

# Sustainable Financing Plan for Namibia's Protected Area System:

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Ministry of Environment and Tourism  
Directorate of Parks & Wildlife Management



Republic of Namibia







Ministry of Environment and Tourism

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**Authors:** Jane Turpie, Jon Barnes, Marie de Longcamp and Midori Paxton

**Cover Photo:** Hans Rack





# EXECUTIVE SUMMARY

## Introduction

Namibia's protected areas cover approximately 17% of the country and form the core strategy in ensuring a sound natural resource base as well as meeting the country's conservation obligations under the Convention of Biological Diversity. In addition, the protected area system contributes significant value to the national economy, primarily in that it underpins a large portion of the national tourism industry, which is the second largest contributor to national income and the fastest growing economic sector.

## The Park Vision

In order to strengthen the protected area system to achieve the conservation goals and unleash the economic potential of the system, the Vision for the development of the Namibian protected area system was formulated by the Ministry of Environment and Tourism (MET) as part of the preparatory process for the Strengthening the Protected Area Network (SPAN) Project. The park vision is closely in line with Namibia's Constitution, Vision 2030, the National Development Plan, as well as the MET's Strategic Plan. The park vision suggests the following approach to enhance the effectiveness of the protected area system; 1) park management with a more regional approach, rather than a sectoral approach, to park management and other conservation activities, focusing ecological regions; 2) strengthening of partnerships with other land managers, in particular in the areas adjacent to protected areas and an ecological link between protected areas; and 3) strengthening the integration of tourism and wildlife management.

## Economic value of and cost of managing protected areas

The economic contribution of the protected area system was evaluated in 2004 and an update of the evaluation was conducted in 2009. The latter evaluation indicates that the total contribution to GNI, which includes multiplier effects, was estimated to be N\$ 2,048 million, or 3.8% of GNI. The study also established that a capital injection of about N\$ 541 million and an annual recurrent expenditure of N\$ 157.3 million for park management will be required. These investments would be expected to improve management and facilities in the parks, resulting in improved biodiversity and a better tourism product overall. The study has revealed that increased investments in the parks alone, excluding NWR investments, could generate an economic rate of return of up to 42% depending on the number of successful concessions developed. Investment in the park system clearly is highly economically efficient and will go a long way to contribute to the country's efforts to achieve Vision 2030.

## Financing gap for improved management

Despite the substantial economic potential, globally, and Namibia is no exception, national protected area systems are usually severely underfunded. The government budget allocation to MET is the main source of funding for parks, supplemented by 25% of the park entry fees and hunting concession fees generated by the parks channeled via the Game Products Trust Fund (GPTF) and donor funding. In the fiscal year 2009/10, N\$ 136.7 million was allocated to the protected area management programme – one of the six official programmes of the MET. This figure is more than three times as much as it was in 2004.

However, the efficiency of the use of the funding is questionable, given that a majority of the operational budget for the park division of the Directorate of Parks and Wildlife Management is spent for personnel and transport cost.

The in-depth analysis identified the estimated financing gap for the protected area system under two expenditure scenarios. The financing gap is in the order of N\$ 8.8 million per annum for the minimum expenditure scenario to maintain the status quo. The gap under the optimal expenditure scenario to make a dramatic improvement to achieve the park vision is in the order of N\$ 113 million per annum.

### **Options for securing sustainable financing for an improved protected area system**

Sustainable financing requires not only securing adequate funds but also considering the quality, form, timing, targeting, use and sources of funding. It is important to build a diverse funding portfolio, going beyond conventional mechanisms and including multiple funding sources. Funds must also be managed and administered efficiently to achieve cost effectiveness of park management operations. In addition, it is necessary to have a mechanism to have an ongoing and continuously improving understanding of the financial requirements of the protected area system, as well as to be able to harness new opportunities for funding.

A number of options are explored to secure sufficient and sustainable financing for an effective protected area system in Namibia. High priority mechanisms for continuation include motivation for government budget investments, motivation for donor grant investment, and collection of park user fees. High priority mechanisms for further development and/or exploration and development include collection of park concession fees, user fees from extractives such as mining in parks and use of wildlife and forest resources, revenues from sale of live game in parks, revenues from bio-prospecting agreements, capture of non-use values such as biodiversity offsets, cause related marketing, capture of carbon market income, and trust fund development.

This report recommends a set of actions to be taken for the next three year period (2010 – 2012). These include effective use of the economic evidence to continue motivating the treasury for additional funding to MET and parks in the interests of national development goals, convincing the Ministry of Finance to allow the MET to retain a greater proportion (or all) of revenue to be reinvested in park management, a similar motivation for the retention of the tourism concession fees. Review and updating of park fees every three years based on proper ongoing analysis of demand and re-evaluation of needs and objectives will be an essential action to take. The action plan also includes establishment of a system for eliciting voluntary payments, investigation into the potential market and mechanisms for a voluntary biodiversity offset scheme, and establishment of a user fee for prospecting and mining activities inside protected areas. Implementation of these actions should bring Namibia close to attaining financial sustainability for its protected area system to safeguard the essential natural resource base and to secure economic benefits for the country.

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## 2 INTRODUCTION

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### 2.1 OVERVIEW

Namibia's protected areas cover some 17% of the country and form the core strategy in meeting the country's conservation obligations under the Convention on Biological Diversity. In addition, the protected area system contributes significant value to the national economy, primarily in that it underpins a large portion of the national tourism industry, which is one of the country's four biggest contributors to national income and one of its fastest growing sectors. The protected area system has been estimated to contribute some 3.8% of the Namibia's Gross National Income (Turpie et al. 2009).

Although tourism attributable to the presence of parks generates considerable tax revenue for the Government, and contributes significantly to poverty reduction, the direct revenue from park use and accommodation fees amount to less than half of the park-related costs. The park system has been characterised by severe under-financing, particularly with regard to the capital budget.

Moreover, the protected area system is still considered inadequate to meet national conservation goals, and it has been identified that further investment is required to expand and improve the protected area system, for which additional funding will have to be found. The latter has been articulated as a vision for the effective development of the parks' system, involving not only changes to the parks and activities in surrounding areas, but also changes in the institutional structures and governance.

Furthermore, the Parks Vision will be instrumental in nurturing the growth of the tourism economy of Namibia and unleashing the economic benefits from the Protected Area system at both local and national level. As such, it will form a key element in realising the national Vision 2030 and associated National Development Plan (NDP3), and is in line with the current strategy of the Ministry for Environment and Tourism (MET). The Parks Vision sets key principles which were suggested by the MET in its formulation of the Strengthening the Protected Areas Network (SPAN) Project.

Irrespective of the extent to which the parks system is developed over the next few years, it will be necessary to embark on sound financial planning which aims to achieve financial sustainability for the parks system as a whole.

## 2.2 ADMINISTRATION OF PARKS AND TOURISM

### 2.2.1 The Ministry of Environment and Tourism (MET)

MET is the key ministry charged with policy development, planning, drafting and enforcement of environmental regulations, budgeting, and international obligations with respect to sustainable development. It coordinates environmental management activities, including parks and wildlife, and tourism. Its directorates include Parks and Wildlife Management; Scientific Services, Tourism, Environmental Affairs, and Administration and Support Services. Its mandates include rural development around parks; management of protected areas, habitats and species; development and support of Community-Based Natural Resource Management (CBNRM), environmental management and regulation, and development and support of tourism.

The **Directorate of Parks and Wildlife Management (DPWM)**, with the assistance of Scientific Services, are responsible for:

- Protected area management, including rural development around parks;
- Protection and management of key species and natural resources;
- Community-based natural resource management and tourism;
- Regulation of environmental protection and sustainable resource management; and
- Improving the economic value of natural resources and protected areas in MET jurisdiction

Although the Directorate of Parks and Wildlife is generally well-staffed, particularly in the high and medium priority positions, the budget for recurrent and non-salary expenditures is inadequate. As a result, the Directorate has had to reduce basic services such as provision of uniforms as well as undertaking essential patrols to combat poaching, the trade in products from endangered species or the control of problem animals (PEER 2007).

Since the establishment the Namibian Wildlife Resorts (NWR) and Namibian Tourism Board (NTB) (see 2.2.2 below), the role of the **Directorate of Tourism (DoT)** has changed to that of policy formulation, tourism development and planning, and facilitation. However, it is understaffed, and lacks specialist expertise in the coordination and formulation of tourism partnerships, and needs to develop improved capacity to assess proposed partnerships between the private sector, local communities and financial institutions (PEER 2007). A small budget has led to over-dependence on donor funding and an inability to fund community projects on its own (PEER 2007).

Several programmes exist within MET, including Protected Areas, Community-

based Natural Resource Management (CBNRM) and Community-based Tourism Enterprises (CBTE). While managed under two directorates (DPWM and DoT, respectively), both the CBNRM and CBTE programmes are concerned with decentralising resource management to generate sustainable income for rural communities. A financial plan is currently also being developed for the CBNRM programme. Potential links are identified in the final section.

### **2.2.2 Namibia Wildlife Resorts (NWR)**

The NWR Company was launched in April 1999 under a Board of Directors. Its main purpose was to manage all commercial aspects relating to marketing, operations and product improvement of the government-owned tourism resorts. Following problems of poor management, lack of trained staff, dilapidated tourism infrastructure and ongoing subsidisation by government, NWR almost closed down in 2006. A business plan (the “turnaround strategy”) was developed for NWR and approved in June 2006 by the Namibian Cabinet, with the ultimate goal of turning the NWR into a profit-making enterprise within three years. This included writing off the outstanding N\$48 million in park entrance fees owed to MET and a two-year N\$120 million loan guarantee to upgrade tourism facilities, especially in Etosha, to international standards. The strategy provided for the renovation and rebuilding of the entire infrastructure of NWR, coupled with human resources development programs, marketing initiatives and strategic investments within national parks. Eight resorts have been developed or upgraded. The strategy also provided for a major increase in service fees at the end of 2007. The Vision of the NWR in the turnaround strategy is to become the provider of a reliable, welcoming and appealing tourism service in the prime tourism destinations of Namibia, and in so doing, to become a profitable enterprise that is able to pay dividends to shareholders.

### **2.2.3 Namibian Tourism Board (NTB)**

The NTB is a Government statutory body, with the prime objective of effectively marketing the tourism industry and promoting environmentally sustainable tourism. It also coordinates the registration and regulation of accommodation establishments. The organization has been successful at carrying out its mandate of marketing Namibia, coordinating licensing, and maintaining standards despite a limited budget.

The NTB is funded mainly by MET, but also derives revenues from tourism business registration fees and levies introduced in the past few years. Because its funding has been fairly limited, it has had a shortage of compliance staff to ensure this collection. However, funds have been committed to NTB’s tourism marketing from the Namibia Millennium Challenge Account (US\$8.26 million over five years; MCA 2009), and it is hoped that the private sector will continue

the momentum thereafter (PEER 2007). MCA funds will be used to support the NTB to procure a marketing agency to carry out a marketing campaign and conduct an audit of tourism sites. In addition MCA funds will be used to support the design and implementation of a fully interactive website that will be managed by NTB to act as a portal to all tourism activities in Namibia, to attract new tourists and facilitate trip planning and booking in different languages. The site will allow accommodation establishments to report bed night usage to assist the NTB to monitor revenue sources.

### **2.3 STRENGTHENING THE PROTECTED AREAS NETWORK PROJECT**

The Strengthening the Protected Areas Network Project (SPAN) is a MET project that aims to improve park management in Namibia. This in turn is expected to significantly contribute to the national and local economy through park tourism. It is funded by the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP). The 6-year project began in April 2006 and is tackling park management issues at three levels:

- Improve national policy and planning for better park management for conservation ;
- Improve MET's institutional capacity
- Drastically improve site-level management of 4 demonstration PA sites – Bwabwata- Mamili-Mudumu (BMM) complex, the Etosha-Skeleton Coast Link, the /Ai-/Ais Hotspring Park and the new Sperrgebiet National Park.

During its preparatory phase, the SPAN commissioned three studies, namely the institutional capacity study, conservation needs assessment as well as studies on the value of the protected area system (Turpie et al. 2004, 2009) and this report.

### **2.4 VISION FOR THE DEVELOPMENT OF NAMIBIA'S PROTECTED AREA SYSTEM**

In 2005 a "Conservation Needs Assessment" was undertaken as one component of the preparatory phase of the SPAN Project by Tarr *et al.* (2005). This project identified priority threats and problems and ways to realign Namibia's PA network for optimal conservation success; and undertook a needs assessment to identify optimal habitat protection to ensure protection of land and species not represented in protected areas. It also assessed data management requirements; evaluated the potential to proclaim World Heritage Sites, and reviewed control procedures concerning prospecting and mining in PAs. The recommendations of the conservation needs assessment are referred to in this

report as the “Parks Vision”, which formed the core principles of the SPAN Project design. In addition, an institutional capacity study (Booth *et al.* 2005) was undertaken that made recommendations for institutional realignment to give effect to the Parks Vision.

### 2.4.1 The Parks Vision

The overall vision is to effectively expand, manage and develop the park network of Namibia in order to **adequately protect the biodiversity and landscapes** of the country. The main objective is to devise a system of **integrating land and natural resource management** that transforms the current protected areas patchwork into a protected areas network, through creating incentives for all Namibians (MET, conservancies, private landowners and tourism operators) to work together toward a common goal. Key tasks for achieving the vision are described below.

It was proposed that protected areas are grouped into three regions that are consistent with respect to habitats, ecological processes, wildlife movements and future compatible land uses – the north-west, north-east and central-south regions (Figure 2.1).

