may fail, decline or attempt to change its mode of operation. Thus, safeguards such as an outline of rights and responsibilities, monitoring processes and 'break-points' in the event of unsatisfactory performance, need to be written into contracts.

Concessions can make a considerable contribution to management of the protected area. For instance, seven concessions awarded to private consortia in South Africa in 2000 guaranteed SANParks at least R202 million (over USD30m at 2004 rates) over a twenty-year period³⁷. (An interesting element of awarding these concessions was that empowerment of historically disadvantaged communities was one of the criteria for selecting concessionaires and enshrined in the contracts.)

An important element of concessions is that, where local communities are involved, the link between tourism earnings and conservation of the protected area must be made very strongly. Where this is not done, local people will be much less inclined to protect the protected area. For instance, a study in Komodo National Park, in Indonesia, found that although residents had positive attitudes towards tourism and that there was support for conservation, there was no positive connection between the two³⁸. Tour operators have a very strong role to play in communicating conservation messages³⁹.

3.4 Direct operation of commercial activities

Direct commercial activities – provision of commercial goods and services by the protected area (other than provision of access or activities covered by user fees)

An alternative to the system of private concessions, is for protected areas management bodies to generate income through operating services themselves. These may include any of the services traditionally handed over to private concessionaires because of the lack of skills within protected areas services such as accommodation, guiding, equipment hire, or sales of merchandise. With the increasing sophistication of the tourism industry and, in many countries, increased ease of finding skilled personnel, along with an awareness of the contribution to protected area revenues which tourism can make, protected areas administrations may more easily be able to become involved in such commercial activities in their own right in order to maximise protected area revenue. This can be done either directly, if national legislation systems allow, or indirectly through a state-owned company. A suitable format might also be some kind of public-private sector partnership such as a joint venture with a private company or with local communities. This kind of arrangement would help to stem the siphoning-off of funds through over-allocation of private concessions, and in the case of local communities could help them with marketing and capacity-building.

Strong management is needed to prevent protected areas personnel simply setting up private enterprises on their own behalf, such as at Bromo Tengger Semeru National Park, in Indonesia, where rangers are involved in a range of lucrative activities from hotels to internet cafés, with no financial benefit to the protected area.

³⁷ Spenceley, A. (2004) Responsible Nature-based Tourism Planning in South Africa and the Commercialization of Kruger National Park, in in Diamantis, D. (ed.) *Ecotourism: Management and Assessment*, London: Thomson, Chapter 15

³⁸ Walpole, M. J. and Goodwin, H. J. (2001) Local attitudes towards conservation and tourism around Komodo National Park, Indonesia. *Environmental Conservation* 28 (2) 160-166

³⁹ Armstrong, E.K. and Weiler, B. (2002) Getting the Message Across: An Analysis of Messages delivered by Tour Operators in Protected Areas, *Journal of Ecotourism* 1 (2&3) 104-121

Another possibility for generating income arises when protected areas are used as sets for filming, subject to payment of appropriate fees. Books written by protected areas personnel can provide another source of income in the royalties generated, although this is never likely to be large.

Some Caribbean protected areas also raise visitor revenue from the staging of special events, including weddings: these are specialist activities that depend on specific market demand in relation to the location of individual protected areas.

3.5 Taxes

Taxes – levies on certain goods, services or transactions that provide funds for national or local government, and which, in this case, are used to support protected areas

A further method of financing protected areas is through taxes. These may take the form of national taxes levied on all visitors to the country or on users of particular tourism services or products, local taxes levied on users of the protected area or on the use of equipment (it will be seen below in the examples how these differ from user fees). The revenues raised are then used for conservation. The advantages of using the tax system include the ability to generate funds nationally (or regionally) and on a long-term basis; the freedom to use funds to suit a variety of needs, as accountability is to the public at large and not to a specific donor; the possibility of using such funds as a "matched" component of funding from international donors, who are increasingly requiring evidence of national commitment as a prerequisite for support; and ease of collection, since there is usually no need to set up a new collection system⁴⁰.

There are also disadvantages of the system. One is that it can be seen as less fair than collecting fees directly from protected areas users, as all visitors to the country/region are taxed for services/resources they might not use. Other difficulties may arise in winning political support for new taxes and setting them aside for conservation, particularly in countries where conservation is a low priority. In Belize, years of negotiations were required before a conservation tax was established, and it was set at a much lower level than originally anticipated. Here, as in many countries, special legislation was required for the tax to be earmarked for a special fund rather than paid into the general treasury. It may be necessary, for political reasons, to allocate revenue raised to different departments or activities. Furthermore, the up-front costs of lobbying for and building such systems also need to be weighed against their potential benefits, although the process of building a constituency to support protected areas through tax legislation goes hand in hand with constituency building for many other purposes - a necessary investment whether or not it leads to specific taxes linked to conservation⁴¹.

A further problem with taxes may arise when there are too many small taxes, as these can be inefficient to collect and administer, easy to avoid, and may be an irritant to tourists if they have to pay each individually, or are inconvenienced by the payment process and associated bureaucracy. It is therefore advisable to simplify tourism taxes, and where possible, to provide mechanisms for tour operators to pay taxes directly on behalf of their clients, and to incorporate them into the overall prices of the tours that they offer

Bed levies are common around the world, and this is most effective when the area is within one municipality or protected area. For example, in the USA, the state of Delaware imposes an 8% charge on room prices of which 10% goes to finance beach conservation. In the Turks and Caicos Islands 1% of the room tax goes to a protected area conservation trust fund (the total tax is 9%).

It can be argued that because tourism is a major source of environmental impact, including climate change, the cost of reducing or rectifying environmental impacts should be included in the cost of travel by air, for instance by adding a tax to the cost of a holiday or by taxing

⁴⁰ after Op cit 11

⁴¹ Op cit 11

airlines on fuel consumption. Ring-fencing some of these funds for conservation would create a major source of income. However, strong economic and political lobbies oppose this, and air travel is beyond the scope of the Kyoto agreement on climate change⁴².

3.6 Volunteers and Donations

Volunteers and donations – volunteers are persons who offer their services to a protected area of their own free will and without payment (except, in some cases, payments to cover their basic living expenses); donations are gifts of money or, in some cases of goods and services, that are donated to support protected areas

Some protected areas have a policy of involving volunteers in their work, either through providing guiding and interpretation services, fund-raising or through staffing key services such as entry booths. This is likely to work best in industrialised countries where there are pools of relatively wealthy people with considerable disposable time. Examples of volunteer systems are those used in Canada⁴³, and in the Brisbane Forest Park in Australia.

A further way of generating funds for conservation areas through tourism is via donations by tourists who have been to the area or have some interest in it and by private companies keen to demonstrate their CSR (Corporate Social Responsibility) credentials. This is a useful way of transferring funds from richer Northern communities concerned about conservation of the world's natural resources to poorer Southern communities who lack the finances to conserve these resources themselves. There are various ways of operating these schemes, including through trust funds and 'Friends of...' organisations. An additional conservation benefit of such groups is that subscribers can be encouraged to lobby against specific threats to the conservation of the area they are interested in.

