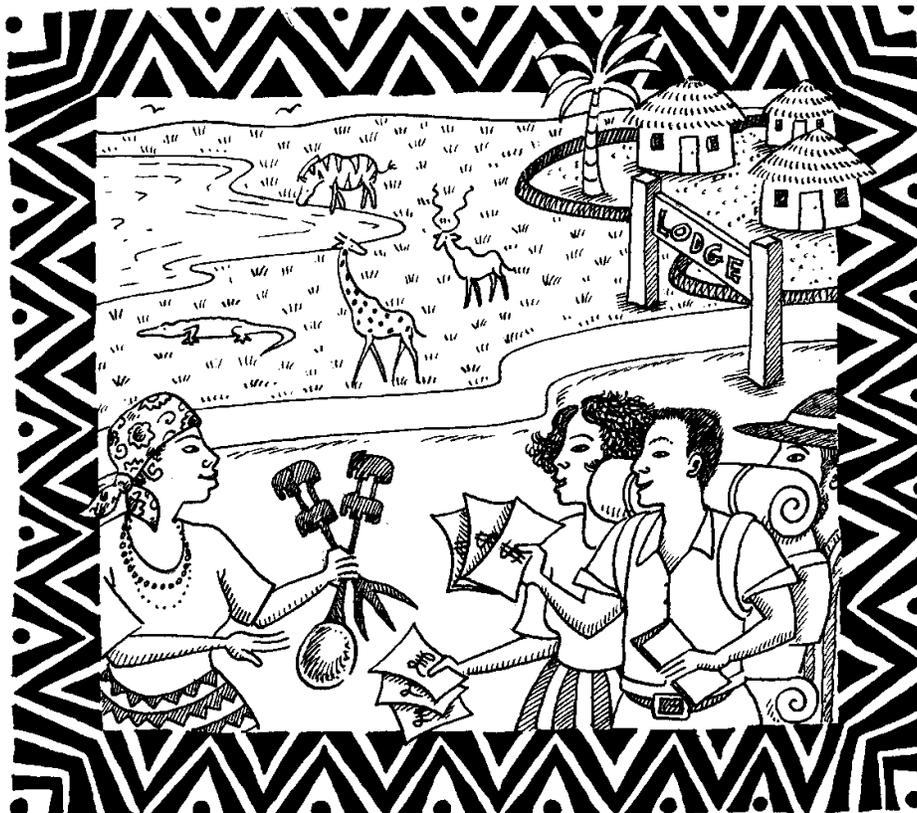


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## Sustainable tourism options for the coastal zone of Namibia

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*This series of Research Discussion Papers is intended to present preliminary, new or topical information and ideas for discussion and debate. The contents are not necessarily the final views or firm positions of the Ministry of Environment and Tourism. Comments and feedback are welcomed.*

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## ABBREVIATIONS

BCLME	Benguela Current Large Marine Ecosystem
CBNRM	Community-based natural resource management
EIA	Environmental impact assessment
GEF	Global Environment Facility
GNI	Gross national income
GRN	Government of the Republic of Namibia
LAC	Limits of acceptable change
M&E	Monitoring and evaluation
MET	Ministry of Environment and Tourism
NACOMA	Namibian Coast Conservation and Management (project)
NHIES	Namibia Household Income and Expenditure Survey
NTB	Namibia Tourism Board
OI	Outcome indicator
SAM	Social accounting matrix
SEA	Strategic environmental assessment
TOMM	Tourism Optimisation Management Model
TSA	Tourism Satellite Account
WTTC	World Travel and Tourism Council

## ABSTRACT

This paper summarises a study commissioned by the Namibian Coast Conservation and Management (NACOMA) Project which investigated the sustainability of tourism development in the coastal zone of Namibia. It complements another paper on the sustainability of coastal natural resource use, presented in another Research Discussion Paper in this series, No 78.

All relevant literature and data as well as some directly collected empirical information, was used to estimate the income and employment associated with the coastal tourism sector, its sustainability and its expansion potential. Valuation was undertaken using data from both the supply of tourism services (the tourism establishment), and the demand for tourism services (tourism expenditures). This provided some convergent validation.