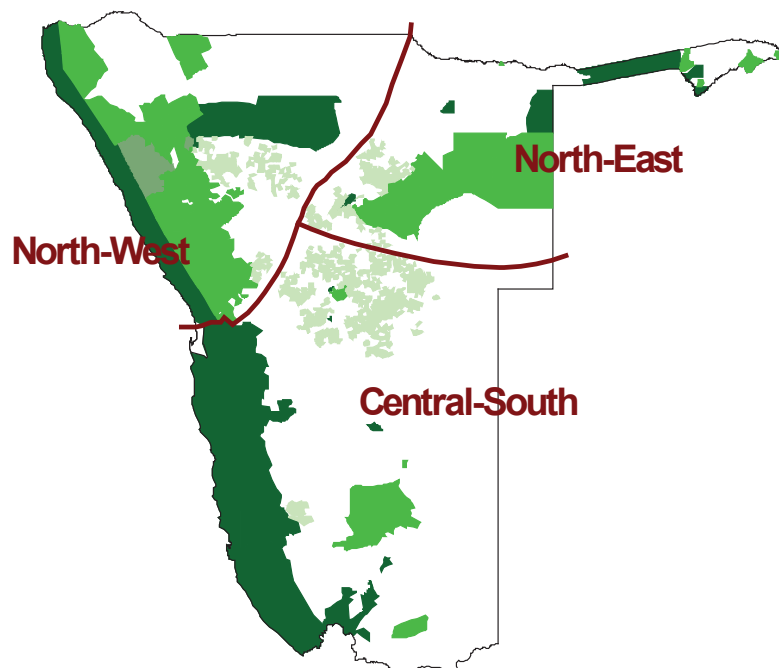


FIGURE 2.1. THREE INTEGRATED REGIONS (SOURCE: TARR *ET AL.* 2005)

The key focus in the **north west region** is on formalizing the linkages between Etosha and the Skeleton Coast Park via the Kunene conservancies, by expanding

conservation areas and removing fences to provide 'safe corridors' to facilitate repopulation of former home ranges and reintroduction of certain species. In the **north-east region**, which includes Bwabwata National Park; Mamili, Mudumu and Mahango National Parks. Khaudum Game Park, the Mangetti Game Camp and Waterberg Plateau Park, the key focus is for establishing new conservancies to provide protection for the eastern floodplains in Caprivi, as well as improving ecological linkages within the transfrontier conservation area. In the **central-south region**, which includes the Namib-Naukluft Park (5.07 million ha) and new Sperrgebiet Park, as well as the Huns Mountains/Ai-Ais/Fish River Canyon Park complex, Daan Viljoen Game Park, the Naute Dam, Hardap, Von Bach and Gross-Barmen Resorts, and Walvis Bay Nature Reserve, **priorities** are the revision and implementation of **management plans** for the protected areas and development of **park infrastructure** and operational capacity, including the enforcement of regulations on grazing of livestock, agriculture, resource harvesting, and tourist access. Linkages between conservation areas such as the Ais-Ais/ Huns Mountains and Fish River Canyon with the Sperrgebiet are required through forming partnerships to ensure appropriate **land use** compatible with the parks. A key focus will be monitoring of mining activity and enforcement of rehabilitation and controls on off-road driving.

The Parks Vision envisages partnerships with communities on communal land adjacent to parks, private landowners, tourism operators, NGOs, academic institutions, private interested individuals, and donor agencies with a joint focus on adopting pro-conservation land uses. Such partnerships can be forged through the formation of multi-stakeholder committees to direct natural resource management, tourism management and infrastructure development and maintenance. This approach supports Vision 2030 through promoting the participation of local communities and ensuring that tangible benefits accrue from the protected areas system through tourism and other activities.

Improved **information research and data management** was seen as integral to the parks vision. Key recommendations in this regard included the revitalisation of output oriented ecological research including the Etosha Ecological Institute, undertaking a 'data management needs assessment' process and designing a data management system and ensuring technical capacity and appropriate software and hardware (Tarr *et al.* 2005). Closer linkage between tourism and wildlife management sectors are also called for to minimize the negative impact of tourism on the environment and to maximize the visitor experience and economic benefits of tourism.

#### **2.4.2 Institutional Restructuring to implement the Parks Vision**

The 2005 capacity assessment report compiled for the preparatory phase of the SPAN Project (Booth *et al.* 2005) proposed a new institutional model for the

Parks and Wildlife Directorate that would be better suited to implementing the Parks Vision of having three conservation regions (North-West, North-East and South-Central (described above). It was designed to overcome current institutional inefficiencies, devolve budgetary control to Parks and Wildlife and give incentives for achieving greater efficiency and profitability.

The proposed institutional structure identified three Directorates (North West, North East and South Central), each having two divisions. A fourth Directorate, based at Headquarters (Scientific Services), would deal with Research and Planning, and would have Divisions and Subdivisions for Field Conservation and Social Science, Monitoring, Research and Planning, and Wildlife Utilisation (permits and game capture subdivisions). The four Directorates would fall under the Department of Parks and Wildlife Development, headed by a substantive Under Secretary and supported by an Administration and Human Resources Division. This Division would support a similar staff allocated at the Regional and Park levels, comprising a number of subdivisions administering salaries, budget control, general services, accommodation, transport and stock, support services, maintenance and HQ coordination.

The capacity assessment (Booth *et al.* 2005) quantified the additional staff required for each park and the attendant costs of managing each region and park. Social scientists were included in the new institutional model for developing co-management institutions in the areas linking parks, with the number of staff estimated based on the surrounding population density and length and perimeter of the park. Technical support and administrative staff structure is based on the total number of staff in other categories, number of camps and extent of tourist infrastructure in the park. The model quantified the number of staff required to be 1971 persons, compared to the actual number of ~900 in 2005. It noted that it is difficult to compare these numbers as the new model included the full set of tourism costs, a new staff component of social scientists and a full complement of administrative and technical staff needed to service the parks i.e. roles that are currently fulfilled by NWR (tourism costs); admin and support done by a separate directorate within the Ministry, and social aspects serviced by a small CBNRM unit within the Division of Wildlife Management. When these are removed from the model, the total number of staff is reduced to about 1500, which assumes staff numbers for running tourism outlets (shops and restaurants) would be outsourced.

In the proposed institutional model, staff will be allocated to one of five categories: Field, Tourism, Scientific Services, Technical Service and Administration.

The model proposed that the Department of Parks and Wildlife Development would assume control over tourism, maintenance and administration – three functions that are now the responsibility of separate Directorates. This means that the role of the NWR would be absorbed into the new Department and all components of maintaining the conservation management agency would be fully internalised. Each section would have its own devolved budget and would be accountable for its performance measured against its budget.

The restructuring process is ongoing and is expected to be finalised shortly. At this stage, the following elements are included:

1. Regional approach – 5 regions headed by deputy directors, incorporating parks and wildlife management functions.
2. Decentralisation of administrative functions
3. Incorporation of financial management, administration, research and maintenance functions in the regional sub units.

The cost calculations in this study are based on the structure envisaged for the Parks Vision (Tarr et al. 2005), and it should be noted that future cost estimates will need to be adjusted when the restructuring process is finalised.

## 2.5 ECONOMIC RATIONALE FOR INVESTING IN THE PARKS SYSTEM

Namibia has outlined an ambitious vision for development of the country over the coming decades. In addition to the national constitution, Vision 2030, together with its implementation plan, the National Development Plan (NDP3), provide important context for role of the wildlife sector, and are described briefly below.

**Namibia's Constitution** (1990) states that it is the State's responsibility to actively adopt policies aimed at *“the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future...”*.

### 2.5.1 Namibia's Vision 2030

Vision 2030 is a framework for achieving Namibia's development objectives that sets out the key development challenges in areas such as land reform, housing, environment, health, education, job creation, ownership patterns, and economic development. The maintenance of stable, productive and diverse ecosystems managed for long-term sustainability is a key Strategic Objective of Vision 2030.

Wildlife and Tourism is a key component of Vision 2030, with the sub-vision or 'target' specifying that **“The integrity of Namibia's natural habitats and wildlife populations are maintained, whilst significantly supporting national socio-economic development through sustainable, low-impact, consumptive and non-consumptive tourism”**.

Recognising that tourism is a major and undervalued contributor to Namibia's economy and that it can a) contribute to wildlife conservation and biodiversity protection; b) contribute to poverty alleviation in rural areas through direct and indirect employment, and c) improve the earning potential of rural women by stimulating traditional crafts, as well as that Namibia's tourism is largely based on a wildlife and landscapes, Vision 2030 advocates preservation of Namibia's natural assets as fundamental to developing tourism as a sustainable economic sector. Land outside state-owned parks is seen to present economic opportunities that can provide new ways of managing human-wildlife conflicts. Key targets for 'Wildlife and Tourism' by 2030 include:

- well-managed parks and nature reserves, with modern, sustainable and well-maintained camps with excellent services and offering diversified and regionally competitive tourism opportunities;
- strong partnerships between government and private sector;
- extension of CBNRM into all viable rural areas to improve livelihoods, and increased tourism-based enterprise development on communal land;
- increased focus on low impact, high quality nature-centred tourism;
- equity participation and distribution of benefits to disadvantaged communities such that ownership and management of the tourism and wildlife industry becomes representative of all Namibians;
- multi-fold increase in contribution to Namibia's GNI to remain one of the key leading economic sectors in our country;
- an efficient system of registering, licensing tourism enterprises and maintaining high quality standards in place and funded by the collection of levies;
- Namibia, as a tourist destination, offers a high quality experience, with high economic value to the country and low negative impacts on the environment and society.
- healthy, diverse and productive wildlife populations of economically important species on land outside State-owned parks, integrated into economic activities on farmland, and making a significant contribution to the national economy; and
- self-sufficient conservancy system, dependent on Government only for technical advice and assistance.

Implicit in meeting these targets will be a requirement for strategies to improve the policy environment on land-use management, and the introduction of economic instruments to finance sustainable development options (PEER 2007). MET will also need to provide increased incentives for private sector investment in communal conservancies.

### 2.5.2 NDP3

The Government's National Development Plan 3 (NDP3) for 2006/7-2011/12 translates the targets of Vision 2030 into actionable policies and programmes. The NDP3 is divided into eight **Key Result Areas** (KRAs) of which '**Sustainable Utilisation of Natural Resources and Environmental Sustainability**' is the most relevant to the Park Financing vision.

The NDP3 goal strategies focus on the sustainable utilisation of natural resources through:

- i) the harmonisation of laws, regulations and policies;
- ii) monitoring the use of the resources;
- iii) the adaptation of improved technologies;
- iv) the adoption of appropriate mechanisms and processes including community and stakeholder participation in the management and exploitation of the resources;
- v) strengthening indigenous capacities; and
- vi) ensuring efficient and sustainable utilisation.

The KRA for 'Sustainable Utilisation of Natural Resources and Environmental Sustainability' has three sub-KRAs, relating to the wildlife subsector, the tourism subsector and environmental sustainability as a linking, overarching sub-KRA.

The sub-KRA for the **wildlife sub-sector** aims to achieve the sustainable utilisation of wildlife resources and the maintenance of bio-diversity in and outside of protected areas. Sub-sector strategies include: (i) the promotion of sustainable utilisation of wildlife in communal and commercial areas; (ii) mitigating human-wildlife conflict; (iii) proclaiming and managing protected areas; and (iv) adopting appropriate policies and regulations and implementing them.

The sub-KRA for the **tourism sub-sector** focuses on expanding tourism through community participation, and ensuring economic and ecological sustainability. The subsector strategies include: (i) promoting tourism as a viable vehicle for poverty reduction, rural development, bio-diversity protection and overall economic growth; (ii) creating a favourable environment for rapid and sustained growth of the tourism sector by developing an appropriate regulatory

framework, institutions and guidelines; (iii) coordinating training and skills development programmes and materials that are particularly aimed at illiterate and semi-illiterate rural communities; (iv) sourcing financial and technical assistance to facilitate the entry into mainstream tourism of previously disadvantaged Namibians through community-based tourism initiatives; (v) creating new tourism investment opportunities focusing on proclaimed conservation areas and cultural heritage sites; (vi) intensifying tourism promotion and marketing, market diversification and destination management; (vii) developing a central data and information management system for planning and monitoring the industry and (viii) strengthening the capacity of the sector. The sub-sector programme will facilitate the development of the different facets of tourism in the country.

The goal for the Sub KRA for **Environmental Sustainability** is to ensure environmental sustainability by strengthening the management of natural resources and bio-diversity across all relevant sub-sectors. Specific environmental targets set under this KRA that directly or indirectly relate to parks funding include:

- increasing the area covered by **conservancies** from 8.0 million hectares in 2006 to 8.8 million hectares by 2012 and that under community forestry from 1.19 million hectares to 1.8 million hectares during the same period;
- stabilising and increasing the **proportion of targeted key wildlife species** from 50 percent to 80 percent; and improving the target marine species;
- establishing at least **one new marine and wetlands park**;
- increasing the number of **partnership agreements** with communities managed in accordance with approved management plans.

Amongst the wide range of environment sub-sector strategies those of key relevance to improved park financing include:

- increasing **recreational facilities** (including parks, monuments and museums);
- extending community-based natural resources management (**CBNRM**);
- protecting Namibia's unique tourism product by focus on **low impact**, high quality and nature-centred tourism;
- ensuring healthy, diverse and productive **wildlife populations** and economically important species **outside State-owned lands**; and
- **integrating** parks into economic activities on farmland.

### **2.5.3 Strategic Plan of the Ministry of Environment and Tourism**

The Ministry of Environment and Tourism (MET) is responsible for implementation of most activities relating to the environment, conservation in and outside of reserves, and tourism. MET compiled a Strategic Plan for 2007/8

to 2011/12 as a legal framework to implement its responsibilities under NDP3 and to refocus its programs to increase its contribution to rural development and economic growth. The Strategic Plan seeks to help MET:

- i) combine its responsibility for the conservation of Namibia's natural assets with making a significant contribution to income generation and poverty reduction;
- ii) organise itself around its functions and programs; and
- iii) channel scarce human and financial resources to areas of maximum impact.

In the Strategic Plan MET revised its development objectives and strategies for the tourism sector in line with targets defined in the NDP3 which emphasised promotion of tourism concessions in protected areas and ongoing technical support to conservancies. Of key relevance here is the Park and Wildlife Directorate's goal of striving for the "continued maintenance of detailed tourism value accounts to assess the economic value and potential of tourism in Namibia". It is expected that this will greatly influence the Ministry's annual budget allocation (as was the case for the 2007/08 financial year; PEER 2007). A number of studies have called for improved financial accounting of tourism (WTTC 2004)

Key objectives and activities of the Strategic Plan of relevance to parks management and financing include:

- Manage national parks and protected areas by devolving authority and budgets, and develop these so that they can earn and retain income whilst also stimulating regional development. This will require investigation of alternative park management structures, establish cost-recovery mechanisms and the development of strategies on relationships with park neighbours and residents.
- Create an enabling environment for sustained rapid growth of the tourism sector through developing a national tourism growth strategy, facilitating inter-sectoral collaboration, establishing a Tourism Advisory Council, and improving data management for better planning.
- Create new tourism investment opportunities focusing on proclaimed conservation areas and cultural heritage sites. Activities will involve developing basic infrastructure that will attract tourism investment in protected areas and cultural heritage sites; implement partnerships, joint ventures and concessions.
- Turn NWR into a profitable company that generates employment and economic benefits to the Parks through implementing the NWR "turnaround" strategy involving developing and implementing plans, asset transfer and projects to improve the economic viability of NWR.

#### 2.5.4 The Tourism and Wildlife Concessions Policy

Namibia's recent **Tourism and Wildlife Concessions Policy** (MET 2006) guides the awarding of concessions on State lands, especially in Namibia's protected areas. These include concessions to develop lodges or camps within a specified area, conduct tourism services and to offer specialised tourism activities such as adventure tourism, aerial site-seeing, kiosks or car rentals. They also include trophy hunting concessions and concessions for the harvesting of plant and animals for sale or bio-prospecting. Community management bodies are responsible for awarding concessions in conservancies and community forests on communal lands.