Many tourism companies set aside a small proportion of their profits (generally less than one percent), or make a donation per booking, to support a variety of philanthropic activities, although these mostly focus on humanitarian rather than environmental organisations. However, tourism companies that specialise in nature-based tours, and some mass tourism companies, support environmental projects and organisations in the destinations visited, particularly if these improve opportunities for tourism, for example, by developing trails or interpretation and guiding, and appeal to their clients. Some companies also encourage their clients to make donations to the projects that they visit, generally by pointing out the work and funding needs of projects during the course of guided tours, and leaving it up to clients to donate if they wish. Sites can also help to encourage donations by setting up donation boxes in suitable locations, such as at visitor centres or in on-site accommodation or food outlets: for instance, a donation box at Jozani Forest Reserve, in Zanzibar, accumulated \$307 in 1997, with the proceeds going to local communities.

A few specialist tour operators include a large donation for conservation activities in their tour prices, of perhaps US \$ 100 or more. These levels of contribution are exceptional, and are associated with specialist, low volume and very high quality tours. They are only likely to be achieved under special circumstances that involve both the particular tour operator and their ability to reach specialist market segments able to pay high prices, as well as keen to experience and contribute to conservation in action, in sites offering unique experiences.

A Travelers' Philanthropy movement⁴⁴ has been established in the US, with the goals of mobilising travel industry investment in the movement, and motivating travellers to become destination philanthropists and stewards. Travelers' Philanthropy note that a large segment of travelers believe it is important that travel companies they use employ local residents and support the local community, and are highly committed to travel that protects the local environment, engages visitors in the local culture, and returns benefits to the community.

⁴² Op cit 2

⁴³ Op cit 10

⁴⁴ Center on Ecotourism and Sustainable Development (2004) "Travelers' Philanthropy: Helping Communities Build Economic Assets & Sustain Environmental & Cultural Resources in an Era of Rapid Globalization, Website: www.ecotourismCESD.org



**Public-private partnerships to
operate eco-resorts provide
income for national parks**

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4 Conclusions & Recommendations

Factors affecting the ability of protected areas to raise funds from tourism

Protected areas attract tourism, and some sites are able to gain substantial revenues from tourists and tourism businesses. However, levels of tourism to individual protected areas, and the ability to raise funds for site management through tourism, depend on a number of factors. The most important of these are the accessibility and attractiveness to tourists of any particular site, which in turn dictates market demand. To a degree, market demand can be influenced by efforts to publicise a protected area and its opportunities for tourism. However, unless there is a demand for tourism to the site, the infrastructure – including transport links and private enterprises providing accommodation and tour arrangements - to support tourism is unlikely to be developed significantly: in such circumstances, tourism will tend to be very limited and a poor source of revenues for a protected area. Without market demand, tourism has little to offer a protected area.

The second key factor concerns the governance and management effectiveness of sites. Most sites are administered within the public sector, and are therefore subject to limitations on their budgets, and on their ability to raise funds for site management (as opposed to remitting any funds raised back to central government). This can mean that some sites may receive little if any of the income that they raise from tourism activities, although they may gain some political support by demonstrating their economic value to their country as a whole. Alongside this, tourism – even if the number of visitors received is only a few thousand each year – requires management and investment in appropriate facilities in order to prevent adverse impacts. Many protected areas lack the funds, staff resources and skills needed to invest in effective management of tourism, and to be able to raise significant funds from tourism. The potential benefits of tourism to any protected area have therefore to be set against the costs of providing facilities and staff to manage tourism, and any adverse impacts of tourism on site conservation goals. A further key issue here is that tourism is highly dynamic in that numbers of tourists can vary hugely from year to year at any site, and sites that are ‘discovered’ by tourists can see rapid rises in visitation. Rapid falls and rises in tourism levels both pose problems for tourism management at a site.

Sites can address these issues by:

- working with local and national government to change the administrative frameworks within which they operate to allow sites to retain funds raised through tourism (although this takes time);
- development and implementation of effective tourism management plans, including integration of tourism alongside conservation management priorities and establishment of limits on the scale and types of tourism permitted (for example, drawing on the framework set out in the CBD’s Guidelines on Biodiversity and Tourism);
- making links with the tourism sector in order to improve understanding of tourism pressures and potential for the site, as well as of conservation priorities and ways these can be reconciled with tourism (for example, by controlling tourist numbers, areas that can be visited, timing of visits and types of tourism activities permitted);

Unfortunately, many protected areas are particularly weak on these issues. A survey of 200 protected areas in developing countries carried out by WWF⁴⁵, found that management of commercial tourism and provision of visitor facilities were amongst the poorest aspects of management effectiveness, along with management planning, stakeholder involvement and

⁴⁵ WWF (2004) “Are Protected Areas Working?”, WWF International, Gland, Switzerland

incorporation of research data into management (a factor that affects ability to adapt management to changing circumstances). Monitoring and evaluation, and education and awareness raising, which are all important for effective tourism management, were also found to be poor.

The opportunities for generating revenues directly or indirectly from tourism are primarily via allocation of government revenues (from general taxation or from tourism-related taxes); fee charging to businesses based outside of protected areas for their use of protected areas (via entrance fees, user fees, and permits); and allowing businesses to purchase concessions or leases to operate inside protected areas. This report has identified the main mechanisms by which protected areas raise funds from tourism:

- Entrance fees
- User fees
- Concessions and leases
- Direct operation of commercial activities, royalties
- Taxes
- Volunteers and donations

As outlined above, the transferability of these mechanisms to any particular protected area depends on the existence of a demand for visitation at that site (and the infrastructure developed around this demand), and on the ability of that site to successfully manage tourism and to raise revenues for site management through this. User fees, concessions and leases, operation of commercial activities and taxes are only feasible where there is a realistic level of demand for tourism to a protected area, and where there is a tourism infrastructure not only to support this, but also to facilitate collection of revenues (which, in turn, requires the cooperation of local tourism enterprises). Entrance fees are generally collected directly by protected area staff, but this may not be feasible or economic at sites with multiple access points, or low levels of visitation, or both. Volunteers and donations can often be most effectively managed through links with an NGO or foundation that assists with site management through a hybrid arrangement or partnership. With the exception of entrance fees, the effectiveness of all these mechanisms is linked to the ability of protected areas to work with local tourism businesses, and to the strength of the local tourism sector. Therefore the ability of protected areas to establish hybrid arrangements and partnerships with the commercial tourism sector is particularly important.

Whatever type of organizational arrangements are in operation for management of protected areas, several factors need to be in place if they are to be effective at drawing in the funds that they require, in particular these include:

- Establishment and implementation of clear goals for the management of the protected area, and which are understood and broadly accepted by all relevant local, national and international stakeholders, from local communities to intergovernmental bodies
- Transparency and accountability in the management and use of funds
- Capacity to use funds to manage the protected area effectively, including retention of suitably trained and competent staff, and sound expenditure on necessary equipment and infrastructure
- Maintenance of good relations with key stakeholders, especially local communities, the private sector, and local and national government

In addition, where tourism is involved, protected areas will need to be effective at managing tourism, including having the management capabilities and capacities to ensure that tourism activities take place only in ways that are compatible with and supportive of the overall objectives of conservation. Key factors for this are outlined in the UNEP Principles for

Implementation of Sustainable Tourism⁴⁶, and the CBD Guidelines on Tourism and Biodiversity.