A revised base line was developed for the NACOMA monitoring and evaluation (M&E) function. This includes the base line economic value of coastal tourism activities, as measured by the direct contribution to national income, of N\$956 million in 2006. The revised base line OI 2 indicator for the number of people involved in sustainable coastal natural resource use in 2007 was estimated at 8,356. The 2011 target was estimated at 10,082.

Coastal tourism embraces three main components, the accommodation sector, the tour operator sector, and the tourism activities linked to these, such as care hire, travel agents, craft sellers, etc. Accommodation contributes some N\$400 million, tour operators contribute some N\$16 million, and tourism related (linked) activities contribute some N\$540 million, to the gross national income.

Generally, there is ample scope for expansion in the development of tourism on the coast. The sustainability of this is threatened by poor planning, where allocation of sites is environmentally and economically suboptimal, and by open access, which encourages overuse, pollution and damage. There are carrying capacity constraints in the case of recreational angling tourism, and some specific tour operator activities such as dolphin watching.

The study lists some 25 recommendations for ensuring sustainable coastal natural resource use. Some of these are short term and possibly implementable within NACOMA, while others are more general and relevant to the long term development of the coastal zone. Key recommendations include:

- planning the further development of coastal tourism through application of zoning as informed by the Strategic Environmental Assessment (SEA) process, sound economic analysis, as well as selected use of environmental impact assessment,
- increasing the economic contribution and sustainability of all tourism development on the coast by increasing property rights and guided tourism activities, through implementation of the concessions policy,
- developing codes of conduct, which aim at sustainability, for tourism investors and operators, and developing further certification of operations on environmental and social grounds.
- undertaking an empirical economic survey of coastal tourism activities, and the development of financial/economic models of these to guide planning,

## 1. INTRODUCTION

A study on sustainable tourism options for the coastal zone of Namibia and refinement of available data on coastal natural resource use practices was commissioned by the Namibian Coast Conservation and Management (NACOMA) Project. This formed part of the study by Barnes and Alberts (2007). The findings of this study, as they relate to tourism, are summarized and reproduced here. The tourism findings complement those of another Research Discussion Paper in this series (No. 78), which deals with natural resource use.

The NACOMA project aims to enhance coastal and marine biodiversity conservation through the mainstreaming of biodiversity conservation and sustainable use into coastal policy, a legislative framework, and institutional and technical capacity, and by supporting targeted investments for biodiversity conservation in critical ecosystems on the coast.

During the first (PDFB) stage of the project development, a study was conducted (van Zyl 2004) to measure the economic values associated with the natural resources in the project area. This was followed by a study to develop outcome indicators for monitoring and evaluating economic benefits in the coastal zone (van Zyl 2005). These two studies form a useful primary basis for the present study. As described under the objectives below, the present study aims to ensure that developments in tourism and natural resource use are sustainable, contribute maximally to economic growth and job creation, particularly in the coastal zone, and that rent capture for development is maximised. The present study also makes recommendations on improvements to monitoring and evaluation (M&E), on improvements to policy, and on possible targeted interventions.

The analysis follows the broad categories of the study by van Zyl (2004), but specifically disaggregates and adds to this framework, where data availability allows. As outlined in the NACOMA Project Document (World Bank 2005), the focus of possible targeted interventions will be on on-the-ground gaps for coastal biodiversity conservation and sustainable use throughout the project intervention zone.

The present study appears to be particularly timely in terms of the changing nature of economic use practices in the coastal zone, which pose an increased threat to coastal resources and biodiversity hotspots, namely the rapidly increasing tourism industry, uncontrolled urbanisation, the large fishing industry, and changes in mining use practices, and the pending process of governmental decentralisation, which offers the opportunity to clarify national, regional, local and sectoral responsibilities, and implement new legislation and integrated/coordinated ways of working.

### *1.1 Background*

Environmentally sensitive habitats and biodiversity hotspots are defining characteristics of the Namibian coast. The status quo is that many of these habitats remain without legislative protection and there are no established marine protected areas. Urbanisation and unregulated tourism, expansion of fishing, mariculture and other extractive industries such as mining, increasing unemployment in coastal towns, and increasing public access are impending threats that were identified in the NACOMA Project Document (World Bank 2005).