One of the goals is to generate revenue for the State through concessions as a means of recovering costs. However, the objectives of the concessions policy are much broader than a financing mechanism, and are also aligned with national development goals, as follows:

- Promote **economic empowerment** of formerly disadvantaged Namibians and their entrance into the tourism, hunting and wildlife-based industries;
- Provide support to ensure the **development of capacity**, skills and to facilitate access to capital for all Namibians to meet concession requirements;
- Enhance the **conservation of biodiversity** and maintenance of ecological integrity in proclaimed protected areas and on other State land;
- Enhance through concessions the **economic value** of proclaimed protected areas, wildlife and plant resources;
- Enhance the ability of the Ministry of Environment and Tourism (MET) to **effectively manage** proclaimed protected areas and wildlife resources, to control and monitor concession operations; and
- Use concessions as a means of **promoting sustainable development**, poverty alleviation and employment creation in protected areas and on other State land.

#### 2.5.5 Current economic contribution of the protected area system

Tourism is the main value of the protected area system, which attracted an estimated 180 000 visitors (of which 124 000 were foreign) made in the region of 235 000 trips to parks during 2008, yielding a total of 918 000 visitor days in parks (Turpie *et al.* 2009). The overall expenditure by wildlife-viewing protected area tourists was estimated to be in the order of N\$2.35 billion. An additional N\$96 million is estimated to be spent by tourists attracted by hunting concessions in protected areas, bringing the total to N\$2.45 billion. Some 36% of this expenditure is on accommodation, with about N\$74 million of this spent

on accommodation in parks. The rest being on a variety of industries such as restaurants, car rentals, and shopping. While standard linkage and multiplier effects might apply to most of these, the accommodation establishments used by protected area tourists may not reflect the distribution of types of accommodation establishments in the country as a whole, however. The direct contribution to GNI was estimated to be N\$1113 million, roughly 2.1% of GNI in 2008. The total contribution to GNI, which includes multiplier effects, was estimated to be N\$2048 million, or 3.8% of GNI (Turpie *et al.* 2009)<sup>1</sup>. About 13 and 16% of the total income generated by protected area tourism goes to skilled and unskilled labour, respectively, and a further 4% goes to communal households. Less than 1% represents income to communal land areas in the form of rents and royalties associated with conservancies.

In addition to the direct non-consumptive and consumptive use tourism values described above, protected areas provide other direct use value in the form of game harvesting for live sales, indirect use values such as carbon storage, water supply and regulation and provision of refugia for species which are valued elsewhere. The protected area system is also valued by non-users, in that local and global society is willing to pay to ensure that the biodiversity within the parks is adequately protected. Namibian tourists have been shown to be willing to pay at least N\$28.7 million. International willingness to pay is also reflected in donor contributions to the wildlife sector, which amounted to some N\$54 million in 2003/4.

### 2.5.6 Potential returns from investment in protected areas

In the 2009 economic valuation exercise of Namibia's PA system, it was established that to be managed properly, the protected area system requires a capital injection of about N\$541 million and an annual recurrent expenditure of N\$157.3 million for park management. These costs are still relatively low in comparison to park management in South Africa. These investments would be expected to improve management and facilities in the parks, resulting in improved biodiversity and a better tourism product overall. The main benefits are expected to be generated through the development of concession areas within the parks. **Increased investments in the parks alone (excluding NWR investments) could generate an economic rate of return of up to 42%, depending on the number of concessions developed.** The total investment in parks and NWR yields a rate of return of up to 37%. Thus investment in the parks system, along the lines of the parks development vision, will not only

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<sup>1</sup> Note that the 2004 study estimated the tourism contribution to amount to 3.1-6.3% of GNI, based on lower- and upper-bound estimates of park visitor numbers. This study was based on more reliable visitor data, which suggested that the lower bound estimate of the previous study was more accurate.

achieve conservation objectives but will also be economically very efficient and will yield substantial economic benefits in line with Namibia's Vision 2030.

## **2.6 SUSTAINABLE FINANCING OF PROTECTED AREA SYSTEMS**

### **2.6.1 Funding of protected area systems**

Funding of protected area systems has been recognised as a major constraint in meeting the global biodiversity protection targets that were set under the Convention on Biological Diversity (CBD, Rio 1992). As a result, protected area finance formed a key agenda item at both the IUCN World Parks Congress in Durban, 2003, as well as the 7th Meeting of the Conference of the Parties (COP) to the CBD (2004), culminating in IUCN's release of a publication on the subject (Emerton et al. 2006). While much of the debate initially was concerned with raising the levels of funding, and developing innovative financing mechanisms to help achieve this aim, more recent emphasis has been on ensuring that financing mechanisms are not only efficient and effective, but also sustainable.

The main aim of covering the costs of protected areas is to contribute towards effective biodiversity conservation. As a signatory to the CBD, Namibia is obliged to abide by its provisions, one of which is that Contracting Parties allocate funds to biodiversity. Protected areas around the world have been funded mainly from national governments and international donors, but these sources have not kept up with the requirements of the protected area systems, often as a result of changing development priorities and increasing budgetary constraints. Funding for protected areas has been at best stable and in some cases has declined in recent years, in spite of growing threats to biodiversity and expansions in protected area systems. In developing countries, protected areas are typically a low priority and have accordingly suffered among the largest budgetary cut-backs. Biodiversity needs have also long taken a back seat under the shift towards poverty reduction as a primary goal for both governments and donor agencies. Accordingly, donor governments have tended to shift their focus from protected areas to the sustainable use and equitable benefit-sharing objectives of the CBD. In addition, much protected area finance has been short term, focusing on land acquisition and capital investment, rather than focusing on sustaining the systems over time. It is for these reasons that conventional systems of funding have come into question, and development of sustainable financing mechanisms has become a global focus for protected area systems.

### 2.6.2 Financial planning

Financial plans differ from budgets in that they not only help to determine the protected area funding requirements over time, but also determine the income sources to match those needs over the short, medium and long term. A financial plan takes into account the fact that different sources of funding have different characteristics with regard to reliability, accessibility, and flexibility of use. Funding mechanisms vary in terms of their time horizons. Some take time and effort to establish, providing little short-term gain but with good prospects for steady financing over the longer-term. A financial plan should identify these characteristics and construct a revenue stream that matches the short- and long-term requirements of the protected area system (IUCN 2000).

### 2.6.3 Sustainable financing

Sustainable financing is a key focus of this financial plan. This requires not only securing adequate funds but also considering the quality, form, timing, targeting, uses and sources of funding. This entails (Emerton et al. 2006):

- Building a diverse funding portfolio, going beyond conventional mechanisms and including multiple funding sources
- Managing and administering funds in a way that is efficient and effective, allowing for long-term planning and security, and that provides incentives and opportunities for managers to generate and retain funds at the PA level.
- Providing support to groups who incur costs as a result of the PA system, as well as securing fair contributions from PA beneficiaries.
- Identifying and overcoming the broader market, price, policy and institutional distortions that act as obstacles to PA funding and financial sustainability.
- Factoring finance into PA planning and management processes to achieve cost efficiency of the operation.
- Ensuring that there is adequate institutional set up and sufficient human capacity to use financial tools, is a key strategy for improving PA financial sustainability.

**Protected area financial sustainability** can be defined as the ability to secure sufficient, stable and long-term financial resources, and to allocate them in a timely manner and in an appropriate form, to cover the full costs of PAs and to ensure that PAs are managed effectively and efficiently with respect to conservation and other objectives (Emerton et al. 2006)

Financial sustainability is not possible without **strong and effective institutions** for PA management.

## 2.6.4 The financial sustainability scorecard

A financial sustainability scorecard has recently been developed by UNDP (Bovarnick 2007) as a tool to assess and track changes in the financial status of national systems of protected areas. The scorecard presents a systematic process for financial planning, and provides a means to assess the extent to which conservation financing needs are being met, as well as the institutional arrangements that influence financial sustainability. The scorecard is divided into two parts. Part I assesses current and future costs, revenues and financing gaps of the PA system (Table 2.1). Part II assesses (i) governance and institutional frameworks, (ii) business planning and other tools and (iii) revenue generation (Table 2.2), culminating in an overall score. The elements of the scorecard were considered in the compilation of this report, but not scored.

**TABLE 2.1. ELEMENTS OF PART I OF THE FINANCIAL SUSTAINABILITY SCORECARD: OVERALL SUSTAINABILITY OF A NATIONAL PROTECTED AREA SYSTEM**

(i) Total annual expenditure for PAs (operating and investment costs)
(ii) Total annual government budget provided for PA management (excluding donor funds)
(ii) Total annual government budget provided for PA management (including donor funds, loans, debt-for nature swaps)
(iii) Total annual revenue generation from PAs, broken down by source
(iv) Net annual surplus/deficit
(iv) Percentage of PA generated revenues retained in the PA system for re-investment
(v) Projected revenues (over 5 year period)
(vi) Estimated financing needs for <i>basic</i> management costs and investments to be covered
(vii) Estimated financing needs for <i>optimal</i> management costs and investments to be covered
(viii) Annual actual financing gap (financial needs – available finances)
a. Annual financing gap for basic expenditure scenarios
b. Annual financing gap for optimal expenditure scenarios

**TABLE 2.2. ELEMENTS OF PART II OF THE FINANCIAL SUSTAINABILITY SCORECARD: ASSESSING ELEMENTS OF THE FINANCING SYSTEM**

<b>1. Legal, regulatory and institutional frameworks</b>
Support for revenue generation by PAs
Support for revenue sharing within PA system
Conditions for establishing endowment or trust funds
Support for alternative institutional arrangements for PA management
National PA financing strategies
Economic valuation of PA systems
Improved government budgeting for PA systems
Clearly defined institutional responsibilities for PA management and financing
Well-defined staffing requirements, profiles and incentives at site and system level
<b>2. Business planning and tools for cost-effective management</b>
Site-level business planning
Operational, transparent and useful accounting and auditing systems
Systems for monitoring and reporting on financial management performance
Methods for allocating funds across individual PA sites
Training and support networks to enable PA managers to operate more cost-effectively
<b>3. Tools for revenue generation</b>
Increase in number and variety of revenue sources used
Setting and establishment of user fees across the PA system
Effective fee collection systems
Marketing and communication strategies for revenue generation mechanisms
Operational PES schemes for PAs
Operational concessions within PAs
PA training programmes on revenue generation mechanisms

## 3 CURRENT FINANCIAL MECHANISMS

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Namibia's parks are financed by (a) government, (b) donor funding and (c) some of the revenues generated by the parks channelled via a trust fund. The **government budget allocation** to MET is the main source of funding for parks. **Donor funding** is currently also playing a major role in the funding of Namibia's parks and wildlife sector, via transfers to MET. In addition, part of the revenues generated by parks is invested in a revolving trust fund, the **Game Products Trust Fund**, for use in wildlife-related projects. An endowment fund, the **Environmental Investment Fund**, has been set up to receive certain park revenues as well as donations from other sources, for use in wildlife management.

### 3.1 REVENUES AND THEIR COLLECTION

#### 3.1.1 Revenue sources

Park fees make up about 90% of non-tax revenues collected by MET (PEER 2007). Concession fees make up about 7% and other revenues sources make up the remainder. The latter include film fees, wildlife utilization permits, wildlife registrations and licenses, film fees, registration of culling teams and professional hunters and sales of trophies. The state-owned Namibia Wildlife Resorts company (NWR), which currently owns and operates most tourist facilities inside parks, does not pay rentals to the parks.

#### 3.1.2 Park fees

Park fees are collected from a total of 23 collection points, using manual collection systems. The protected area system was estimated to generate approximately N\$52 million from entry fees during 2008 (Table 3.1). The accuracy of these estimates is hampered by poor park entry statistics but the estimated total revenue has been corroborated in two separate analyses (P. Erb, MET, pers. comm. 2008).

Until 2004, NWR was responsible for the collection and transfer of park entrance fees to MET. However, park entrance fees were retained by NWR to cover operational losses from 2000/1-2003/4 while the resort struggled to get on a sustainable financial footing since its creation as a corporation in 1999. In 2001/02 NWR increased park entrance fees and made a payment to the Ministry of Finance but retained them again in subsequent years (PEER 2007). MET took over the collection of park entrance fees from the NWR in April 2004, and made significant improvements in the collection of park fees in the first

year (2004/05). By the second year (2005/06), during which park tariffs were significantly increased, MET raised revenues by 42 percent in real terms, which also coincided with growth of the tourism industry. Failure of NWR to transfer park fees to MET led to a loss in revenues of N\$48 million for the MET which has been written off. Nevertheless, The collection of park fees has resulted in considerable cost to the MET, due mainly to the attendant costs of extending park opening hours (e.g. increased personnel, fuel and equipment costs) as well as additional transport to ensure frequent banking, due to long distance from remote parks to towns.

**TABLE 3.1. ESTIMATED TOTAL PARK ENTRY (PARK USE) REVENUE IN NAMIBIA IN 2008 (N\$'000)\***

Park	Domestic	Regional	Overseas	Total
/Ai-/Ais	440	2 380	2 060	4 880
Cape Cross	290	700	1 990	2 970
Caprivi	10	20	10	30
Daan Viljoen	190	190	200	570
Etosha	4 410	5 270	20 660	30 340
Gross Barmen	240	80	70	400
Hardap	180	190	170	540
Khaudum	40	110	40	190
Mahango	110	130	170	410
Mangetti	0	0	0	0
Mudumu	10	10	40	60
Namib-Naukluft	650	1 260	3 650	5 570
Popa	40	80	90	210
Skeleton Coast	750	570	190	1 520
Von Bach	140	10	10	150
Waterberg Plateau	1 010	480	2 630	4 120
<b>TOTAL</b>	<b>8 500</b>	<b>11 490</b>	<b>31 970</b>	<b>51 960</b>

\*Using assumed average payment (including vehicle fees) of N\$85, 65 and 35 per day for overseas, regional and domestic visitors at Category 1 parks, and N\$45, 35 and 15 for Category II parks.

Despite important increases in the collection of park entrance fees, the capacity of the MET to effectively collect revenues is constrained by a number of factors. These include:

- weak capacity of staff in revenue management including absence of computerized systems which causes delays in the transfer of information and data unreliability,
- difficulty in estimating revenues due to absence of revenue forecasts and unpredictable events leading to poor planning and ad hoc management of expenditures,
- theft and corrupt practices by staff, and
- insufficient incentives for the Directorate of Parks and Wildlife to implement a more efficient system for collecting entrance fees as there

is no correlation between the amount of income generated and allocated park management budget

A range of measures have been identified to increase the efficiency of revenue collection, but lack funding and capacity until today. To reduce revenue leakages MET have focused attention on introducing cash registers to increase security, and to outsource transport of collected funds to banks. In addition, NWR has offered tourists the option of pre-paying park entrance fees since May 2007. Additional measures identified include establishing a better database (on a pilot basis at Etosha) and promoting credit card payment facilities at all park entrances. The option of a smart-card system to increase park revenues and reduce cash transactions is also under consideration.

### **3.1.3 Concession fees**

A number of hunting and non-hunting concessions have been granted within the protected area system. The fee structures and payment arrangements vary between concessions, depending on what was negotiated at the time. There is no standard system for determination or collection of concession fees.