To what extent should protected areas consider raising funds from tourism?

The factors discussed above also impact on the extent to which protected areas should consider raising funds from tourism. As a general principle, all protected areas should also seek a diversity of funding sources in order to mitigate the risks associated with excessive dependency on any one source. Generation of income from tourism provides one source of funds for site management, but may be volatile as levels of visitation change, and must also be balanced against the costs of management of tourism. There are possibilities to even out variations in income from visitation by setting up trust funds to receive tourism income, and to pay out funds for protected area management at a level that reflects average levels of tourism over several years.

Protected areas need to be realistic about the potential to raise funds from tourism. Many sites tend to overestimate the benefits and underestimate the costs of tourism: in part, this is because they often fail to establish proper management plans for tourism, and to understand the business realities of tourism. Most examples of protected areas that have raised significant funds from tourism focus on sites of high tourism potential, often in developed countries or areas with well-established infrastructure and tourism markets. These sites are exceptional in various ways, and although they provide good examples of what is possible in some situations, lessons learned from these sites are not necessarily relevant to many protected areas in developing countries. In broad terms these sites fall into three categories.

- Some sites already have high levels of visitation, and for these sites the priority is to get to grips with tourism to ensure first, that it is effectively managed so that it does not harm attainment of conservation goals, and second that it generates sufficient revenues for the site to cover tourism management costs (including interpretation and awareness raising activities) and if possible to provide a surplus that can be used for conservation purposes. For some of these sites, the priority may not be to raise revenue from tourism in the first instance, but to reduce the impacts, and costs of managing tourism.
- Some sites have high tourism potential, because of a combination of their natural features and location in relation to tourism markets, but do not currently receive numbers of tourists to match this potential for a variety of reasons. These sites need guidance on how far it is worth for them to develop tourism activities taking into account overall conservation priorities and the impacts that tourism may have on these (including the costs of managing tourism); on development of tourism management plans; and on building links with the commercial tourism sector to increase levels of tourism and revenue in accordance with their management plans.
- Some sites will have low tourism potential, or be subject to restricted access for conservation reasons. At these sites, tourism will either be inappropriate or limited to very low-level, specialist groups of visitors. In either case, the potential revenue that may be generated through tourism will be low, except in very specific circumstances such as controlled hunting of rare species as part of culling programmes for maintenance of healthy populations.

Tourism management plans will be needed where tourism takes place in any protected area, and should integrate business realities of tourism with the sites conservation goals. Ideally these plans should be prepared in advance of any tourism activities: in practice, most sites will need to prepare plans to catch up with existing tourism.

As well as for its potential for generating revenues for conservation, sites may also support development of tourism for other reasons to help to promote their survival. Diagram 1

⁴⁶ UNEP (2002) Principles for Implementation of Sustainable Tourism, Paris: United Nations Environment Programme <http://www.unep.org/pc/tourism/policy/principles.htm>

identifies six survival essentials for protected areas, all of which are interlinked and mutually supportive. Sites may use tourism as a means of gaining political support through government policies and practices, and support from local communities and key stakeholders, rather than as a means of generating revenue. Although difficult to quantify, such support may be of equal or even greater importance for a protected area than revenue generation.

Individual protected areas will need to decide whether tourism is appropriate at the site, and if so what levels of visitation and types of tourism will be suitable. This requires an understanding of tourism markets and demand, and essentially brings together the skills and knowledge of the commercial tourism sector, with the conservation management skills of site managers. As indicated above, the selection of appropriate mechanisms for management of and revenue raising from tourism depends on a variety of factors, and local tourism businesses and infrastructure will generally play a significant role in implementation of mechanisms to raise revenues from tourism for site management. Protected area managers therefore need to enhance their skills at building links with tourism businesses to help them manage and raise revenues from tourism.

4.1. Next Steps

Development of tourism as one source of funding for protected areas is consistent with both the programme of Work for Protected Areas and the Guidelines on Biological Diversity and Tourism, adopted by the Seventh Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, 2004. As outlined above, tourism will not be appropriate at all sites, both for conservation reasons and for reasons associated with the operation of the commercial tourism sector and market demand. Further work is needed to understand better at which sites tourism is most suitable for revenue raising, and to be able to differentiate the role of tourism at different sites, including matching appropriate types of tourism to particular sites, taking into account conservation goals and tourism markets.

This report has also identified the need for protected areas to develop and implement effective tourism management plans that integrate business realities of tourism with the sites conservation goals, and to build management capabilities and capacities to ensure that tourism activities take place only in ways that are compatible with and supportive of the overall objectives of conservation. For some protected areas, the priority may not be to raise revenue from tourism in the first instance, but to reduce the impacts, and costs of managing tourism. The ability of protected areas to establish hybrid arrangements and partnerships with the commercial tourism sector is also particularly important, and efforts are needed to build up their skills at making links with tourism businesses to help manage and raise revenues from tourism. As indicated by WWF's recent report "Are Protected Areas Working?", protected areas in developing countries are particularly weak on all these aspects. These matters could be addressed by working with a selection of sites with high levels of/potential for tourism to build capacity for development of tourism management plans, visitor facilities, interpretation/guiding and awareness raising programmes, and implementation of revenue raising mechanisms.

Dive tags have proved
a successful
fundraising tool for
marine protected areas

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5. Case studies of organisational arrangements

Parastatals

- **Zimbabwe:** The Department of National Parks and Wildlife Management became a parastatal at the end of 1996, with the ability to manage its own funds. Fees for the national parks are still set nationally, however.
- **Kenya:** The Kenya Wildlife Service was established in 1989 (replacing the former Wildlife Conservation and Management Dept.). It was virtually cut off from government support (which was minimal in any case), but simultaneously given a massive financial transfusion from donors (World Bank \$60.5 million, plus around \$40 million from other donors). Autonomy was limited due to government control of the Board and frequent intervention and public pressure to retain much of its public sector functions. It proved unable to take advantage of all the opportunities it had in respect of investment patterns, HR management approaches and relations with the private sector were not noticeably different from when it was the WCMD. The probable reasons for this were due to the strong internal and external cultural elements that resisted change and were generally suspicious of the private sector.
- **South Africa:** The KwaZulu-Natal Nature Conservation Service (NCS) became a parastatal in 1998 and is judged to have made good use of the opportunities and flexibility it enjoyed. Its protected areas are managed as conservancies under cooperative agreements with local landowners. The conservancies can be used for farming as well as wildlife preservation. Landowners pay an annual fee based on the number of hectares they own, and this helps to pay for NCS running costs. Indigenous communities manage their conservancies through boards, and NCS provides training and employment in tourism-related business such as guiding and handicraft manufacture. NCS sells surplus animals as a further way of generating revenue.
- **Ghana:** Kakum National Park has forest elephants, seven species of primate, and high antelope and bird diversity, providing tremendous potential for ecotourism. In 1994, Kakum National Park received fewer than 5,000 visitors per year. A USAID project funded various park enhancements including a visitors' centre with restaurant and souvenir shop and a rainforest canopy walkway 30 metres above the ground, the first of its kind in Africa. With these facilities and the rehabilitation of the nearby Elmina and Cape Coast castles, which helped to attract visitors, visitor numbers topped 170,000 in 2000. An entry fee is paid for the park and a user fee for the walkway. When the USAID project finished the assets (worth \$750,000) were transferred to the Ghana Heritage and Conservation Trust (GHCT) through a complex two-year-long negotiation, along with the rights to manage the business elements of the park (walkway fees, shop concessions, etc). The GHCT is run by a board that is made up of local people, and which includes scientists, tribal chiefs, park management staff, NGOs, businessmen and members of local authorities. The walkway and souvenir shops generate around \$250,000 yearly, and negotiations are under way for concessions on mineral water and organic cocoa around the park, using the park's name as a copyrighted marketing add-on. Communities around the park work with local tour operators to guide and accommodate tourists.