There is also a lack of environmental and socio-economic data on the coastal regions, and little regional input into planning and controlling use practices on coastal land. The globally

important coastal resources of Namibia are at significant risk of degradation and unsustainable exploitation and there is a need for an integrated coastal zone management approach to ensure their conservation and sustainable use. The current development patterns feature insufficient or no conservation of coastal biodiversity, and lack of integration of biodiversity conservation in the landscape and coastal development planning, as well as the challenges related to weak management of the existing coastal zone. Without the intervention of this project, such developments will likely result in an irreversible loss of biodiversity and mainstreaming opportunities.

## **2. OBJECTIVES AND METHODOLOGY**

### *2.1 Objectives*

- 1) To disseminate a scaled-down and concise version of the findings and recommendations of the main report in the form of two separate Research Discussion Papers amongst the relevant stakeholders and other experts (listed below) for further review, analyses and contributions.
- 2) To assess the unsustainable and sustainable tourism use practices and recommendations for a shift to sustainable use practices indicating expansion potential and more efficient rent capture through e.g. land/resource zoning, future allocation of property rights and concessions.
- 3) To update the NACOMA Monitoring and Evaluation OI 2 baseline data for sustainable and unsustainable tourism options

### *2.2 Methodology*

#### **2.2.1 Literature review**

A review was undertaken of the unpublished report on "Sustainable Tourism Options for the Coastal Zone of Namibia and refinement of available data on coastal natural resource use practice" (Barnes & Alberts, 2007). A review was undertaken of the other unpublished related reports specifically written for the NACOMA project in 2007.

#### **2.2.2 Current and future methodology for economic valuation**

The monitoring and evaluation process will require future application of the same methodology used in this baseline study.

The absence of systematic survey data on economic activity in the coastal region made it necessary to draw information and data from various sources, estimate values using some adaptation (including extrapolation, interpolation and inflation), and use various assumptions. Because of the lack of direct data, wherever possible use was made of triangulation or convergent validation, i.e. estimates were made using two or more approaches to arrive at a corroborated average.

### **2.2.3 Direct contribution to national income**

The tourism values were estimated using data from two sources: the supply of tourism services, and the use of such services. On the supply side, data were extracted from NTB statistics on the numbers of registered suppliers of tourism services by category and Region in Namibia. Then data from tourism enterprise models (primarily lodge and campsite models) were subjectively applied to these numbers to get aggregates for gross output and direct contribution to national income.

On the demand side, estimates of the numbers of tourists visiting the coast were derived from surveys of tourists at national level and at the coast, and from the national Tourism Satellite Accounts (TSAs) (WTTC 2006). This involved a somewhat crude estimate of the share of total tourist numbers that visit the coast. Trip expenditures, also derived from these surveys, were then applied to derive aggregate gross outputs associated with coastal tourists. Then the ratio of direct contribution to national income to gross output derived from the models was used to derive aggregates of such direct contribution. Values derived from these two approaches were in broad agreement, and they were averaged to derive the direct contributions of tourism accommodation and tour operators to national income.

Data from the latest foreign visitor exit survey and a recent park tourist survey on the allocation of tourist trip expenditures were used to determine the tourism-related direct contribution. This was estimated from the ratio of accommodation to other, linked, trip expenditures.

The numbers of employment opportunities involved in tourism service provision were also estimated, using the enterprise models and aggregated appropriately. Similar ratios of employment to the amount contributed to national income were then applied to the linked tourism-related use practices. A second approach was used to corroborate the employment estimates for tourism use practices at the coast. Here, ratios of employment to generated national income were derived from the TSAs, and these were applied to all the national income estimates.

### **2.2.4 Total, direct and indirect contribution to national income**

In estimating the total direct and indirect contribution of tourism and resource use practices to national income (the total economic impact), the direct values derived as described above were added to the indirect values. Indirect contributions were determined using income multipliers extracted from the Namibian social accounting matrix (SAM) (Lange et al. 2004). These are fairly broad measures estimated at sector level. Employment values were attributed to the indirect values using the same ratios, for jobs to national income, which were derived in the case of the direct values above.