In 2009, fees from trophy-hunting and non-hunting concessions generated revenues of approximately N\$2.4 million and N\$2.2 million, respectively (data supplied by the MET Concessions unit).

## **3.2 DISTRIBUTION AND REINVESTMENT OF REVENUES**

Non-tax revenues generated by the MET are mostly collected by the Parks and Wildlife Directorate and transferred to the **State Revenue Fund**. These include park entry fees and concession fees. Revenues from trophy hunting concessions from state land and game parks, as well as revenues from the sale of game and game products, and levies from the export of game are collected by the MET and directly transferred to the **Game Product Trust Fund (GPTF)**, which constitutes an important instrument for the MET to distribute collected non-tax revenues. Registration fees of professional hunters collected by the Namibia Tourism Board have also been paid into the Game Product Trust Fund since 2005. In addition, 25 percent of park entrance fees transferred to the MoF is paid into the GPTF by the MoF on a quarterly basis, following negotiations with the MoF in 2005 (PEER 2007). These fees accounted for N\$7 million in 2005/06. A second fund, the **Environmental Investment Fund (EIF)** is a similar instrument that will be financed mainly through tourism concessions but it has only recently become active. These funds are discussed in more detail below.

### 3.2.1 The Game Product Trust Fund

The Game Product Trust Fund is a revolving fund established under the **Game Products Trust Fund Act (Act 7 of 1997)** as a mechanism for using funds collected through the sale of wildlife products (mainly from trophy hunting and legal sales of game and ivory), for re-investment in conservation efforts, mainly community development projects and conservancies. It aims to provide grants to emerging public wildlife organizations and protected areas, and to persons and institutions approved by the Minister. An independent board, appointed by the Minister of MET, manages the Fund, and it is chaired by representatives of the MET's Directorates, the Ministry of Agriculture, Water and Rural Development, the MoF, and two representatives of community-based organizations. Though the act makes provision for this to be outsourced, MET currently administers the Fund in order to save costs.

The Government has not capitalized the Fund through parliamentary appropriations (as allowed for in the act), but it has granted approval on a case-by-case basis for the proceeds of game product sales, live game auctions, live game export levies, hunting concessions, and park entrance fees to be deposited into the Fund (PEER 2007). Cabinet has agreed that any trade in elephant products and black rhinoceros hunting quotas in terms of the Convention on International Trade in Endangered Species (CITES) is also deposited into the Fund. The main source of revenues from 2000/01 to 2004/05 was derived from hunting concessions, while since 2005/06 park entrance fees have provided the largest contribution. The fund grew by 139% in real terms from about N\$5.7 million in 2000/01 to almost N\$20 million in 2005/06 (PEER 2007). Income to the fund in that year was around N\$8.4 million.

Projects funded by the GPTF are approved on a tri-semester basis by the board based on applications for funding and submission of progress reports for each phase of a project. In 2009, the GPTF Board formally recognized the fact that the 25 percent of the park entrance fees, which is the largest portion of the GPTF, needs to be directly reinvested in improving park management. The Board made a decision that it will entertain an annual proposal from the MET for the usage of the 25 percent, which exceeded N\$12 million in the fiscal year 2009/10. There is a plan to motivate for a higher retention rate to the MoF, which will provide even larger sustainable financing for park management. In addition, the GPTF is in a process of hiring a dedicated full-time person to increase fund administration capacity as well as outreach activities to increase accessibility of the grants.

The Fund has played an increasingly important role in financing both MET's and conservancies' operations and has supported more activities with the increased

resources over the past years. However, available resources in the GPTF are still not adequate to address the needs of all conservancies as well as the needs of MET. The retention of park entrance fees is insufficient relative to the increasing costs required by the Ministry. Inadequate funding has resulted in serious underinvestment of the parks' infrastructure and maintenance leading to criticism that park's facilities are not up to the required standard of high-income tourism. MET has on various occasions proposed that a greater proportion of park revenues be retained and allocated to the GPTF, and this has been supported by a number of other studies (e.g. TSA 2007, Etosha Management Plan).

### **3.2.2 The Environmental Investment Fund**

The Environmental Investment Fund (EIF) is an endowment fund established under the **Environmental Investment Fund Act 13 of 2001** to enhance the country's environmental and wildlife protection efforts by raising resources for direct investment in environmental protection and natural resource management. It also seeks to grant loans and bursaries to community-based environmental projects. It has not yet been brought into effect, but relevant mechanisms and regulations are being put in place for the implementation of this Act. These include the appointment of the Board members by the Minister of Environment and Tourism as well as establishment of operational procedures and office.

The EIF is a mechanism to collect funds that will generate income in perpetuity. This income will be allocated to activities and projects promoting-

- a) the sustainable use and management of environmental and natural resources;
- b) the maintenance of the natural resource base and ecological processes;
- c) the maintenance of biological diversity and ecosystems for the benefit of all Namibians; and
- d) economic improvements in the use of natural resources for sustainable rural and urban development.

## **3.3 GOVERNMENT AND DONOR FUNDING**

The MET relies on three types of sources of revenues: fiscal revenues, the Game Product Trust Fund (discussed above), and donor assistance.

### **3.3.1 Government funding to MET**

During 2002/03 to 2006/07, about two thirds of the MET budget was financed by domestic resources, including Government's fiscal revenues, and a small

amount through the GPTF (that in 2005/06 amounted to only 5.2 percent of MET’s total domestic resources). Note that the amount allocated to MET from the GPTF is only a portion of the total, as other organizations (e.g. NGOs and conservancies) also benefit from the fund.

MET’s spending has fluctuated, but overall declined by 6% between 2001/02 and 2005/06. It increased sharply by 16% between 2002/03 and 2003/04 due to subsidization of the NTB as well as overspending on personnel expenditures and goods and services. Spending declined due to cuts in subsidies to the NTB in 2004/05 and again in 2005/06 due to the transfer of the Forestry Directorate to the Ministry of Agriculture and Water. However, spending sharply increased between 2006 and 2008 due mainly to expenditures incurred by the Tourism Directorate for the NTB and tourism infrastructure upgrading for the 2010 World Cup, as well as for upgrading of park infrastructure (e.g. Etosha Park celebration of 2007) and administration (e.g. construction of new headquarters). In 2007/08, MET’s budget increased by almost 100% to N\$299 million, equivalent to 2.3% of the total Namibian budget, and has remained roughly at this level, with a budget of N\$305.6 million for 2009/10. Figure 3.1 provides a summary of the budget allocation (see Appendix 1 for details).

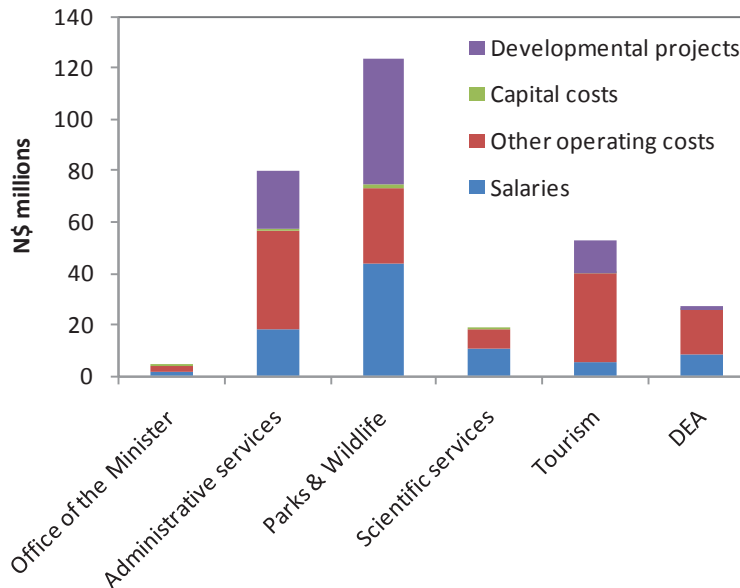


FIGURE 3.1 ALLOCATION OF THE MET BUDGET FOR 2009/10 AMONG ITS DIRECTORATES

The budget of the Ministry of Environment and Tourism is divided among **six directorates** and **six cross-cutting programmes** (Table 3.2). Of the **2009/10 MET budget**, just over N\$123.8 million was allocated to the Directorate of Parks and Wildlife Management, of which N\$96.7 million was for parks. The total

budget allocated to **protected area management** across all directorates for 2009/10 was **N\$136.7 million**, some 45% of the total MET budget (Table 3.2; see Table 3.3 for budgets from 2007/8 – 2012/13). This is more than three times the 2004/05 allocation due to the effective use of the economic evidence presented in the protected area valuation study of 2004. The budget allocated to parks does not include the costs associated with tourist facilities, which are separately managed by Namibian Wildlife Resorts, a government parastatal.

For mid-year emergencies, the MET can apply for funds provided under the contingency fund if the expenditure relates to unforeseen natural disasters such as severe drought, forest fires or flooding.

**TABLE 3.2. MET BUDGET BREAKDOWN BY DIRECTORATES AND PROGRAMMES FOR 2009/10 (N\$ '000s). DATA SOURCE: MET**

Programme	Directorate						Total
	ALL	DASS	DEA	DoT	DPWM	DSS	
Protected area management	100	36 897			96 700	3 000	<b>136 697</b>
Protection and management of key species and natural resources		8 232			6 588	15 834	<b>30 654</b>
Community-based natural resource management and tourism		8 542	1 000	9 000	1 500	4 100	<b>24 142</b>
Regulation of environmental protection and sustainable resource management		20 000	26 800			5 000	<b>51 800</b>
Tourism development		1 500		47 467			<b>48 967</b>
Improving the economic value of natural resources and protected areas in MET jurisdiction		3 088	6 200			4 000	<b>13 288</b>
<b>TOTAL</b>	<b>100</b>	<b>78 259</b>	<b>34 000</b>	<b>56 467</b>	<b>104 788</b>	<b>31 934</b>	<b>305 548</b>

**TABLE 3.3. PLANNED EXPENDITURE ON MET PROGRAMMES (N\$ '000s). SOURCE: MET**

Programme	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Protected area management	90 612	92 584	136 697	157 064	146 356	261 535
Protection and management of key species and natural resources	13 930	16 500	30 654	30 261	31 262	55 049
Community-based natural resource management and tourism	53 563	23 117	24 242	16 700	29 564	25 573
Regulation of environmental protection and sustainable resource management	10 994	12 317	51 800	32 985	43 803	66 948
Tourism development	117 244	48 736	48 967	51 191	56 675	78 482
Improving the economic value of natural resources and protected areas in MET jurisdiction	13 574	16 036	13 288	16 100	16 150	37 512
<b>Total</b>	<b>299 917</b>	<b>209 290</b>	<b>305 648</b>	<b>304 301</b>	<b>323 810</b>	<b>525 100</b>

### 3.3.2 Donor funding

Donor funding does not enter government budgets, either through the State Revenue Fund or development budget, but is recorded in the Medium Term Expenditure Framework (MTEF) which is the main policy document that serves as the basis of Parliamentary discussions. This makes it difficult to derive accurate estimates of available and disbursed resources (PEER 2007). Total donor aid in 2006/7 was estimated to be about N\$33 million, of which 66% was Global Environmental Facility (GEF) assistance through the World Bank and the UNDP amounted, 29% was from Germany and 9.5% was from DANIDA (PEER 2007). Other donors include the EU, Spain, Finland, Norway, UK, France, Luxembourg, Netherlands, Iceland, USAID, IFAD and FAO. In addition, international and national NGOs such as WWF, NACSO, NNF, DRFN provide donor-funded support to the sector. Coordination of donor assistance by the National Planning commission is reportedly weak and limited to assuring alignment with national goals.

#### *Millennium Challenge Account (MCA)*

The tourism sector is obtaining substantial funding through the Millennium Challenge Account (MCA) which will provide opportunities to maximize the contribution of tourism to economic growth and poverty reduction in Namibia. This is the first MCA funding on tourism and biodiversity conservation, and is a testimony of recognition that investment in park management and biodiversity based tourism yield necessary economic return for development and poverty reduction. MCA seeks to support the tourism sector with a total estimated budget of US\$96.9 million over a five year period (2008-2013). The MCA aims to unlock tourism potential of many of the Namibia's protected areas and create strong linkages between park development and rural poverty alleviation through increased private sector investment and involvement. The investment program will be implemented and managed through four components (Table 3.4) with the MET, Boards, parastatals, communities, the private sector and associations comprising the implementing agencies.

**TABLE 3.4:** MCA INVESTMENT IN THE TOURISM SECTOR (IN US\$ MILLION)

Activity	08/09	09/10	10/11	11/12	12/13	13/14	TOTAL
Etosha infra investments	1.00	2.05	5.57	15.97	8.76	7.12	40.51
Marketing activity (NTB)	0.50	1.40	2.37	2.42	1.58	-	8.26
Conservancy support activity	0.98	1.27	5.10	4.98	4.45	1.42	18.19
Total	2.48	4.71	13.04	23.36	14.79	8.58	66.96

Source: MCA Namibia Tourism Project Description 2009

Funding mechanisms include providing the public investment portion into joint ventures, public investment in infrastructure to unlock private sector opportunities and revolving funds, but do not include grant or equity funding to the private sector. However, equity support to community owned ventures (for example conservancies) could be considered. Technical assistance and research might be considered when they the main actions.

There is some uncertainty regarding the sector's capacity to implement such a large investment program. The activities are to be funded in a phased fashion, with a primary emphasis on capitalization costs during the first three years and dissipation of recurrent costs during the remaining two years (4-5). Several questions remain regarding issues such as the recurrent cost implications for the sector over the long term.

On the whole, the MCA Namibia investment will complement on-going initiatives, including the ongoing CBNRM Program but will not replace the resources invested by government, NGOs and other partners to build capacity of conservancies. Most of the support provided by the development partners focuses on capacity building and institutional reform. MET recognizes that mechanisms will need to be put in place to ensure the financial sustainability of the activities, such as (1) strengthening of private-public partnerships by removing some of the investment barriers and (2) the financial and institutional sustainability of the CBNRM program

## 4 FINANCIAL REQUIREMENTS OF THE PROTECTED AREA SYSTEM

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### 4.1 MAINTAINING THE CURRENT PARKS SYSTEM

Funding for parks management is currently in the order of N\$136.7 million. Based on the difference between running costs requested and received by the parks, it has been estimated that the allocation to park management division fell short by some N\$28 million for 2009/10 (D. Faulkner, SPAN consultant, pers. comm.). If parks continue to receive less funding than they request, then infrastructure and general quality of management is likely to be degraded, resulting in biodiversity loss, and possibly a loss in tourism. This suggests that the 2009/10 budget just to adequately maintain the parks system should have been in the order of at least **N\$165 million**. This is about 20% more than the amount that was allocated. However, this is not adequate to meet biodiversity conservation requirements, and, as argued above, merely meeting minimum funding requirements will not produce the economic returns that could be created from an improved parks system as described by the Parks Vision.