Public-private sector partnerships

- **Philippines:** El Nido-Taytay Managed Resources Protected Area demonstrates a good private-public sector partnership. Here, a developer (the Ten Knots Development Corporation) built a series of exclusive island resorts over 20 years, which was a pioneering tourism concept in the Philippines. Award-winning tourism services are combined with effective environmental management and community service. The relative protection of the nearby Bacuit Bay - a unique limestone cliff landscape with azure bays and white sandy beaches - and the creation of this managed protected area is due to the developer's efforts. There are critics of the scheme, since the resort is the

major local employer and many social/environmental costs are shouldered by the resort rather than by government departments, resulting in an undermining of the public sector's power and a possibly skewed angle to local developments since there will inevitably be a tendency for them to look after their own interests. Overall, though, this is a good example of effective tourism-funded conservation.

- **Tanzania:** In 1992 the government handed over management of Chumbe Island Coral Park to a private company. Tourism and environmental education facilities were funded by private, governmental and NGO donations. Considerable expertise was donated to the project by volunteers. Site management is assisted by representatives from nearby fishing villages, university scientists and government officials. Local people are employed as park rangers, and tourism has created the stimulus for protecting the reefs. In 1999 Chumbe won the British Airways Tourism for Tomorrow award.
- **South Africa:** The Madikwe Game Reserve was established on former farmland in 1991 and is now a major protected area in the North West Province. Several sites within the reserve are leased to the private sector, which has built game lodges and manages tourism and trophy hunting. Even after only three lodges were built, by 1999, the economic impact of tourism was already greater than that of the former farm operations. Management is carried out through a partnership of public sector, private companies and local communities.

Community based management

- **Zimbabwe:** a nationwide program called CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) began in the 1980s and was one of the first programmes to introduce an innovative approach to working with communities. Under the scheme, the ownership, control and benefits of wildlife were made over to the local community. The scheme was workable because 42% of Zimbabwe's land area is designated communal land, and 18% of Zimbabwe's territory participates in the programme. Aspects of the scheme included selling photo and hunting opportunities to tour operators, farming the land, selling other resources such as timber, and developing tourism projects. The most popular use for tourism is licensing hunting tour operators in return for a share of the profits, which are subsequently distributed or used for infrastructure development. The goals were to allow wild species to contribute to livelihood and to allow local people to make management decisions. It has been criticised by animal welfare apologists who see it as an excuse for killing wildlife, while more fundamental problems are that even after nearly two decades, it has not become self-financing and continues to rely on overseas subsidies. There have also been difficulties over revenue-sharing arrangements. However, the conservation benefits appear to be measurable in that the elephant population is said to have increased by 20% in 8 years, while local people report high levels of satisfaction with the program.
- **Philippines:** Palawan's Underground River is a former National Park (also a UNESCO World Heritage Site) that was made over to the City Government of Puerto Princesa in an exceptional move following a political tug-of-war. The local mayor made sure that the new system worked, achieving good stewardship against slash-and-burn, a high level of local acceptance and a good system for accredited boatmen to take visitors on an hour-long cruise inside the river/cave. Revenues are kept locally and are mainly used for monitoring, enforcement and local benefit (in contrast to the system for all other Filipino parks, where the money returns to the national coffers). This positive experience engendered other examples, such as the Tubbataha Reefs, a dive location now managed at provincial level and whose entrance fees are paid into provincial trust funds.
- **Namibia:** Legislation was passed to allow community-run 'conservancies' to manage natural resources. These are popular amongst local people and organisations and there has been an increase in the amount of wildlife and improve income through community-private joint ventures for hunting and ecotourism. Success has been achieved partly because of the way that government agencies, the University, and 12 NGOs coordinate their activities within a body called NACSO (The Namibian Association of Community Based Natural Resource Management Support Organisations).

- **Indonesia:** In Mount Halimun National Park, a consortium of ecologists, entrepreneurs and development agencies established several guesthouses within the park during the 1990s. In 1997 ownership was handed over to local communities, members of which had been trained in tourism services and management. Despite these inputs, by 2001 the project had failed to attract enough visitors to make it economically viable, and local people had returned to other means of earning a living. A combination of circumstances seems to have affected the project, including the construction of a better-quality guesthouse nearby which attracted more visitors; the fact that the locally-run guesthouses lacked modern means of communication so that making reservations was difficult; and difficulties with maintaining the partnership between the funding agency, the project managers, and the local community. The project also appears to have lacked the essential market orientation, and it was unlucky in that it was launched just at the time that Indonesia began to suffer from poor publicity and declining tourism numbers due to the forest fires and instability of the late 1990s.
- **South Africa:** The Makuleke were encouraged to make a land claim within the Kruger National Park by the post-apartheid decision to open up wildlife management to private and community groups. A Common Property Association was formed which, with the help of NGOs, enabled the Makuleke to negotiate and win their land claim. The Makuleke subsequently developed several tourism joint ventures with the private sector which were showing economic, social and cultural benefits. The experience showed that participatory community development is a slow process and considerable patience is often needed.
- **Namibia, Botswana and Zimbabwe** have shown a rapid uptake of community-based management, with increasing revenues and increasing wildlife populations. A key component of successful community-based management is proprietorship, of which there are three aspects: the right to benefit, including cash; the right to management, for instance to set quotas; and the right to sell to best advantage. Evidence also shows that channelling wildlife revenues in at village level (rather than higher levels) results in substantially improved performance in several variables: democratisation and accountability; reduced corruption; construction of social projects; awareness and wildlife management.

NGOs management

- **Saba, Netherlands Antilles:** Saba Marine Park was established in 1987 by the government of Saba, in the Netherlands Antilles, with grants totalling \$270,000 from the island government, the Dutch Development Corporation, and private foundations. Management of the park is delegated to an NGO, the Saba Conservation Foundation, which was created to manage the park and has authority to carry out all management activities, including land acquisition to expand the protected area and the creation and maintenance of trails. The Foundation has a three-pronged revenue-generation strategy emphasizing user fees, souvenir sales and voluntary donations. The strategy also focuses on keeping operating expenses low by using volunteer services wherever possible, soliciting in kind goods and services, and requesting grants for special projects, such as research and monitoring. The Island government continued to subsidize operating expenses for three years beyond the start-up period while the revenue streams were being developed. Donations are generated through the Friends of the Saba Marine Park. Souvenir items at Saba bring in significant income and the park is investigating the possibility of corporate sponsorship, allowing businesses to use the park's logo and name for an annual fee.