### **2.2.5 Future measurement of values**

The baseline tourism and resource use indicators measured in the study should be re-estimated at the end of the NACOMA Project. A similar approach to that described above should be applied, but should incorporate any new or improved data, e.g. from surveys, that have become available by then. Changes in values that emerge in such future analyses should be carefully assessed to see whether they are the result of real project-attributable change or other factors or simply better information. The lack of a systematic, replicated series of

targeted surveys means that this process will, to some extent, be subjective. However, this should not detract from the undoubted value of the monitoring and evaluation process

### 2.3 Study area

The project intervention zone employed for the study was that of the NACOMA Project Document (World Bank 2005). Thus, it embraces the full length of the coast and extends 12 nautical miles out to sea from the coast, and some 2 to 3 km inland from the coast, except where urban and other land uses with coastal links extend further inland (Figure 1). The data collected will be relevant to this zone, but the division between coastal and non-coastal use practices will be conceptual rather than rigidly physical. The coastal zone does not exist in isolation, and a number of use practices take place outside of it that are linked to tourism or natural use practices inside it.

**Figure 1: Coastal regions and protected areas**



Source: EcoAfrica Environmental Consultants (2004)

## 2.4 *Socio-demographic characteristics*

The NHIES (GRN 2006a:13) reported a decrease in the household size of the Namibian population from 5.7 in 1993/4 to 4.9 in 2003/4. The national urban household size also decreased from 4.8 to 4.2, while the national rural household size decreased from 6.1 to 5.4 in the same period.

In the Kunene Region, according to results of the Namibia Labour Force Survey 2004 (GRN 2006b:37), there are 14,084 households in this region. They have an average size of 4.6 persons per household, totalling a population of 64,786 and an economically active labour force of 18,486. The main source of income for 25,526 people is wages and salaries, while a secondary source for 3,952 people is subsistence farming (crops and animals). In the NHIES, a total of 13,365 households with an average household size of 4.6, a population of 61,647, and a per capita income of N\$10,431 were recorded for this Region (GRN 2006a:16, 105) which correlates closely with the findings of the 1993/4 Namibian Labour Force Survey.

In the Erongo Region, a total of 29,952 households with an average household size of 3.6, totalling a population of 107,827 and a labour force of 50,892, with 37,701 employed and 13,919 unemployed people were reported in the Namibia Labour Force Survey 2004 (GRN 2006b:37). According to the latter survey, the main source of income for 42,484 people was found to be wages and salaries, while a secondary source for 5,607 people was found to be pensions. These findings closely correlate with the results of the NHIES (GRN 2006a:16, 105), where the Region showed a total of 27,713 households with an average household size of 3.6 (the lowest in the country), a population of 99,013, and the second-highest income per capita, namely N\$14,948 as compared to the highest per capita income of N\$22,860 in the Khomas Region.

In the Hardap Region, 15,114 households with an average household size of 4.2 totalling a population of 64,379 people were reported in the Namibia Labour Force Survey 2004 (GRN 2006b:37). The main source of income for 25,011 people was found to be wages and salaries, while a secondary source for 3,872 people was subsistence farming, crops and animals. The NHIES (GRN 2006a:16, 105) found a total of 16,365 households with an average household size of 3.7, a population of 68,194 and a per capita income of N\$10,431 for this Region.

In the Karas Region, a total of 18,602 households and an average household size of 4.0 totalling a population of 74,408 was found in the Namibia Labour Force Survey 2004 (GRN 2006b:37). The main source of income for 29,317 people was wages and salaries, while the secondary income for 4,539 was subsistence farming, crops and animals. The NHIES (GRN 2006a:16, 105) found a total of 15,570 households with an average household size of 4.2, a population of 62,465 and an income per capita of N\$11,123 for this Region.

## **3. REFINEMENT OF INDICATORS**

The objectives of the main study called for an update of the baseline indicators for the NACOMA Project. The baseline data from the study of van Zyl (2005) OI 2 were refined and updated, as outlined in Table 1.2 of that report.

### 3.1 *Baseline scenario OI 2*

Outcome Indicator 2 (OI 2) reads as follows: Increase in the number of people engaged in the relevant use practices and the proportion of their incomes derived from these use practices by year 5 compared to baseline situation. Table 1 below shows a summary of the NACOMA baseline data and targets estimated for coastal tourism. More details can be sourced in the main report (Barnes & Alberts 2007).

It must be noted that no empirical data are available to develop meaningful measures of proportions of income derived from sustainable use. The databases and reports of the NHIES (GRN 2006a), the Namibia Occupational Wages Survey (GRN 2002), and the Namibia Labour Force Survey (2006b) are too generalised to provide specific measures for the use practices in the coastal zone. Instead, specific surveys involving employees in the enterprises concerned are required ó which is beyond the scope of this study. Nonetheless, the measures of economic value and employment generated by these use practices have been updated, as shown in Table 2, below.