### 4.2 FINANCIAL REQUIREMENTS FOR THE PARKS VISION

#### 4.2.1 Human resource and operating costs

Park conservation management costs were taken from recently drawn up management plans for /Ai-/Ais, Namib-Naukluft, Etosha, the North East Parks, Sperrgebiet, and the proposed Kunene Peoples Park. The remaining park budgets and headquarter costs were thus taken from a spreadsheet model developed in 2004 by Rowan Martin based on several exercises carried out over the past few years using spreadsheets to develop staff structures and operating budgets for protected areas (Martin 1997, 2003, 2004). The detailed methods and assumptions are described in an accompanying report (Turpie *et al.* 2009). The model estimated the ideal human resource and operating costs of a more efficient protected area system. This was based on factors such as park size and priority issues, and applying the high-level institutional structure proposed by Booth *et al.* (2005). Effective management of this system would require about 1071 staff for park management. An annual recurrent expenditure of **N\$157.3 million** would be required for park management (Table 4.1). These figures do not include tourism management

These costs are modest in comparison with South African National Parks (~N\$1200/km<sup>2</sup> compared with ~R11 000/km<sup>2</sup>), even when only comparing the flagship parks – Etosha and Kruger - which are a similar size and both in savanna areas (~N\$2100/km<sup>2</sup> compared with > R6000/km<sup>2</sup>).

Needless to say, cost efficiency of an operation must be realized, with an adequate allocation of budget, for the amount to be sufficient. For this, business planning at park level would be needed.

**TABLE 4.1. ESTIMATED TOTAL REQUIRED COSTS OF THE PROTECTED AREA SYSTEM (N\$ 2008). PARK MANAGEMENT COSTS ARE DERIVED FROM MANAGEMENT PLANS FOR PARKS MARKED WITH \*.**

<b>PARKS</b>	<b>Park management</b>	<b>Cluster &amp; head office costs</b>	<b>Total</b>
<b>North-West</b>			
Etosha*	26 700 000	16 667 314	43 367 314
Skeleton Coast	8 819 258	4 032 133	12 851 391
Cape Cross	3 222 300	747 047	3 969 347
West Coast RA	10 667 921	911 689	11 579 610
<b>North-East</b>			
Babwata NP*#	10 709 490	5 374 112	16 083 602
Mudumu*	3 366 000	1 287 544	4 653 544
Mamili*	1 870 000	898 778	2 768 778
Poppa Falls	741 017	1 132 990	1 874 007
Khaudum*	7 480 000	530 239	8 010 239
Mangetti*	1 309 000	28 563	1 337 563
Waterberg	5 924 834	7 480 150	13 404 984
<b>South-Central</b>			
Namib-Naukluft	13 504 933	4 741 087	18 246 019
Sperrgebiet*	441 000	125 904	566 904
/Ais-/Ais*	2 770 491	1 238 444	4 008 935
Hardap RR	4 218 551	1 875 733	6 094 284
Naute RR	1 517 622	347 417	1 865 039
Von Bach RR	1 076 892	308 981	1 385 873
Daan Viljoen	1 171 481	898 374	2 069 855
Gross Barmen	1 508 777	1 740 925	3 249 701
<b>Total</b>	<b>107 019 566</b>	<b>50 367 423</b>	<b>157 386 989</b>

# Babwata = Mahango, Kwando, Caprivi

#### 4.2.2 Capital costs

Capital requirements to meet the parks vision and realize the potential economic benefits include upgrading of buildings such as staff quarters, purchase of equipment and vehicles, fences and construction or upgrading of roads. Total capital requirements for park development (excluding NWR resorts) over the next 5 years are anticipated to be in the order of N\$541 million (Table 4.2).

The highest capital expenditure is required for Etosha and the Namib-Naukluft park, mainly due to required road infrastructure. The US\$40.5 million

investment in Etosha park management infrastructure will go a long way in addressing the existing deficiency. Similarly, €12 million KfW funding for park management infrastructure in the Bwabwata, Mudumu and Mamili National Parks in the North East will substantially improve the current conditions with very little infrastructure.

**TABLE 4.2. ESTIMATED INITIAL CAPITAL EXPENDITURE REQUIRED (N\$ 2008) BASED ON MANAGEMENT PLANS AND OUR ESTIMATES.**

<b>Park</b>	<b>Capital costs</b>	<b>Park</b>	<b>Capital costs</b>
/Ai-/Ais	16 361 900	Mudumu	6 401 384
Cape Cross	6 550 000	Namib-Naukluft	116 000 500
Babwata*	26 323 772	Diamond Coast	0
Daan Viljoen	6 550 000	West Coast	14 108 919
Etosha	276 591 126	Naute	0
Gross Barmen	0	Popa	0
Hardap	14 108 919	Skeleton Coast	6 550 000
Huns Mtns	0	KPP	16 231 000
Khaudum	14 831 312	Sperrgebiet	6 550 000
Mamili	4 027 980	Von Bach	0
Mangetti	3 388 440	Waterberg Plateau	6 550 000
<b>Total N\$</b>			<b>541 125 251</b>

Babwata = Mahango, Kwando, Caprivi

In recent years, there has also been a marked increase in the government capital budget in developing and upgrading park infrastructure. It has grown from N\$ 2.69 million in 2004/05 to N\$ 49.2 million in 2009/10. One of the parks that benefited substantially was /Ai-/Ais Hot Spring Park, which is part of the /Ai-/Ais Richtersveld Transfrontier Park with South Africa. Funding from the Peace Parks Foundation and the Government's development budget constructed two access gates along the Orange River, a new MET station with staff accommodation and information centre in Rosh Pinah.

Although there has been much improvement over the last five years, this level of government's capital investment needs to continue and further increase in order to adequately maintain the parks to achieve the Park Vision which will yield substantial economic benefits to the nation from the parks.

#### **4.2.3 Additional costs associated with the vision**

It is estimated that a minimum increase of about 20% over current government funding levels would be required to maintain the system of parks in its current state, i.e. just to prevent the further decay that would be inevitable with continued underfunding. However, this basic expenditure scenario would not be sufficient to achieve the Parks Vision, realise the full potential value derived from parks and meet the objectives of Vision 2030. Total costs of

implementation of the vision are estimated in Table 4.3. Initial capital costs are assumed to be spread over a five year period, with the spread based on existing business plans. Thereafter, it is assumed that annual capital costs would be in the order of 5% of the initial 5-year investment. The overall additional cost of realising the vision and associated economic benefits is estimated to be about N\$878 million over the first 5 years, and N\$95 million per annum thereafter.

**TABLE 4.3.** PROJECTED TOTAL PUBLIC SECTOR COSTS ATTRIBUTABLE TO THE PARKS SYSTEM (EXCLUDING NWR) WITH IMPLEMENTATION OF THE PARKS VISION IN NAMIBIA (N\$ MILLIONS, 2008 CONSTANT VALUES).

Measure of costs	Year 1 2007/8	Year 2	Year 3	Year 4	Year 5	Year 6-20*
<b>Current costs</b>						
Capital costs	6.2	6.2	6.2	6.2	6.2	6.2
Recurrent costs	84.4	84.4	84.4	84.4	84.4	84.4
<b>Total</b>	90.6	90.6	90.6	90.6	90.6	90.6
<b>Additional costs to implement the vision</b>						
Capital costs	72.7	99.9	173.9	119.6	43.9	20.8
Recurrent costs	73.0	73.2	73.6	73.9	74.2	74.4
<b>Total</b>	145.7	173.1	247.5	193.6	118.1	95.3
<b>Total costs of implementing the parks vision</b>						
Capital costs	78.9	106.1	180.1	125.9	50.1	27.1
Recurrent costs	157.4	157.6	158.0	158.3	158.6	158.8
<b>Total</b>	236.3	263.7	338.1	284.2	208.7	185.9

\* Year 6 includes replacement capital costs prorated, in constant prices, to year 20

### 4.3 THE FINANCING GAP

Based on the above, and conservative projections of revenues, the current financing gap to maintain the status quo in park management is estimated to be currently in the order of N\$8.8 million per annum, and the financing gap for achieving the Parks Vision and associated economic impact is in the order of N\$113 million per annum. This suggests that the current protected area system under a minimum financing scenario could be self financing through access to a greater proportion of the revenues from entrance fees. Self financing for the Parks Vision to achieve maximum conservation benefits and unleash the economic potential of protected areas is less likely to be achievable, given the size of the financing gap. There will be greater pressure to increase government and donor inputs.

**TABLE 4.4. ESTIMATION OF THE FINANCING GAP FOR THE PROTECTED AREA SYSTEM UNDER TWO EXPENDITURE SCENARIOS (N\$ MILLIONS, 2008 VALUES)**

	Minimum expenditure scenario to maintain the status quo			Optimal expenditure scenario to achieve the Vision		
	2008-2012	2013-2017	2017-2022	2008-2012	2013-2017	2017-2022
<b>(Constant 2008 prices, N\$ millions)</b>						
(i) Estimated financing needs for management costs and investments to be covered	766.5	766.5	766.5	1331	929.5	929.5
(ii) Projected revenues (over 5 year period)						
Entrance fees (current estimate + 5% growth rate)	287	366	468	287	366	468
Concessions	10	10	10	99	214	296
Live sales & other	12	12	12	12	12	12
Total projected revenues	309	388	490	398	592	776
(iii) Amount of PA generated revenues retained in the PA system for re-investment	83.75	103.5	129	83.75	103.5	129
(iv) Total government budget (incl donor funds)	638.8	638.8	638.8	683.5	683.5	683.5
(v) Financing gap for 5-year period	44	24	-1	564	143	117
(vi) Estimated <b>average annual financing gap</b> (financial needs – <i>available</i> finances)	<b>8.8</b>	<b>4.9</b>	<b>-0.2</b>	<b>113</b>	<b>29</b>	<b>23</b>

## 5 OPTIONS FOR FINANCING AN IMPROVED PROTECTED AREA SYSTEM

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### 5.1 INTRODUCTION

With government's political commitment to the environment and tourism sector being embedded Vision 2030 and the NDP3, budget allocations are somewhat in favor of the protected area system. However, these allocations have been insufficient to maintain a minimum standard of services in national parks resulting in a deterioration of the infrastructure. The protected area system requires an increase in funding as well as increases in the efficiency and effectiveness of MET's expenditures.

One of the reasons for the current financial situation has been the lack of allocation of resources to park and financial planning in Namibia. Since needs and opportunities change over time, such efforts will be required to have an ongoing and continuously improving understanding of the financial requirements of the protected area system, as well as to be able to harness new opportunities for funding.

**Action:**

A dedicated financial planning unit should be established and housed in the Policy and Planning Unit of the restructured MET. This unit should be engaged in ongoing data gathering, projections and financial gap analysis and updated, and should make continued use of evaluation tools such as the financial scorecard described above.

Several possible financial mechanisms exist for ensuring adequate investment in the protected area system (Table 5.1). The more viable options are discussed below. High priority mechanisms for continuation include motivation for government budget investments, motivation for donor grant investments, and collection of park user fees. High priority mechanisms for further development and/or exploration and development include collection of park concession fees (rentals and royalties), user fees (royalties) from extractive activities such as mining in parks and use of wildlife and forest resources, revenues from sale of live game in parks, revenues from bio-prospecting agreements, capture of non-use values such as biodiversity offsets, cause related marketing, capture of carbon market income, and trust fund development. A number other mechanisms also warrant ongoing exploration as lower priorities (Table 5.1).

TABLE 5.1. SCREENING OF FUNDING MECHANISMS FOR PARKS IN NAMIBIA. TRENDS ARE DESCRIBED AS

▲ = INCREASING IN USE, ► = STEADY, ▼ = DECREASING IN USE,

+ = HIGH PRIORITY, AND - = LOW PRIORITY

Mechanism	Trend	Namibia	To explore	Comment
<b>External Flows</b>				
1. Government budgets	▲	Yes +	Yes +	CBA
2. Donor bi/multilateral grants	▲	Yes +	Yes +	CBA
3. Protected area trust fund	▲	No	Yes	EIF/Parks fund
4. Earmarked taxes	►	No	Yes -	
5. Environmental fines	►	No	Yes -	
6. Tax deductions for donations	►	Yes	Yes -	
7. Individual donations		No	Yes -	
8. Corporate donations		No	Yes -	
11. Loans	►	No	Yes -	
12. Debt reduction schemes	▼	No	No	
<b>Market-Based Mechanisms</b>				
1. Tourism revenues				
Entry fees	▲	Yes +	Yes +	
Concessions fees	▲	Yes -	Yes +	New policy
Voluntary contributions		No	Yes	
Activities fees (e.g. filming)		Yes	Yes	
Tourism taxes (e.g. bed, airport)		No	Yes -	
2. Resource extraction user fees/sales				
Wildlife/Forest		Yes	Yes +	Live game
Bio-prospecting	►	No	Yes +	New policy
Mining	►	No	Yes +	Agreements
Petroleum/Gas		No	No	
3. Ecosystem services				
Carbon	▲	No	Yes	
Watershed		No	No	
Wildlife refuge		No	No	
4. Biodiversity offsets		No	Yes +	Sperrgebiet, NNP
6. Cause related marketing		No	Yes	Elephants
7. Lotteries		No	Yes	
<b>Cost-sharing Mechanisms</b>				
1. Co-management		No	Yes	
2. Management concessions		No	Yes	Small parks
3. Volunteers and interns		No	Yes -	

## 5.2 EXTERNAL FLOWS

### 5.2.1 Government budgets

Namibia's parks system has been traditionally funded from the government

treasury, most specifically through Vote 18. The parks system has also traditionally been given low priority as it was seen to have little to contribute to the national development process. Recurrent budgets were commonly just enough to keep only basic management structures in place, and capital budgets were insufficient to prevent depreciation and decay of park infrastructure. However, valuation studies have shown that the parks system underpins a large part of the national tourism industry and, as such, generates significant economic value in terms of income and employment (Turpie *et al.* 2004, 2009). These studies have also shown that enhanced investment in the parks system will be economically efficient resulting in positive economic returns in terms of income.

**Action:** use existing economic evidence to continue motivating to treasury for additional funding to MET and parks in interests of national development goals.

The evidence of significant economic value associated with the parks system, and further investment in it, was used by the MET to motivate for an increased government budget allocation for parks.

### 5.2.2 Grants

The evidence and tools developed in the economic analysis of Turpie *et al.* (2004) were used to appraise a very large US Millennium Challenge Account project to invest N\$535 million (US\$66.9 million) in the tourism and parks sector of Namibia over a five-year period. Funds have also been committed from the German Government (KFW) to develop the North East parks. The motivation for continued and new external flows to parks, based on economic evidence will be an important element of this financing plan. However, it should be recognized that because Namibia is becoming an emerging country, donors are likely to start withdrawing, the government of Namibia will increasingly have to take responsibility for these costs. At the same time, globally, there is an increasing amount of donor funding to initiatives that address biodiversity based mitigation and adaptation activities in light of climate change and envisaged serious impacts.