Hybrid arrangements & partnerships

- **Indonesia:** Komodo National Park is embarking on a collaborative management approach, involving all key stakeholder groups in the management of the protected area. These include the park authority (PHKA), local government, a Joint Venture between an international NGO (TNC) and a local tourism company (Jaytasha Putrindo Utama), as well as local communities, government agencies, and private sector organizations. A tourism concession has been established with the goal of protecting the park's biodiversity and generating revenues required for the park in a way that is environmentally sound, socially responsible and economically viable. The tourism

concession will be responsible for financial management, investments in Park infrastructure and marketing, while the collaborative management agreement provides the governance structure for the management of the Park. A Joint Venture company (JV) "*Putri Naga Komodo*" has been established to run the concession, and the charter of this JV company directs that any profits and revenues earned will be invested back into conservation. A controlling shareholding in the Concession ensures TNC's ability to fulfill its obligation to ensure the compatibility of all activities in the park. This agreement brings together the complementary skills of a conservation NGO and a tourism-oriented private sector company⁴⁷.

- **Indonesia:** Bunaken National Park was established in 1991 to protect its reefs and mangroves and outstanding biodiversity. The Indonesian government has established the multistakeholder Bunaken Management Advisory Board (BNPMAB) by government decree. The 15 seats on the board are allocated to 8 non-governmental and 7 governmental organisations, and include village representatives, park authority, the Tourism and Fisheries Departments, the local university, and the private tourism sector. To help finance the park, the BNPMAB has adopted a system of entrance fees. The provincial government of North Sulawesi enacted legislation to permit these fees to be introduced. 80 percent of the funds collected from the entrance fee system are used specifically for conservation programs in the park, including enforcement, conservation education, trash management, and environmentally-friendly village development. The remaining 20 percent is split between local, provincial, and national government, and provides an incentive for government to continue to support the scheme.
- **USA:** In an initiative supported by the US National Parks Service and the American Travel Industry Association, Golden Gate National Park along with over ten other natural and cultural parks with a range of visitor levels from high to low, have set up joint promotion and marketing. Using professional assistance, the parks have repackaged information from their websites, aiming it at a specific tourism audience and jointly advertising high and low visited parks. This is helping highly visited parks to reduce pressures from visitation, while increasing visitation at lesser-known parks.
- **USA:** As US National Parks are part of governmental agencies, they are not permitted to raise funds themselves. However, funds can be raised by associated foundations, and the US The National Parks Foundation has been established with this goal. The Foundation has a licensing agreement with the US National Parks Service, and annually raises around US \$52 million in cash and in kind by building long-term corporate partnerships between parks and business. Three years ago their "proud partners" programme started which includes partnerships with American Airlines, BP, Ford, Time Warner and Discovery Channel. The funds raised through this are provided to the US National Parks Service to support conservation activities.
- **USA:** Protected areas around Las Vegas have formed the "Outside Las Vegas Foundation", through which they work together to benefit from economies of scale and jointly raise funds by selling valuable lands inside the build up area of Las Vegas at high prices, exchanging them for lands outside the city. The large amount of money earned through this is being used to finance conservation projects that have been jointly developed by the cooperating bodies.

⁴⁷ The Nature Conservancy, Collaborative Management Initiative in Komodo National Park, The Nature Conservancy Southeast Asia Center for Marine Protected Area (SEA-CMPA <http://www.icran.org/SITES/komodo.html>)

6. Case Studies of funding methods

Entrance fees: pricing

- **Ecuador:** Ecuadorian national parks have differential fees for domestic and foreign tourists (usually 200% higher) and different fees for each park depending on their location and popularity. For example, foreign tourists pay \$20 at Cuyabeno Fauna Production, \$5 at Podocarpus National Park and \$100 for the Galapagos National Park (the entry fee to this is \$6 for Ecuadorians).
- **Mexico:** At the National Marine Park near the popular resort of Cancun, boat operators enter the area freely, and there are too few park officials to control the situation, even though it is realised that excessive visitation is damaging the site. Mexican legislation allows an admission fee of around \$3 per visitor to be charged, but none is currently collected. Boat operators have agreed a target for voluntary donations but this attempt at self-regulation is not working as less than half the target materialises. There is resistance on the part of boat operators to charge a per capita entry or user-fee as this would entail revealing the size and extent of their business and possibly to higher income taxes⁴⁸.
- **Costa Rica:** here, an entry fee increase for national parks was exceptionally controversial and poorly managed. Fees were raised by a factor of 10 in 1994 (from \$1.5 to \$15 for foreign visitors), well above the middle range of willingness to pay indicated by studies. This provoked immediate protests from tour operators, who were often contractually obliged to absorb the cost; from tourists, who felt they were being exploited; and from local residents who relied on national park visitors and whose livelihood was threatened by the potential decline in visitors. Residents took control of the park entrance at one point⁴⁹. However, the higher fees worked to the extent that visitor numbers plummeted by an average of 44% in the year after the increase but total revenues increased substantially. The benefit to overall park finances and reduction of pressure on ecosystems had to be balanced against the loss of revenue to local communities, and the fee increase was reduced. The case demonstrates the importance of collaboration and shared agreement (or at least not too much disagreement) on entrance fee increases.
- **South Africa:** Kruger National Park has replaced its previous vehicle fee for a visitor fee. The standard Daily Conservation Fee for all adult international visitors is \$18. A 10-day International Wild Card Membership can be purchased which allows access to what? for what cost? Each 10-day benefit purchased will remain valid within a window period of 15 days from the date that it is first used
- **Zimbabwe:** In November 1996 entry fees to the Gonarezhou National Park was increased from \$0.90 (Z\$10) to \$1.80 (Z\$20) for domestic tourists and from US\$1.80 to US\$10 for foreign tourists. A vigorous campaign against the increases resulted in halving the admission fee two months later, reverting to Z\$10 for Zimbabweans and US\$5 for foreigners⁵⁰.
- **Canada:** In Ontario Provincial Parks, fee increases of over 40% resulted in a substantial increase in visitor numbers due to investment in better recreational services⁵¹
- **USA:** Most US National Parks collect entrance or vehicle fees. \$50 covers an unlimited number of entrances to them all, the most popular of passes sold by the National Park Service. A number of popular US National Parks charge up to \$20 (covering 7 days) for a regular passenger vehicle, with annual area passes available at around \$40. Less visited parks charge around \$10 and smaller parks around \$4. In the Acadia National Park, commercial tour bus fees range from \$150 for passenger capacity of 26 or over to \$25 for sedans with 1 to 6 capacity. Group fees in Yellowstone are about twice those of Acadia.