**Table 1: NACOMA OI 2 baseline data and targets for coastal tourism**

OI 2	Baseline (2007)	End of project (2011)
Increased number of people involved in sustainable coastal tourism*	8,356	10,082
Proportion of income derived from sustainable coastal tourism	No data	No data

\* Direct jobs

The goal of the NACOMA Project OI 2 will be to increase, through targeted investment, the number of people involved in sustainable coastal tourism from some 8,356 (baseline) to some 10,082 by the end of the project.

As stated, there are no empirical data available on the proportions of household income derived from the use practices. There is some overlap of economic values in that some of the economic values for recreational angling are also included in the tour operatorsøuse category, because some tour operators offer recreational angling tours. The degree of overlap could not be calculated, however, resulting in a small amount of double counting. The economic values associated with tourism-related use practices refer to expenditures made by tourists using coastal zone accommodation and tour operators. They include car rental, travel agent and restaurant use, among others.

### 3.2 *OI 2 monitoring framework for the indicators*

Barnes and Alberts (2007) provided an outline methodology for data collection regarding indicators in the NACOMA M&E process. The predetermined indicators are to measure change over a period of five years. The indicators should undergo continuous review to respond to the ever-changing circumstances and information received. It is important to note

that these indicators will not provide all the required answers and solutions, but could be valuable tools for monitoring and assessing changes.

The establishment of an environmental office at the coast is recommended, with the objective to support NACOMA in identifying viable sustainable projects on the ground as well as help to collect the baseline data and provide the M&E specialist with quarterly progress reports. Overall progress will be verified by the M&E specialist, ideally on an annual basis, within the framework of the NACOMA objectives. The overall process would be linked to the Project Cycle Management initiative of the Directorate of Decentralisation Coordination in the Ministry of Regional and Local Government and Housing and Rural Development (funded by the French Government). The parallel training and involvement of Development Officers in the Regional Councils would ensure the longevity of the overall project.

## **4. TOURISM SUSTAINABILITY - FINDINGS**

### *4.1 Introduction*

The concept of sustainability has evolved since the Brundtland Report, "Our Common Future" "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs in order to embrace three dimensions or pillars of sustainable development" (World Commission on Environment and Development 1987).

Economic sustainability has a focus on generating prosperity at different levels of society and ensuring the viability of enterprises and use practices is maintained in the long-term. Social sustainability has a focus on respecting human rights and providing equal opportunities in society. There is an emphasis on local communities, recognising and respecting different cultures and avoiding exploitation. Environmental sustainability has a focus on conserving and managing resources, especially those that are not renewable, requiring action to minimise pollution of land and water and conserving biological diversity and natural heritage.

The findings of the current tourism use practices at the coast will be discussed within the framework of the three "pillars" of sustainability as elaborated above. It is important to reiterate that some of the economic data were based on estimations due to the lack of empirical baseline data such as the current proportions of income of the people derived from the current tourism use practices could not be estimated. It is also of pivotal importance to highlight that none of the current coastal tourism use practices fulfil all the requirements of all three "pillars" of sustainability, namely, economic, social and environmental sustainability.

Coastal tourism in Namibia is divided into three primary sectors. These are the fixed accommodation sector the more mobile tour operator sector, and the various activities linked to these, including car hire, travel agents, craft sellers, etc. Table 2 presents the economic values for these categories as estimated for 2006 (Barnes & Alberts 2007). Analysis of the sustainability follows.

**Table 2: Revised summary of coastal baseline tourism economic use values**

<b>Sector</b>	<b>Spatial distribution</b>	<b>Annual economic value, 2006</b>	<b>No. of jobs</b>
Tourism accommodation	Kunene, Erongo and Karas	Direct GNI: N\$400 million Total direct and indirect GNI: N\$740 million	Unskilled ó 2,449 Semi-skilled ó 480 Management ó 480
Tour operators	All Regions	Direct GNI: N\$16 million Total direct and indirect GNI: N\$29 million	Unskilled ó 92 Semi-skilled ó n/a Management ó 92
Tourism-related	Kunene, Erongo, Karas, inland	Direct GNI: N\$540 million Total direct and indirect GNI: N\$540 million	Unskilled ó 3,306 Semi-skilled ó 622 Management ó 743
<b>Total tourism</b>	<b>All Regions</b>	<b>Direct GNI: N\$956 million</b> <b>Total direct and indirect GNI: N\$1,309 million</b>	<b>Unskilled – 5,847</b> <b>Semi-skilled – 1,194</b> <b>Management – 1,315</b>