**Action:** start motivating now for continued and new donor funding parks for beyond 2012.

### 5.2.3 Trust funds and reinvestment of park income

One of the greatest problems facing the sustainability of the Namibian protected area system is that very little of the revenues generated are internalised. In other words, parks currently have little access to the funds they generate. This, coupled with the fact that budgets allocated to protected areas are not influenced by the revenues that they generate, creates a disincentive for enabling tourism developments and consumptive use or live capture

initiatives that might raise revenues, since these all increase the management costs of parks, and stretch the already-limited budgets.

By separating income and expenditure within the government accounting system, the incentives are not present to make each unit within the organisation efficient or profitable. This syndrome is further exacerbated by centralising budget control. To create the conditions under which an *esprit de corps* can be instilled into each park requires the full internalisation of all of the components which go into maintaining an effective management agency. Only when each section (field, tourism, scientists, technical services and administration) has its own devolved budget, is accountable for its performance using that budget and can measure the returns against that budget, can it be expected that morale will rise and the aims of the Parks Vision will be realised.

**Action:**

- Set up a system to reward performance by different parks and / or divisions.
- Mainstream management plans for each park and develop and support parks financial model
- Convince MoF to allow MET to retain a greater proportion (or all) of revenue in trust funds.
- Improve the ways existing trust funds work from a parks point of view.
- Capitalise the EIF.

Under the current institutional set up, the trust funds provide the best opportunity for ensuring that as much as possible of the revenue generated by parks is returned to parks. The Game Products Trust Fund (GPTF) in 2009 committed itself to provide annual supplementary funding for park management, earmarking the 25% of the park entrance fees it receives. It is in a process of recruiting a full-time fund manager to increase its efficiency and outreach. The GPTF therefore has a great potential to become a viable sustainable financing mechanism. The EIF, which is not operational yet, has a much broader mandate than the protected area system. It would be possible to establish a third trust fund which is specifically geared to the parks system, or to change the management of the existing funds to serve parks better. This would entail some reorganization of the sources of funding and the way in which funds are disbursed, as suggested in Table 5.2.

It is important to improve the management of the current funds, irrespective of whether a dedicated fund for protected area is set up in addition. In improving the trust fund set up, it will be important to take current understanding of best practice into account (Box 1). Once the funds are fully operational funds, should be readily available for their intended purpose.

**TABLE 5.2. POSSIBLE USE OF TRUST FUNDS IN THE NAMIBIA’S WILDLIFE SECTOR.**

<b>Fund</b>	<b>Type</b>	<b>Sources</b>	<b>Spent on</b>
Game Products Trust Fund	Revolving	Park entrance fees, concession fees Proceeds from the sale of game products and bioprospecting; Transfers from EIF	Supplementary park management costs and capital investment, concession development and management cost Projects relating to the welfare of people living around parks and conservation in buffer areas
Environmental Investment Fund	Endowment	Parliamentary appropriations, donations, payments for ecosystem services, interest accrued	Maintenance of biodiversity (PAs); Management and sustainable use of resources outside PAs
Protected Areas Fund	Combination	Tourism revenues (including concession fees and voluntary contributions from users); Transfers from EIF	Park operating costs and capital investments

## **5.3 TOURISM REVENUES**

The main source of revenue from parks is currently the park entrance fees, which are charged per person per day and per vehicle entrance. Two areas need to be addressed: (a) development of an optimal pricing system that achieves the desired balance between revenue maximization and overall welfare value, and (b) development of an efficient fee collection system.

### **5.3.1 Park fees and collection system**

#### *Pricing*

Over the last few decades, Namibia has seen substantial growth in international tourism, with a large proportion of tourists being primarily drawn to the country by its natural attractions. Park fees generally form a small proportion of tourist travel costs, and tourists are often unaware of what they have paid as park fees are often hidden within the cost tour packages or tour guide services. Evidence suggests that demand among nature-based tourists for park entry tends to be more price inelastic than their demand for whole tourist trips, which itself tends to be price inelastic (Barnes 1996). In Costa Rica, for example, the average long-run price elasticity of foreign visits to parks was found to be 0.68 (Alpizar 2006). This means that increasing prices will result in increased revenues, facilitating a high value - low impact tourism policy. Nevertheless, pricing policies also have to consider encouraging use by domestic visitors, who already pay taxes which indirectly support the parks system.

**BOX 1. CONSERVATION TRUST FUNDS AND THE RECIPE FOR SUCCESS  
(BASED ON CONSERVATION FINANCE ALLIANCE 2008)**

**Conservation Trust Funds** can be either revolving funds or endowment funds that are used to cover the operating and capital costs of protected area systems and other conservation-related activities.

The **objectives** of Conservation Trust Funds (CTFs) range from a strict focus on conserving biodiversity to improving the livelihoods of communities near PAs and promoting sustainable development. In developing countries governments and donors have tended to encourage a shift towards the latter to align with national development goals, as well as to indirectly support biodiversity conservation by reducing human threats. However, there is a danger that too broad a focus may dilute the direct impacts on biodiversity.

**Advantages** of CTFs are that they

- i. provide a relatively stable and secure source of funding for salaries, infrastructure maintenance, equipment and supplies.
- ii. serve as an exit strategy for international donors in countries where they plan to close down their projects or offices (for budgetary or other reasons) but would still like to have a lasting impact.

The single most important condition for **good governance** of CTFs is for a majority of the members of the governing board to come from outside of government. Experience has shown that this makes them more successful in attracting contributions from international donors and the private sector and more transparent and effective in achieving biodiversity conservation goals. In particular, the Chairman of the board should not be a government official; the CTF's offices should not be physically located inside a government ministry; and nongovernmental members of the board should not be chosen or appointed by a government.

The **main sources of funding** for CTFs are the GEF and bilateral aid agencies (around 75 percent), but also include corporations, other nonprofit organizations and foundations. In most cases, money raised through the latter is used to finance individual projects and programs rather than to capitalize endowments. Fundraising for CTFs relies on fundraising, marketing and strategic skills of their boards and senior management, as well as the existence of a realistic and well thought-out marketing and fundraising strategy. Conducting a system-wide PA financial gap analysis helps to raise the initial capital for a CTF, such as in the case of Madagascar.

**Key factors** for ensuring the success of CTFs include:

- 1) A country-wide *conservation strategy* that presents a quantified biodiversity conservation needs assessment both within and outside PAs;
- 2) *Political support* at the highest levels in a country, with limited government involvement in a CTF's day-to-day management;
- 3) Fundraising and technical *support from international organizations*;
- 4) *Consultative processes* that include all major stakeholders and reflect those inputs in a CTF's design, including support for sustainable livelihoods; and
- 5) Top-notch *human resources* that provide the breadth of skills needed to lead a CTF, both at the senior management staff level and board level.

In addition, CTFs need to ensure that interest and investment income (including capital gains) earned by investment of endowment funds is **exempt from taxation** at the source (i.e., in the country where the money is invested) or in the destination country (i.e., the country where the CTF is legally registered or operate).

Pricing systems can be used to make protected areas more financially self-sufficient, they can be used to manage visitation rates to reduce congestion and ecological impacts (e.g. through differential prices for parks of different popularity and ecological sensitivity), and to smooth seasonal patterns (though low and high-season prices). They can also be designed to ensure that Namibia does not subsidise recreation for visitors from wealthier countries at the expense of its own citizens. Fees can also be aligned with those of the competition, such as those of parks in neighbouring countries (Brown 2001).

It is important to note that determining **optimal park entrance fees** may not be based entirely on maximising revenues. Park pricing strategies also need to take social equity and ecological sustainability into account, as well as the ecological and tourist carrying capacities of the parks. Welfare maximizing pricing systems take into account the consumer and producer surplus of national visitors, negative impacts of visitors within parks, and the positive impacts of national and international park visitors felt beyond the park (Alpizar 2006).

Thus park pricing strategies thus have to have **defined goals** (e.g. maximizing welfare versus cost recovery). See also Larson & Jarvis (1998) and Krug *et al.* (2002) for discussions on optimal park pricing from a theoretical perspective.

Namibian policy has been to try and maximise revenues by setting prices to correspond with overseas visitors' average willingness to pay, and offering differentiated prices to regional and domestic visitors by setting discount levels to adjust prices to correspond with their respective willingness to pay. Understanding of the different levels of willingness to pay and price elasticity for visitors of different origins can be particularly useful in setting revenue-maximising entry fees that capture as much consumers' surplus as possible. This can be done through a combination of tiered pricing for visitors from different origins, and differential pricing for different parks. Indeed, Namibian park fees are differentiated not only between the domestic and foreign tourists, but also between better developed parks with a high visitation rates and less developed parks with low visitation rates.

Visitors often pay less than they would be willing to pay for the use of protected areas. Park pricing strategies may thus entail raising prices in order to capture the differential, or 'consumers' surplus', thereby increasing revenues. Willingness to pay for the use of protected areas is usually ascertained by means of questionnaire surveys, using the Contingent Valuation Method. Several studies have been conducted investigating tourists' demand for wildlife viewing in Namibia (Stoltz 1996, Barnes *et al.* 1997, Barnes *et al.* 1999, Nyysölä & Ågren 2002, Krug *et al.* 2001, Krug *et al.* 2002, Krug 2003, Alberts 2006,

Turpie 2009). As with the other southern and eastern African studies, studies in Namibia have found that foreign tourists have a much higher consumers' surplus than local tourists, and account for most of the uncaptured consumers' surplus (see Turpie et al. 2004 for summary of these earlier study results). A more recent analysis of the 2006 survey of park tourists (SIAPAC 2007) by Alberts (2007) indicated that overseas tourists were willing to pay significantly more than the entrance fees charged for the higher priced parks (Table 5.3), whereas regional and domestic tourists were not.

**TABLE 5.3. WILLINGNESS TO PAY (WTP) FOR TOP PARKS DERIVED FROM 2006 VISITOR SURVEY**

Origin of visitors	Price charged	Mean WTP (N\$)	Median WTP (N\$)
Overseas	80	119	125
Regional	60	72	64
Domestic	40	46	25

Source: Alberts (2007)

Informed by the abovementioned studies, prices have been adjusted several times over the past decade (Table 5.4). Up till 1996 visitors to parks were charged a single entrance fee, and a daily fee was introduced from 1997. Park fees have differentiated between foreign and Namibian visitors since at least 1994, with Namibians receiving a 20% discount until 1995 and a 50% discount thereafter.

**TABLE 5.4. CHANGES IN NAMIBIAN PARK ENTRY FEES PER PERSON PER DAY (NAMIBIANS AND CHILDREN RECEIVE DISCOUNTS).**

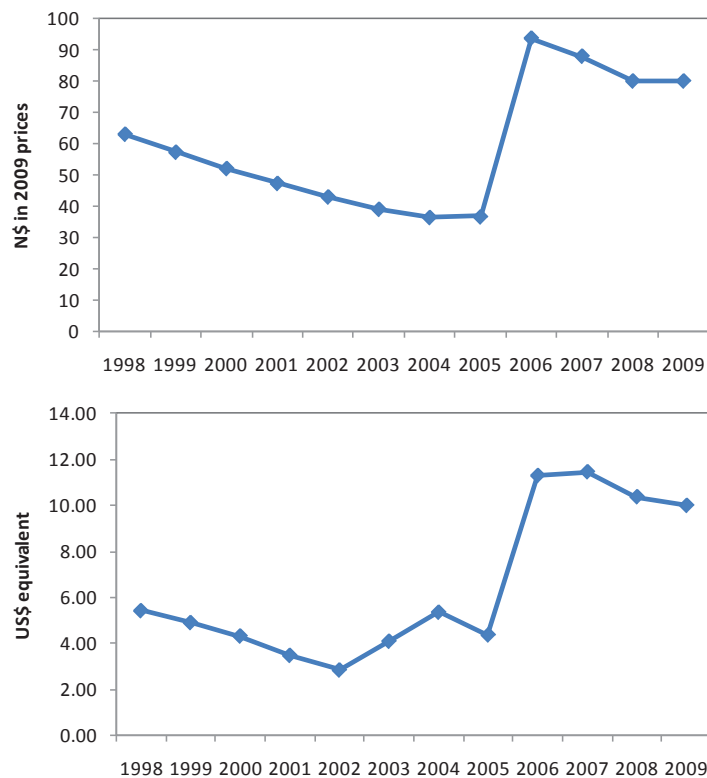
	1998-9	2000	2001	2003-5	2006-9
Etosha National Park	30	30	30	30	80
Namib-Naukluft Park (Sossusvlei)	30	30	30	30	80
Skeleton Coast Park	20	20	20	20	80
Waterberg Plateau Park	10	10	20	20	80
Ai-Ais Hot Springs	10	10	20	20	80
Namib-Naukluft Park (Namib section)	10	10	20	20	40
Khaudum Game Park	10	30	20	20	40
Daan Viljoen Game Park	10	10	20	20	40
Hardap Recreation Resort	10	10	20	20	40
Popa Game Park	10	30	20	20	40
Cape Cross Seal Reserve	10	10	20	20	40
Other parks*	10	10	10	20	40

\*entry fee is not charged where public access cannot be controlled for logistical reasons, such as in certain parts of the desert parks

Park entry fees failed to keep up with inflation from 1998 to 2005, which meant that park entry became increasingly cheap to Namibians over this period.

Subsequent price adjustments have reversed this trend, so that parks have roughly doubled in price over a relatively short period, and increased overall (Figure 5.1). In US dollar terms, park prices remained relatively steady between 1998 and 2005, but adjustments since then have led to a dramatic increase in prices in foreign currency terms.

A survey of park visitors in 2009 suggests that overseas visitors are still prepared to pay more than double the current entrance fee (using median or geometric mean as the more conservative and accurate estimate; Table 5.5).



**FIGURE 5.1. REAL CHANGES IN PARK ENTRY FEES(UNDISCOUNTED PRICE) FOR TOP-END PARKS IN NAMIBIA FOR NAMIBIAN AND SOUTH AFRICAN TOURISTS AND FOR OVERSEAS TOURISTS, DUE TO INFLATION AND EXCHANGE RATE EFFECTS.**

**TABLE 5.5. WILLINGNESS TO PAY (WTP) FOR ETOSHA DERIVED FROM 2009 SURVEY OF PARK VISITORS**

	n	Price charged	Mean WTP (N\$)	Median (geometric mean) WTP (N\$)
Overseas	249	80	253	193
Regional	159	60	173	123
Domestic	15	40	128	103

Source: JK Turpie

Thus there appears to be potential for increasing fees on an ongoing basis, as willingness to pay seems to keep going up. Nevertheless, it would be risky to raise the prices much further in the light of the strengthening local currency. Furthermore, extracting maximum willingness to pay from foreign tourists may not always be the most desirable solution, since this may detract from the visitors' experience, and possibly reduces the opportunities for capturing consumers' surplus in other areas of the economy, such as in expenditure on private sector and community-based tourism initiatives. In the case of domestic tourists, goals may be to maximise the opportunity for locals to visit parks, which would require low entry fees. Namibians already pay for parks through taxes. These types of considerations may also extend regionally.