⁴⁸ Lubowski, R.N. and Barton, D.N. (2001) The Economics of Managing a Marine Park in Cancun, Mexico, EEDP IV

⁴⁹ Op cit 10

⁵⁰ Goodwin, H., Kent, I., Parker, K. and Walpole, M. (1998) Tourism, conservation and sustainable development: Case Studies from Asia and Africa, IIED Wildlife and Development Series no. 12, London, IIED

⁵¹ Moos, R. (2002) Ontario Parks- a successful business operating model, PARKS (in press)

- **USA:** The US National Parks Service is operating a demonstration project under which a selected number of national parks are allowed to raise their own entrance and user fees. 80% of the revenue gained from this is retained for investment by the park that collects the fees, while the remaining 20% is put into a fund for use by lesser-visited parks that have no potential to raise their own funds from visitors. In several parks (including Grand Canyon, Bryce, Zion, Lake Mead) funds have been used for investment to provide facilities such as visitor centres, boat launch ramps, shuttle buses, rest rooms. This has been communicated via signs in the parks indicating the improvements that have been made possible through this scheme.
- **Thailand:** increased fees for three recreational areas in northern Thailand (Doi Inthanon National Park, Doi Suthep and Mae Sa Waterfall) were calculated based on the 'recreational value' of each area. The study recommended an increased entrance fee for Doi Inthanon National Park from 5 baht (\$0.12) per person to 40 baht (\$1) per person, and for Mae Sa Waterfall from 5 baht (\$0.12) per person to 20 baht (\$0.50) per person. For Doi Suthep, the recommendation was that the entrance fee should remain at zero given the difficulty of assessing the predominantly spiritual value of the site.
- **Nepal:** Visitors to the Annapurna Conservation Area pay a \$12 entry fee which covers the costs of towards park maintenance.
- **Malaysia:** The Sarawak Forest Department increased entrance fees from \$0.90 to \$2.60 in July 2002 in an attempt to double revenues from this source. Critics say that although the increase is welcomed for some parks, it will detract visits from lesser-known ones and is too high for national visitors⁵². Concessionary fees are available for students, senior citizens and groups, however.
- **Philippines:** Tubbataha Reef National Marine Park, in the Philippines, has an entry fee (also called a conservation tax) of \$50 for foreign visitors and \$25 for local visitors. The park is also a World Heritage Site.
- **Indonesia:** A study of Komodo National Park found that only 6.9% of park's management costs were recovered through entry fees, despite the fact that visitors were willing to pay over 10 times the current entrance fee. Although there was clearly substantial potential for increased revenue, the extent to which fees can be increased depends to some extent on the effects a fall in visitor numbers might have on the local economy. A moderate, tiered fee increase was judged most likely to succeed.
- **South Korea:** The same admission fee of \$0.83 (1000 won) is charged for entry to all Korean national parks. Further income is gained from user fees (particularly camping) and concessions, but in total revenues cover only 32.6% of the total operating costs of the park. A willingness-to-pay study in 5 national parks showed a margin for increasing entry fees of up to \$14.

User Fees

- **Canada:** The Tobermory Maritime Association and the Fathom Five Park (the country's top dive area) run a dive tag scheme to improve the quality of the visiting divers' experience.
- **Indonesia:** At Bunaken Marine National Park in North Sulawesi, user fees are \$6 per day ticket to use the park's facilities or \$17 for one year. The user fee system has been adapted from the Bonaire Marine Park system and raised over \$250,000 for conservation programs in Bunaken during 2001-2003. Dive tags and tickets are purchased through marine tour operators based in the nearby city of Manado and in the national park, or from ticket booths in the park. Enforcement of the fee system is conducted via spot checks by park rangers on land and at sea. Proceeds from sales of dive tags and tickets are managed by the Bunaken National Park Management Advisory Board (BNPMAB), a multi-stakeholder board comprising dive operators, environmental organisations, academics, government officials and members of communities within the park. The BNPMAB uses these funds to finance conservation and development programmes such as village improvement schemes, collection and disposal of plastic and other waste,

⁵² Azahari O (2001) The Perception of Visitors of The New Entrance Fees to National Parks and Wildlife Centres, Hornbill 5:nn-nn <http://www.mered.org.uk/Hornbill/Azahari.htm> About Malaysia.

conservation education of park residents, reef and mangrove rehabilitation, and patrols and law enforcement aimed at ending destructive fishing practices. In 2003 Bunaken won the British Airways Tourism for Tomorrow award

- Saba, Netherlands Antilles:** A fee per dive is charged rather than a yearly fee because of geography: there is no shore diving and divers have to use boats, giving an institutional contact through which the per-dive fee can be levied. The fees are collected by commercial operators who are required, under the terms of their permits, to turn over all fees collected (as well as diver/snorkeller statistics) to the management foundation on a monthly basis. User fees were first charged only to divers (\$1 per dive) and snorkellers (\$1 per visit to the island). The fee was later doubled, and a yacht mooring/anchorage fee was introduced. These fees brought in about half of the park's revenue by the late 1990s. By 2003 the per-dive fee had been increased to \$3 and the proportion of income from user fees had increased to 70%. Other income comes from souvenir sales (32% in the late 1990s) and voluntary donations (17%).
- Bonaire, Netherlands Antilles:** Bonaire Marine Park operates a user fee system (also called an 'admission ticket') with the fee set at US \$10. Divers are provided with a dive tag to show that they have paid the fee which is valid for one year. The dive fee is collected on behalf of the Park by dive operators. Since all divers need to get their tanks from a dive operator, compliance is near 100% - although there is some recycling of tags, with old ones passed on to new arrivals by divers or operators. In general, though, the MPA has a good working relationship with the operators, who have to participate in an annual refresher course. The park received about 345,000 visitors in 2001 at its 86 dive sites, which generated around \$280,000 in fees. In 2000 80-90% of park management costs were covered by these revenues. Research shows that divers have a significantly higher willingness to pay for access to the park. A dive tag price of \$20 would result in annual revenue of over \$506,000 and would be associated with only a 6% decline in visitation. The study also shows that higher fees could be used to limit diver access to specific areas when there is diver-density related deterioration of the reef⁵³. However, there is resistance from dive tour operators to an increase in the fee, and instead other forms of raising revenue (fees for snorkelling, yacht mooring charges) are being considered.
- Curaçao:** The Curaçao Dive Operators Association (CDOA) operates a voluntary dive tag donation of \$10 with the information to divers that this money will help towards conservation, for which the diver receives a Curaçao Marine Park key chain (dive tag). Within the first two months over 500 tags were sold.
- Philippines:** WWF Philippines surveyed divers' willingness to pay for dive permits which would be used to improve the conditions of the coral reefs in Anilao. Results were P400 (\$7.10) per weekend visit (or P100 (\$1.77) per dive for average 4 dives on a weekend). After consultation, the official fee was lowered to P50 (\$0.85) a day.
- St. Eustatius:** The National Parks Foundation operates a compulsory dive tag of for the upkeep and maintenance of the park facilities in the St. Eustatius MP, opened in 1998. Annual passes are sold for \$15 and day tags are sold for \$6.
- St. Lucia:** The Soufrière Marine Management Authority has both an Annual and a Daily Marine Reserve Dive Fee (\$12 and \$4 respectively), while snorkellers pay \$1 per day. The rationale behind this is so that snorkellers (judged to be less wealthy than divers) will not be deterred. Permits can be purchased from St. Lucian dive operators, licensed dive leaders, or at the Soufrière Marine Management Authority office. There are also vessel fees ranging from \$10-\$25 (the amount depends on the size of boat and length of stay).
- India:** Kaziranga National Park provides fee-based activities such as elephant rides (Rs255 adult, Rs265 child). Visitors also have to pay a basic amateur photography fee (Rs175) and/or a basic amateur video-recording fee (Rs525). Different rates apply for amateur photography with additional lenses and for professional photography.