While social equity considerations may encourage lower prices for Namibians, the prices still have to be set at sufficiently high levels that discourage visitor numbers from exceeding ecological and tourist carrying capacities. Ecological carrying capacity is the level of visitation beyond which there are negative impacts on the environment and biodiversity of the parks. Tourist carrying capacities are reached when congestion levels have a measurable impact on visitors' enjoyment of the parks. Increasing park fees to limit tourist numbers (and impacts) is usually compatible with increasing revenues, although this depends on the elasticity of demand, which in turn depends on the availability of substitutes within and beyond Namibia.

Revenue generation could be further improved by collecting fees at some parks where there are no gates at present. However, given the current spread of visitor numbers, it is important to first establish whether cost of setting up the required facilities would make this worthwhile.

**Action:**

- Undertake a theoretically sound analysis for the estimation of optimal pricing for welfare maximisation.
- Review and update park fees every three years based on proper ongoing analysis of demand and re-evaluation of needs and objectives.

### *Payment system*

Smart-card systems such as the WILD Card system used in South Africa, are potentially attractive in terms of marketing and efficiency. In 2004, Turpie et al. (2004) modeled the potential impacts of introducing such a system for Namibia. The conclusion at the time was that the transaction costs would override the benefits of such a system, and run the risk of decreasing income to the state from park revenues. Data which would enable further development of a more detailed cost-benefit model of local implementation of the WILD Card system in Namibia is not available at this stage. However, information provided by a local firm which runs the WILD Card system in South Africa concurs with the earlier

conclusions, that the introduction of a card system in Namibia would not enhance revenues directly, and may reduce them. However, it would likely enhance park use through a promotion and marketing effect. There are both cost (visitor impacts) and benefit (visitor experience) implications to this that would need to be further analysed.

It is recognized that the existing manual collection systems are prone to error and theft, and that revenues could be increased by about 10% just by increasing the efficiency and safety of the system. One option that has been suggested is that NWR/other agents sell the entry permits, MET gate staff collect entry data using a computer data entry system and MET invoices the selling agent accordingly on a monthly basis. After entering, the tourist would have to go and make the payment to validate the ticket received at the gate, and this would be checked on exit (Peter Erb & Denyse Faulkner, *in litt.*). However, there are some potential failings of such a system: (a) it would be prone to dispute between MET and the payment receiver, (b) it is easier for tourists and tour operators to book and pay everything together, and (c) day visitors who have limited time in the park may resent having to go to another point within a park and stand in a queue to pay as a significant waste of their time. Thus, it is suggested that an online booking and payment system is developed for MET in conjunction with NWR and other concessionaires that can be used to receive and record payments of park fees for overnighting visitors. Day visitors should also be given an option to pay online and this should be incentivised by a discount and/or fee paid to external agents – lodges, tour operators. Cash burden at the gate can further be reduced by allowing day visitors to pay at the gate by credit card.

Implementation of a smart-card system is not recommended.  
**Action:** Design and pilot a computerised recording system in Etosha and design a centralised online booking and payment system for use by multiple agencies for the parks system as a whole.

### 5.3.2 Concession fees & royalties

#### *Royalties from NWR accommodation*

The resorts within the protected areas generate substantial turnover in the from a capital base and location which belongs to the MET. This presents a significant opportunity for revenue generation for the parks. Ideally, NWR should pay a royalty of 10-15% of turnover, which includes park royalties and a rental for capital assets, or 4 – 10% of turnover for park royalties alone, if they own the infrastructure. Up until now, the non-profitability of the resorts (with the exception of the three Etosha resorts) has been the main factor standing in the way of realizing such income, though the situation will improve as a result

of the NWR's turnaround strategy. Payment of a royalty could further undermine the financial sustainability of the parastatal at this stage. In addition, the capital assets are to be transferred from MET to the NWR. This will limit potential royalties to those from the use of the park. Nevertheless, the possibility still exists to derive income from the resorts in terms of a percentage of turnover for their being located within the parks. Income derived in this way will only really be viable if the profitability of the resorts is increased.

Prices at NWR resorts have increased markedly following renovations and upgrading during the past two years. The net result has reportedly been an increase in demand for resorts outside of parks which offer better value for money. Thus the NWR strategy might have to be reviewed in the context of this competition.

### *Royalties from private-public sector partnerships*

Many of the parks have the capacity for increased numbers of beds, across a whole range from bottom- to-top-end establishments, including as luxury bush-camps. The development of this potential can yield significant benefits.

The most efficient way to develop further tourism potential in the parks will be to enter into private-public partnerships with concessionaires. MET would have the responsibility of identifying areas for tourism developments and providing the necessary infrastructure such as road networks and water holes. The costs in setting this up might be reduced if MET identifies areas where development can take place in clusters. Private operators would be responsible for the building and maintenance of the camps. Although this means a lower potential rental on these developments, it also means that the private entrepreneurs are the ones to carry the higher risks. A typical lease period for this type of arrangement is 15 to 45 years, with assets being handed back to the park at the end of the period. The expected royalty amounts to about 4 – 10% of turnover. This could increase once the lease period has expired and the assets are transferred to the parks.

It is important that there is a balance between the revenue generation and conservation objectives of the parks. Development for the generation of income should not compromise the conservation objectives of the parks. Factors that need to be taken into consideration include roads, water supply and electricity, the potential levels of congestion on the road networks. Water is a limiting factor for tourism developments in most of the parks, except for Etosha and Daan Viljoen, where water is supplied by NamWater. Revenue generation is not a simple function of the number of visitors. A strategy more

compatible with conservation objectives is to concentrate on providing quality services, rather than quantity.

Implementation of the parks development vision will involve both renovation of the existing tourism facilities in the parks, as embraced by the NWR 2007 turnaround strategy, as well as development of new tourism capacity within parks guided by the MET concessions policy (MET 2006). Concessions policy implementation within parks will be guided by the management plans for specific parks. It will involve development of full tourism carrying capacity over some 20 years with up to 77 tourism facilities (mostly lodges and camps), where private capital and management will be harnessed in joint ventures with government and with significant donor-sponsored community involvement. The new tourism developments will be phased in to meet anticipated growth of 16% per annum in overall demand. The concessions will pay rentals and royalties to the parks according to the joint venture agreements involved. Because the prospective concessionaires will compete for concessions via a tender process, it is anticipated that rentals and royalties will adequately capture the economic rent associated with park tourism concessions.

The pattern of joint venture concession development envisioned with implementation of the policy within the parks development vision and expected revenues generated from these concessions (based on detailed analysis of and planning for concessions in the planned park in the Kunene Region by Massyn *et al.* 2008 and Barnes *et al.* 2008) are described in Table 5.6. Thus, when park tourism capacity is achieved in about year 20 of implementation, government will receive some 178 million annually in revenues from park concessions. These park revenues will be made up of N\$78 million from rentals and royalties, N\$42 million from park use fees, and N\$58 million from indirect, income and company taxes. These projections indicate that implementation of the concessions policy in the parks will not only be economically very sound, but it will be a very important source of park finance through the rentals, fees and taxes that result.

**Action:**

- Develop guidelines for lease duration, remuneration levels and affirmative action obligations to be incorporated in the contractual relations governing tourism partnerships.
- Motivate for the retention of the tourism concession fees within the MET to be reinvested in park and concession management.

**TABLE 5.6.** NUMBER OF NEW LODGES/CAMPS IN PARKS IN NAMIBIA WITH IMPLEMENTATION OF PARKS DEVELOPMENT VISION, AND ESTIMATES OF THE RESULTANT BENEFITS

Park	Year 1	Year 10	Year 20
/Ai-/Ais	0	2	2
Cape Cross	0	2	2
Caprivi	0	6	8
Etosha	2	7	16
Huns Mtns	1	2	2
Khaudum	0	2	2
KPP	2	7	12
Mamili	0	3	3
Mahango	0	2	2
Mangetti	0	1	1
Mudumu	0	2	2
Namib-Naukluft	1	4	12
West Coast	0	3	3
Skeleton Coast	1	3	3
Sperrgebiet	0	3	4
Waterberg Plateau	0	2	2
<b>TOTAL</b>	<b>7</b>	<b>51</b>	<b>77</b>
<b>Estimated government rentals derived (N\$ millions)</b>	7	51	78
<b>Estimated park entry fees derived</b>	3.8	27.6	42.2
<b>Government tax revenues derived (VAT, company tax and employee income tax)</b>	5.3	38.0	58.2

There have been some obstacles to private sector investment outside of parks, mainly that access to loans is difficult due to the combination of high risk and insecurity of land tenure. Such problems are less likely to arise within parks, and thus the park concession opportunities are likely to be more attractive than opportunities in surrounding areas. A more general problem relates to the lack of expertise within MET regarding tourism partnerships (PEER 2007). With the support from the SPAN Project, the Concession Unit was established in 2007 to perform concession development and management functions of the MET. However, continuous capacity development of the Concession Unit staff will be necessary. Moreover, in order to cover the additional cost of the concession management and to ensure the high level of visitor experience in parks, it is strongly recommended that the tourism concession fees will be reinvested in the park management through the GPTF or with another means. With the retention of the concession fees and if the potential of the tourism concession development is achieved, it should be feasible for Namibia to achieve a self-financing protected area system with the optimal expenditure scenario sufficient to achieve the Park Vision. This should lead to the attainment of both Namibia's conservation and economic targets.

#### *Trophy hunting concessions*

The parks currently generate a total of about N\$2.4 million per annum from seven hunting concessions. However, there is further capacity in the parks to increase this to 15 concessions. While the potential offtake from the parks is

obviously much greater (this could be as much as 1-2% of all game populations in the parks), the proposed level of hunting would not interfere with wildlife viewing tourism or biodiversity conservation goals.

**TABLE 5.7. PROJECTED GOVERNMENT REVENUES FROM PARK TOURISM WITH IMPLEMENTATION OF PARKS VISION IN NAMIBIA OVER 30 YEARS FROM 2008 (N\$, 2008 CONSTANT VALUES)**

Measure of revenue	Year 1	Year 10	Year 20	Year 30
<b>Revenues associated with new tourism concessions in parks</b>				
Rentals/royalties	7,024,500	50,772,800	77,590,900	77,590,900
Park use fees	3,816,800	27,587,700	42,159,500	42,159,500
Taxes on concessions	5,269,100	38,084,600	58,200,800	58,200,800
Total concession revenues	16,110,400	116,445,100	177,951,200	177,951,200
<b>Revenues associated with all tourism in parks</b>				
Concession rentals/royalties	7,024,500	50,772,800	77,590,900	77,590,900
Concession taxes	5,269,100	38,084,600	58,200,800	58,200,800
All park use fees*	51,963,400	300,742,300	443,619,600	443,619,600
All park revenues **	64,257,000	389,599,700	579,411,300	579,411,300
* All of current park use fees, and new park use fees due to growth and new concessions				
** All park revenues attributable to direct economic activity in parks including park entry (use) fees, park concession rentals, and taxes on park concessions				

### 5.3.3 Voluntary contributions

Visitors to parks may be given the opportunity to make voluntary contributions over and above the entry and other fees they paid to visit the park. This is usually when they exit the park, but it could also be elicited at national exit points. The design of these systems is important in determining their success. For example, experimental research in Costa Rica showed that visitors donated an average of US\$2.50 per person, with donations of up to US\$100, but the size of their donation was related to the way in which it was elicited and was 25% higher when the amount given was observable by others (Alpizar *et al.* 2008). However such a tactic may be at the cost of the visitor's comfort.

**Action:**

- Establish a secure and non-intrusive system for eliciting voluntary payments.
- Ensure that the voluntary payments are explicitly made into a trust fund or chosen project fund.

Local and foreign visitors to Etosha and Sossusvlei indicated a higher willingness to pay if a non-government organisation was responsible for managing park revenues, reflecting a general distrust of government institutions (Krug *et al.* 2002). Thus a voluntary contribution system might be more successful if directly linked to one of the trust funds.

## 5.4 REVENUES FROM RESOURCE EXTRACTION

### 5.4.1 Sale of wildlife/plant products

Extraction of natural resources from the parks system to date has been dominated by the capture and sale of live game, usually involving species of high value. Government holds game auctions every two or three years in which the domestic and South African markets purchase game, mostly for stocking private land. In 2008 such an auction was held with a turnover of some N\$19 million (Table 5.8). These revenues are paid into the Game Products Trust Fund.

Live game sales should continue to be important as part of the implementation of the parks vision, as long as the demand for live game prevails. This will depend to a large extent on the tenure security and investment prospects for those holding private or leasehold land in Namibia and South Africa. It has been estimated that the parks could supply some live game worth some N\$32 million per annum as the parks system matures (Table 5.9).

TABLE 5.8. DETAILS OF THE MET 2008 GAME AUCTION

Species	Number sold	Average price N\$	Sales value N\$
Black rhino	8	500,000	4,000,000
Buffalo	40	263,375	10,535,000
Sable antelope males	10	125,000	1,250,000
Sable antelope breeding groups	6	322,500	1,935,000
Black-faced impala	90	12,167	1,095,000
Giraffe	21	11,524	242,000
<b>Total</b>	<b>175</b>		<b>19,057,000</b>

Source: Erb, P. (pers. comm., 2008)

The income generated could be improved by outsourcing capture operations on a regular basis through a tender process. This would pass the risk and costs of the capture operation to the private sector, leaving the MET with a good margin on this operation. This would also be a more efficient mechanism of marketing game than via an auction, as auction costs, including animal holding costs and mortality, can be high.

Potential for the use of other plant and forestry products also needs to be explored. Some of the succulents that grow in the southern areas of the country, especially in the succulent karoo, offer potential income to the MET. There is a strong demand for many of these species and many are illegally

harvested. This market has not been tested and the practicality and administration involved may not be worth the risk of opening the market.

**TABLE 5.9. ESTIMATED POTENTIAL INCOME FROM LIVE GAME SALES, GIVING A RANGE FROM A CONSERVATIVE LOWER BOUND ESTIMATE BASED ON SELECTED HIGH-VALUE SPECIES TO AN UPPER BOUND ESTIMATE BASED ON POTENTIAL MAXIMUM SUSTAINABLE OFFTAKE RATES OF ALL SPECIES. POPULATION ESTIMATES AND MAX OFFTAKE RATES FROM BARNES (UNPUBL. DATA). ZONE 1 AND ZONE 2 ARE ABOVE AND BELOW THE 'RED LINE', RESPECTIVELY.**

Name	Offtake rate		Zone 1 pop	Zone 2 pop	Offtake		Live sale value (N\$)	
	Lower	Upper			Lower	Upper	Lower	Upper
Buffalo	5%	9.59%	1025	250	13	24	625 000	1 198 750
Cheetah	0%	5.00%	639	126	0	6	-	129 106
Eland	0%	10.22%	1704	380	0	39	-	321 842
Elephant	0%	3.70%	8993	0	0	0	-	-
Gemsbok	0%	12.22%	6950	1315	0	161	-	486 243
Giraffe	0%	6.08%	3383	108	0	7	-	88 023
Hartebeest, Red	0%	10.56%	1468	115	0	12	-	38 367
Hippopotamus	0%	0.00%	1262	0	0	0	-	-
Impala, blk-faced	0%	14.48%	1500	0	0	0	-	-
Impala, common	0%	14.48%	77	0	0	0	-	-
Kudu	0%	12.22%	1613	884	0	108	-	241 376
Lechwe	0%	14.00%	0	0	0	0	-	-
Leopard	0%	5.00%	1670	330	0	17	-	393 494
Lion	0%	5.00%	546	0	0	0	-	-
Ostrich	0%	10.00%	3297	490	0	49	-	70 821
Rhinoceros, black	0%	2.00%	816	43	0	17	-	2 577 000
Rhinoceros, white	0%	2.00%	54	62	0	2	-	278 400
Roan antelope	5%	11.00%	440	120	28	62	1 680 000	3 696 000
Sable antelope	5%	12.22%	256	60	16	39	711 000	1 737 684
Springbok	0%	20.34%	17811	1121	0	228	-	277 417
Tsessebe	0%	12.22%	0	15	0	2	-	32 903
Warthog	0%	17.93%	148	61	0	11	-	9 378
Waterbuck	0%	12.22%	0	0	0	0	-	-
Wildebeest, blue	0%	10.56%	18098	0	0	0	-	-
Zebra, Burchell's	3%	10.73%	764	3210	96	344	144 450	516 650
Zebra, Hartmann's	3%	10.00%	77489	8914	2592	8640	9 072 315	30 241 050
							12 232 765	42 334 502

#### 5.4.2 Bioprospecting

Bioprospecting permits generate revenues in protected areas around the world. Bioprospecting potential tends to be highest in biodiversity hotspots. In Namibia, the extremely diverse floral communities of the succulent Karoo Biome in the newly proclaimed Sperrgebiet National Park have the highest bioprospecting potential.

Payments for bioprospecting would probably include a once off fee for the rights over a defined period, and/or a fee per sample. A percentage of the project cost (e.g. 25%) might be payable upfront as a rehabilitation/

performance bond. In addition, the contract can make provision for a percentage (e.g. 2%) of the total global gross sales of the product(s) made or derived from the collected samples, to be paid annually by the resource user to the government and landowners (if not state-owned land) for as long as the product is sold in the market. Several international companies have expressed interest in this regard.

Namibia does not have any laws that specifically regulate bioprospecting access and benefit sharing. There is an Interim Plant Bioprospecting Council (IPBC) which is mandated by Cabinet to deal with matters of indigenous plants and knowledge, genetic resources, access and benefit sharing (ABS), and a bill on ABS has been drafted, but is being held back by difficult technical issues (Chinsembu 2009).

### 5.4.3 Mining

There is significant and increasing mineral prospecting and mining activity taking place within the parks system. The economic importance of potential and current mining developments in terms of national income and employment is generally assumed and found to be very significant. For this reason such developments are given high priority and political support, and park development is able only to mitigate the damage they cause. Although environmental care in line with the Environmental Management Act is expected from miners and prospectors, no compensation is currently provided to the park system by miners and prospectors.

In the development of this financing plan a number of stakeholders were of the opinion that prospecting and mining that takes place in parks should be treated as **user** of park

**Action:** Set up a user fee for prospecting and mining activities inside protected areas.

resources, just as that of tourism concessions is. As such the users of park resources (prospectors and miners) should be paying user fees to the government park authorities. It is considered that an economically efficient situation will involve agreements on the use of the land and such payments. Given the high value of most mineral investments, such income (user fees for prospecting and mining) could be a very significant part of the financing plan.

## 5.5 REVENUES FROM PAYMENTS FOR ECOSYSTEM SERVICES

No payments are received for ecosystem services generated by the parks system. This is currently a major area of activity and research around the world, as governments and conservation agencies seek more innovative ways of financing conservation. Analysis of successful cases where such payments do

occur and do make a difference to conservation efforts are, however, limited to a few basic services, primarily water supply and carbon sequestration (Turpie et al. 2008). Namibia's protected areas do not protect any major catchment areas that generate sufficient value to be captured by the protected area system. However, there may be some potential for generating income from carbon sequestration or storage. The parks are mostly in desert and devoid of large carbon stocks, but there is more potential in the more mesic northern and northeastern areas of the country.

## 5.6 BIODIVERSITY OFFSETS

Biodiversity offsets are actions that offset biodiversity losses caused by economic activity in one area by contributing to conservation of biodiversity elsewhere. This can be a requirement to allow a development to go ahead which might otherwise not have been possible due to its environmental impacts, or it might be a voluntary action on the part of a firm that wants to improve its image. There is no specific provision in Namibian law for the former use of biodiversity offsets at this stage. There are major concerns that biodiversity offsets could be used by government authorities and developers to permit too much environmental damage from developments, and that this damage will not be entirely offset so that there is "no net loss". The lack of credible standards on biodiversity offsets act as a major barrier. For these reasons, it is not particularly desirable to use this tool other than as a voluntary activity. A scheme could be devised where firms could receive biodiversity offset certificates for making contributions to conservation, e.g. into a trust fund. However, it is doubtful that this would be a significant source of revenue for parks in Namibia.

**Action:** Investigate the potential market and mechanisms for a voluntary biodiversity offsets scheme.

## 5.7 CAUSE-RELATED MARKETING

Cause related marketing, involving for example, the sale of adoption rights for park attributes has significant potential for development. Numerous wildlife adoption schemes are operational around the world which act as revenue generating mechanisms for conservation-oriented NGOs. In these schemes, the donor chooses from a range of species, and symbolically adopts the species rather than a known individual animal. In return for a set donation, the donor receives a package. These vary from small donations of about \$20 – 30, which buy a certificate and information pack, to schemes which elicit donations of the order of US\$250 which buy a furry animal toy in addition to the above. The WWF scheme is a good

**Action:** Identify a partner to set up an adoption scheme.

example, and the certificate in this scheme carries weight because of its well-known logo. Whether such a scheme specific to one country could work is still to be tested, but would be a case of clever marketing. Namibia has many charismatic species, and there was an attempt to establish an adopt an Etosha elephant scheme in collaboration with the US based scientist, however it has not taken off. A scheme of this sort could also include interesting and unusual small animal and plant species that are endemic to the country. Such a project could be taken up by an NGO or by a joint public-private sector initiative.

## **CONCLUSION**

Sustainable financing requires not only securing adequate funds but also considering the quality, form, timing, targeting, use and sources of funding. It is important to build a diverse funding portfolio, going beyond conventional mechanisms and including multiple funding sources. Funds must also be managed and administered efficiently to achieve cost effectiveness of park management operations. In addition, it is necessary to have a mechanism to have an ongoing and continuously improving understanding of the financial requirements of the protected area system, as well as to be able to harness new opportunities for funding.

A number of options have been explored to secure sufficient and sustainable financing for an effective protected area system in Namibia. High priority mechanisms for continuation include motivation for government budget investments, motivation for donor grant investment, and collection of park user fees. High priority mechanisms for further development and/or exploration and development include collection of park concession fees, user fees from extractives such as mining in parks and use of wildlife and forest resources, revenues from sale of live game in parks, revenues from bio-prospecting agreements, capture of non-use values such as biodiversity offsets, cause related marketing, capture of carbon market income, and trust fund development.

Actions that need to be taken over the next three year period (2010 – 2012) include effective use of the economic evidence to continue motivating the treasury for additional funding to MET and parks in the interests of national development goals, convincing the Ministry of Finance to allow the MET to retain a greater proportion (or all) of revenue to be reinvested in park management, a similar motivation for the retention of the tourism concession fees. Review and updating of park fees every three years based on proper ongoing analysis of demand and re-evaluation of needs and objectives will be an essential action to take. Other actions needed include

establishment of a system for eliciting voluntary payments, investigation into the potential market and mechanisms for a voluntary biodiversity offset scheme, and establishment of a user fee for prospecting and mining activities inside protected areas. Implementation of these actions should bring Namibia close to attaining financial sustainability for its protected area system to safeguard the essential natural resource base and to secure economic benefits for the country.

## 6 ACTION PLAN FOR FINANCING PROTECTED AREAS

Actions	Indicators	Timing	To be implemented by	Indicative budget (N\$)
Ensure that the policy and planning unit in the new structure of the MET contains a protected areas financial planning unit.	<ul style="list-style-type: none"> <li>Protected Areas Financial planning unit</li> </ul>	2010	Office of the PS	0
Use existing economic evidence to continue motivating to treasury for additional funding to MET and parks in interests of national development goals	<ul style="list-style-type: none"> <li>Publication of the Financing Plan</li> <li>Updated PA economic valuation booklet</li> <li>Organisation of a national PA financing conference to secure commitments of stakeholders.</li> <li>Increased park management budget (operational and capital)</li> </ul>	2010 2010 2011  2012	Office of the PS	100,000
Motivate for continued and new donor funding for parks for beyond 2012	<ul style="list-style-type: none"> <li>Proposal formulated for SPAN phase 2 and submitted to GEF or other donors</li> <li>Proposal formulated and submitted to the German Government's International Climate Change Initiative.</li> </ul>	2011  2010	DPWM, SPAN Office of the PS, SPAN	40,000
Set up a system to reward performance by different parks and/or divisions.	<ul style="list-style-type: none"> <li>An institutionalised system to evaluate and award performance of different parks and/or divisions</li> </ul>	2011	DASS	30,000
Mainstream management plans for each park and develop and support parks financial model	<ul style="list-style-type: none"> <li>Cost centre system operational and linked to park management and business plan.</li> <li>Existence and use of park management and business plans</li> <li>Enhanced park management effectiveness by NAMETT</li> </ul>	2010-2011	DPWM, SPAN	
Convince MoF to allow MET to retain a greater proportion (or all) of revenue in trust funds.	<ul style="list-style-type: none"> <li>50% retention of the Park entrance fees</li> </ul>	2011	Office of the PS, DPWM	0
Improve the ways existing trust funds work from a parks point of view.	<ul style="list-style-type: none"> <li>GPTF adequately staffed and fund management capacity enhanced</li> </ul>	2010  2011	DSS, DPWM	50,000

	<ul style="list-style-type: none"> <li>A larger funding is earmarked from GPTF for park management with increase in income from parks</li> <li>EIF capitalised</li> </ul>				DEA	0
Capitalise the EIF.						
Undertake a theoretically sound analysis for the estimation of optimal pricing for welfare maximisation.	<ul style="list-style-type: none"> <li>Study conducted to set optimal pricing and fee structure revised accordingly.</li> </ul>		2011	2011	DPWM, DEA, SPAN	100,000
Review and update park fees every three years based on proper ongoing analysis of demand and re-evaluation of needs and objectives.	<ul style="list-style-type: none"> <li>Park fees reviewed every three year with a thorough analysis.</li> </ul>		2010 2013 2016	2010 2013 2016	DPWM, DEA, SPAN	60,000
Design and pilot a computerised recording system in Etosha and design a centralised online booking and payment system for use by multiple agencies for the parks system as a whole.	<ul style="list-style-type: none"> <li>New computerised system designed and piloted.</li> </ul>		2010-2011	2010-2011	DASS, DPWM, SPAN	700,000
Develop guidelines for lease duration, remuneration levels and affirmative action obligations to be incorporated in the contractual relations governing tourism partnerships	<ul style="list-style-type: none"> <li>Review conducted and approved by the Concession Committee.</li> </ul>		2010-2011	2010-2011	DPWM	60,000
Motivate for the retention of the tourism concession fees within the MET to be reinvested in park and concession management.	<ul style="list-style-type: none"> <li>Submission made for the retention.</li> <li>Motivation approved by the MoF</li> </ul>		2010	2010	Office of the PS, DPWM	0
Establish a secure and non-intrusive system for eliciting voluntary payments in which voluntary payments are explicitly made into a trust fund or chosen project fund.	<ul style="list-style-type: none"> <li>Voluntary payment system established</li> </ul>		2010-2011	2010-2011	DPWM, SPAN	50,000
Investigate the potential market and mechanisms for a voluntary biodiversity offsets scheme.	<ul style="list-style-type: none"> <li>Potential investigated</li> <li>Biodiversity offset piloted.</li> </ul>		2010-2011	2010-2011	DPWM, DEA, SPAN	100,000
Set up a user fee for prospecting and mining activities inside protected areas.	<ul style="list-style-type: none"> <li>User fee system established and operational</li> </ul>		2010-2011	2010-2011	DPWM, DEA, SPAN	60,000
Identify a partner to set up an adoption scheme.	<ul style="list-style-type: none"> <li>An adoption scheme set up</li> </ul>		2010-2011	2010-2011	DPWM, SPAN	50,000

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## 8 APPENDIX 1. MET BUDGET 2009/10

Budget (N\$ 000's)	Office of the Minister	Administrative services	Parks & Wild Man	Scientific services	Tourism	DEA	
Salaries	1 897	18 206	44 106	10 658	5 142	8 153	88 162
S&T	1 500	4 595	10 045	745	400	400	17 685
Materials and Supplies	89	961	3 124	620	300	138	5 232
Transport	420	10 650	9 257	3 050	300	298	23 975
Utilities	30	17 708	650	453	40	5	18 886
Maintenance	23	816	142	60	150	24	1 215
Other	45	4 000	613	2 170	600	1 313	8741
International Subscriptions	-	-	5 030	90	700	94	5 914
Domestic Subscriptions	-	-	100	-	32 000	15 000	47 100
Individuals and Non-profit	-	-	-	-	50	-	50
<b>Operating Costs</b>	<b>4 004</b>	<b>56 936</b>	<b>73 067</b>	<b>17 846</b>	<b>39 682</b>	<b>25 425</b>	<b>216 910</b>
Furniture and Office	100	310	90	160	20	21	701
Vehicles	-	200	1 000	290	120	-	1 610
Other	-	10	500	-	-	-	510
<b>Capital costs</b>	<b>100</b>	<b>520</b>	<b>1 590</b>	<b>450</b>	<b>140</b>	<b>21</b>	<b>2 821</b>
Materials and Supplies	0	0	5 000	0	0	0	5 000
Other	0	0	4 000	0	3 500	1 500	9 000
Furniture and Office Equip	0	0	-	0	2 000	0	2 000
Operational Equipment	0	0	1 600	0	0	0	1 600
Feasibility Studies	0	0	5 800	0	1 500	0	7 300
Construction	0	22 500	32 800	0	5 667	0	60 967
<b>Developmental projects</b>	<b>-</b>	<b>22 500</b>	<b>49 200</b>	<b>-</b>	<b>12 667</b>	<b>1 500</b>	<b>85 867</b>
<b>Total</b>	<b>4 104</b>	<b>79 956</b>	<b>123 857</b>	<b>18 296</b>	<b>52 489</b>	<b>26 946</b>	<b>305 598</b>