⁵³ Thur, S., 2003. Valuing recreational benefits in coral reef marine protected areas: an application to the Bonaire National Marine Park, University of Delaware.

- **Malaysia:** Taman Negara National Park has a camera permit of \$1.30 (RM5), a fishing licence of \$2.60 (RM10), and car park charges of \$1.30 (RM5) per day. Increasing the amount or introducing a two-tiered system so that foreigners would pay more has been discussed but not implemented due to “legislative and administrative inertia”⁵⁴.
- **Mexico:** A local consultancy group used government money of \$100,000 to develop the tourism infrastructure of El Chico, Mexico's first National Park (opened 1996). More than 25 kilometres of trails and two camp-sites were created and several rangers were trained. The camp-site costs \$20 for 4 people per night, which includes firewood and the use of hot water. Weekend occupancy rates are very high, giving work for six forest rangers. This concept has proved to be good business for conservation while helping local individuals develop the park.
- **USA:** Around 25% of revenues in state parks were obtained from camping fees⁵⁵. Most of the big national parks offer well-developed camping facilities, with some parks (for example Yosemite, Yellowstone and Rocky Mountain) providing numerous campgrounds, while others provide only a single main campground. Camping fees from \$4 to \$15. Some campgrounds have a fee collection station near the campground entrance while others have a self-registration system. Holders of a Golden Age Passport or a Golden Access Passport pay half the regular camping fee. The park entrance fee must be paid in addition to the camping fee.
- **Dominica:** To answer increasing use of facilities in Dominica, a user fee was introduced at several major attractions in 1997. The money generated has gone to pay for site-hardening initiatives such as improved paths and viewing-platforms.
- **United Kingdom:** National park land is mostly in private ownership, and there is no mechanism for charging visitors an admission fee. Instead, national park authorities charge for car-parking or for specific goods such as leaflets on hiking trails.
- **Uganda:** A gorilla tracking permit in Uganda costs \$250 plus park fees, means that just three habituated gorilla groups of about 38 individuals in total can generate over \$3 million in revenue per year, making each individual gorilla worth nearly \$90,000 a year to Uganda. Tourism funds have contributed to development at the local, national and regional level. The presence of such a valuable tourism revenue source in the fragile afro-montane forests ensures that these critical habitats are protected, thus fulfilling their valuable ecological function including local climate regulation, water catchment, and other natural resources for local communities. Prior to the outbreak of civil war, tourist visits provided \$1.02 million in direct annual revenues, enabling the government to create anti-poaching patrols and employ local residents.
- **Cameroon:** In 1994 trophy hunting generated over \$750,000 in user fees. Fees vary according to the species shot, and the number of animals killed is restricted. However, the benefits were less strong than they could have been because although 30% of the fees were supposed to go to a special conservation fund this did not happen, and because there was no mechanism for ensuring that safari hunting companies had a long-term interest in protecting the area⁵⁶.
- **Nepal:** Expeditions wishing to climb Mount Everest pay a fee of \$70,000, which has not proved to be a deterrent.

Concessions

- **Australia:** Kakadu National Park has lease arrangements with concessionaires that allow developments in the park, thus providing revenue for the park while reducing the need for public expenditure.
- **Brazil:** Foz de Iguacu National Park has more visitors than another other national park in Brazil at around 1 million visitors per year, making it the country's only self-sufficient park. It is the laboratory for concessions in Brazil. A large hotel and a boat operator that takes

⁵⁴ Op cit 21

⁵⁵ Eiken, 1992, in Op cit 11

⁵⁶ Wilkie, D. S. and Carpenter, J. F. (1999) The potential role of safari hunting as a source of revenue for finance protected areas in the Congo Basin, *Oryx* 33 (4), 339-345.

tourists beneath the waterfalls are examples, although the mechanism of granting concessions is not sufficiently transparent. Challenges to the park's economic resources include the demand to share in tourism benefits by people displaced by nearby Itaipu, the second-largest hydroelectric plant in the world (after the Three Gorges scheme in China).

- **South Africa:** South African National Parks (SANParks) have a policy of increasingly outsourcing commercial services and functions, expanding the funds available for management while allowing it to focus on the core business of conservation. While there was considerable resistance to this initiative, it has proven highly successful. Nine tourism concessions are likely to generate profits of \$35-53 million over the next twenty years, create some 700-800 new jobs, and have specifically been designed to increase the participation of formerly disadvantaged individuals and enterprises.
- **USA:** Around 16% of park revenues were obtained from accommodation in park-run lodges⁵⁷, although most US national parks do not offer overnight accommodation, with lodges in only about 25 of the 378 national parks. Most national park lodges are owned by the government but operated by private concessionaires, with room rates and food prices generally subject to supervision by the park superintendent in which the lodge is located. Facilities and prices span a wide range, from tent cabins for \$35 to \$50 to hotels such as the Ahwahnee in Yosemite National Park and Jenny Lake Lodge in Grand Teton National Park at over \$200 per night.
- **British Virgin Islands:** BVI National Parks Trust installed over 200 mooring points with funds from USAID and other donors. Commercial users, government officials, and Trust staff discussed several options for collecting revenues from the users of the moorings, including concession fees for commercial operators, individual visitor fees, and a surcharge on an existing cruise tax. The option selected was Marine Conservation Permits, sold directly by the Trust, which retains all fees and puts the revenues directly back into maintenance and operation of the protected area and the mooring buoys. Anchoring within the protected area is not permitted, so use of the moorings is mandatory. The permit is required to use the moorings. BVI boat owners pay an annual fee of \$25; charter boats pay a weekly fee of \$10 to \$15 depending on capacity, and dive operators pay \$1 per diver per day. Non-commercial foreign boats pay \$50 per year, foreign charter vessels \$375 per year. For convenience, Dive Operators Association members as well as Trust officials offer permits for sale. Fines for use of the buoys without permits can range up to \$500⁵⁸.
- **Philippines:** WWF Philippines is proposing a conservation tax in Mabini in the form of a dive tag. The Mabini local government tax collection system is inefficient - only 17% of resorts pay taxes, and large resorts pay national taxes but not local ones, which means that the municipality gains little from them. To try and overcome this, the local government at Mabini is making available pre-paid passes to the resorts so that guests can pay the fee as part of their resort bill. Visitors who do not stay at the resorts can buy their passes at the Town Hall. It has also been proposed to set up a 'drive-through' booth at the entrance of the park. The introduction of entry fees is planned to take place alongside the dissemination of information amongst divers, resort owners and other stakeholders. 85% of the Conservation Fee accrues to the Conservation Trust Fund, which pays for the conservation and management of the aquatic and coastal resources of Mabini. In addition, WWF has provided seed funding of \$6,840 (P400,000) and the local government \$3,420 (PhP 200,000) to the Fund. The resorts and other groups or individuals are also solicited for contributions. A multi-sectoral board was created to oversee the Fund and decide on the allocation of disbursements. The board includes representatives from resorts, divers' groups, fishermen, NGOs, bankers, and the LGU. This scheme is still at an early stage, with the board having been constituted only in 2003.
- **Namibia:** The country has a well-developed sport hunting industry. From 1983-1991, safari hunters took an average of 21 cheetahs per year. Most were shot on private land (mainly on game farms or hunting concessions rather than commercial cattle farms or communal land). While the total amount of money spent by a trophy hunter during his

⁵⁷ Eiken, 1992, in op cit 11

⁵⁸ Op cit 11

stay can be considerable, the trophy price for a cheetah is currently rather low, between \$600 and 1,500. In contrast, zoos sell live cheetahs for between \$6,000-10,000. The Cheetah Conservation Fund (CCF) believes there is scope for increasing promotion of the cheetah as a trophy animal along with raising the trophy fee, with a portion of the fee to be channelled back into cheetah conservation through the CCF.

- **Zambia:** privatization of game lodges and hunting concessions is regulated on an international competitive bid basis, but to encourage local investors and particularly indigenous entrepreneurs, certain leases and hunting concessions have been reserved for domestic bidders.
- **India:** At Keoladeo National Park the Forest Department operates and receives revenue from entry fees, food sales and river and land tours within the park. Additional businesses are licensed and provide further revenue. In 1995-96 the park authorities collected over \$364 per month from permits issues to rickshaw and tonga drivers, while \$980 was received from leasing the park book-shop⁵⁹.

Direct operation of commercial activities

- **Uganda:** Kibale Forest National Park runs selected guided chimpanzee viewing trips to habituated groups (although chimpanzees are harder to predict than gorillas). The de-nesting in the morning and the nesting in the late afternoon can be observed at close quarters, for groups currently not exceeding 4 per day. The cost per day is \$125 per person, food and extras excluded, and a 5-day venture costs at present \$500 per person.
- **Saba, Netherlands Antilles:** Saba Marine Park sells a variety of branded clothing and accessories as well as books and other souvenirs, and covers around 18% of its budget in this way.
- **United States:** The National Park Service and State Services (NPS) remains a traditional Government Department, entirely dependent on centrally-allocated budget, with any revenues earned going to the national treasury. NPS shows the typical features of a government department in that it is always over-running budget and is years behind on scheduled maintenance, while managers have no autonomy and no incentives to improve performance. By contrast, a number of state-level park services have been 'spun off' from state governments financially: they remain government departments, but with complete or considerable financial autonomy and HR and other management flexibility, and these have been very successful, in terms of both financial viability and management performance. An important feature is that if state park managers exceed expected annual revenues, they can retain the extra for use within the park (an agreed amount is returned to the overall parks budget to cross-subsidise less lucrative parks).
- **Antigua:** Nelson's Dockland National Park has developed specific revenue sources such as yacht dockage fees and leases and rents, as well as gift shop sales.
- **St Lucia:** Pigeon Island National Park stages a jazz festival every year.

Taxes

- **Belize:** a \$3.75 departure tax for every foreign tourist travelling by plane or cruise ship goes directly to the Protected Area Conservation Trust, a Belizean fund dedicated to the conservation of the barrier reef and rainforest. This generates about \$750,000 per year and is on top of the normal departure tax of \$11.25. Tourists are given a separate receipt and explanatory leaflet about the tax⁶⁰.
- **The Seychelles** in the Indian Ocean was proposing to introduce a \$90 tax on travellers entering the Seychelles, with revenue used to preserve the environment and improve tourism facilities. However, at the time of writing (April 2004) this did not seem to have been introduced yet – instead, there is a \$40 departure tax, while tourists pay fees to visit the individual islands.

⁵⁹ Op cit 50

⁶⁰ Sweeting, J.E.N., A.G. Bruner, and A.B. Rosenfeld. 1999. The Green Host Effect: An Integrated Approach to Sustainable Tourism and Resort Development. Conservation International Policy Paper. Washington, DC: Conservation International.

- **The Cook Islands:** Of the \$10 airport tax, \$2 goes to an Environmental Protection Fund, in an account managed separately from the Ministry of Finance.
- **Eastern Caribbean:** In 1998 six small countries decided to charge a standard environmental levy of \$1.50 to every tourist visiting the country, whether by plane or cruise ship. St. Kitts and Nevis has an additional airport departure tax of \$15.
- **Egypt:** In 1985 a law was introduced which funds pollution prevention and nature conservation through a tax levied on all international air tickets issued in Egypt in local currency. The tax was initially 10% and was later raised to 25%. Some of the finances have been used in Sinai for the apparently conflicting purposes of developing recreational tourist areas and hotels as well as funding conservation projects⁶¹.
- **USA:** The government levies an 11% tax on sales of hunting weapons and ammunition, half of which goes to the US Wildlife Restoration Fund (CFG), while it also levies up to 5% of the product price on outdoor recreational equipment, including backpacks, field guides and recreational vehicles, which yields \$350 million annually and goes to wildlife agencies.
- **USA:** A road toll of \$3 is charged to all motorists on a scenic highway known as 'Alligator Alley', in Florida, where there is a good chance of spotting alligators while driving along. This toll raises \$60 million each year, which goes to conservation of the Everglades ecosystem.
- **Costa Rica** and other countries impose a tourism tax on the price of hotel rooms, some of which is earmarked for conservation⁶².

Voluntary donation schemes

- **Alaska Wilderness Recreation and Tourism** run a 'dollar a day' programme. When they invoice their clients they give the client the option of adding a donation of a dollar for each day spent in Alaska which goes to a conservation fund.
- **Saba Marine Park** runs a successful 'Friends of Saba Conservation Foundation' scheme. Donations are generated through a 'Friends of the Saba Marine Park' promotion that encourages park visitors to register, give donations, and receive information via a newsletter. The foundation is registered in Texas, USA so that American visitors can give tax-deductible contributions on site or by mail after their return. Subscriptions start at \$25/year (Friend) to \$5000/year (Patron).
- **Ecuador:** Lindblad Expeditions includes a donation of \$250 in the price of its tour packages to the Galapagos Islands. The money goes to a fund for Galapagos Conservation. Tourists are given a \$250 voucher that they can use for future trips booked with the company, which is an encouragement for repeat business. The \$250 donations are tax deductible for the company.
- **South Africa:** The KwaZulu-Natal Conservation Trust is an independent foundation set up in 1989 to encourage public and corporate donations to conservation. It raises funds through donations, sporting events, and trading in art, and has an emblem which is licensed to use on clothing, equipment and accessories. The Trust works closely with the government Nature Conservation Service of KwaZulu-Natal.
- **East Africa:** The Dian Fossey Gorilla Fund receives a donation of \$200-300 per visitor from the tour operator Discovery Initiatives, for its conservation activities in Ugandan gorilla parks.
- **Antigua:** Nelson's Dockland National Park solicits visitor donations, which are an important part of revenue.

⁶¹ Shackley, M. (1999) Tourism development and environmental protection in southern Sinai, *Tourism Management*, Vol. 20, pp. 543-548

⁶² Op cit 11



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