## 4.2 *The hospitality sector*

### 4.2.1 **The hospitality sector and socio-economic sustainability**

Within Namibia as a whole, a total of 486 accommodation establishments were found to be registered with the Namibian Tourism Board (NTB), and make a direct contribution to national income (direct value added only) amounting to N\$399.9 million per annum. The total contribution (direct and indirect value added) to national income was estimated at N\$740.6 million per annum, with around 3,409 employees. Of these, 2,449 (72%) are unskilled, 480 (14%) are semi-skilled, and 480 (14%) represent skilled/management. The proportion of income amounts to an estimated N\$33.2 million (38%) for unskilled employees, N\$12.6 million (14.6%) for semi-skilled, and N\$40.7 million (47.4%), for skilled/management.

Zeybrandt (1999) used a contingent valuation method for valuation of coastal sightseeing tourism. The average tourist enjoyed a consumer surplus of some 35% of his/her total trip cost. The aggregated consumer surplus was found to be N\$123 million per annum. The total economic value, or the gross direct economic use value for sightseeing tourism to the Namibian coast, was found to be some N\$347 million per annum.

In this study, the outputs associated with coastal tourism accommodation and tour operators were estimated based on the estimated numbers of facilities and the turnovers associated with them, according to enterprise models (unpublished data, Ministry of Environment and Tourism 2007). Using this supply-side approach, the output for the coast tourism accommodation sector was estimated at N\$833.2 million. To test and corroborate these findings, the output of coastal tourism accommodation was estimated using tourism expenditure data ó a demand-side approach. Thus, using data from the World Travel and Tourism Council (WTTC 2006), the number of international tourists visiting for leisure and

business (54% of the total) were estimated at 422,390. Among nature-based tourists, Barnes et al. (1999) established that 22% were from overseas, 48% were from southern Africa, and 30% were domestic. Based on data from SIAPAC (2003, 2007), the average Namibian expenditure among nature-based tourists was determined for different segments, including an estimate of the Namibian component of package tourists. Then, from visitation data in SIAPAC (2007), it was found that 75% of the nature-based tourism component would visit the coast during their trip, spending 27% of their time there. The estimate for coastal tourism accommodation output using this demand-side approach was N\$811.2 million, which correlates closely with the supply-side approach (N\$833.2 million) and provides some validation for the results.

In order to avoid oversupply and loss of viability, it is important that growth in tourism does not exceed the growth in overall demand for it. Nonetheless, all urban accommodation developments currently have the potential to expand along with the expected urban growth. Thus, in line with predicted national growth in travel and tourism demand, i.e. 6.9% per annum (WTTC 2006), the number of establishments in urban areas can be expected to grow by 40% over the next five years. The contribution of the latter sector to gross national income (GNI) will grow more quickly as tourism becomes more valuable, i.e. growing at 8.6% per annum (WTTC 2006). After five years, this will mean an increase of around 50%. As predicted in the TSAs (WTTC 2006), the accommodation employment values will also increase, but at a slower rate (4.4% per annum). After five years, therefore, employment in urban accommodation can be expected to have grown by some 24%. Evidence suggests that growth rates have not and will not be exceeded.

The expected urban growth prediction is corroborated by the recently completed SEA for Erongo and Kunene Regions (DHI, 2007) in which it was stated that in accordance with Vision 2030 sub-vision on urbanisation, there is a growing need for Namibia's secondary cities like Walvis Bay and Swakopmund to play a bigger part in absorbing urban development than they do today, when Windhoek is hosting the major urban growth. Accordingly, the need for better urban policy, planning and management to accommodate urban growth is likely to become a more urgent imperative in the future.

This sector is the destination of so many production chains, and in venues where the final consumer is usually in a happy and positive frame of mind, and the price of the service is often subservient to its appeal and positioning in quality terms.

It is difficult to generalise about the proportion of total tourist expenditure that is allocated to the coastal zone. Overall, the average tourist from elsewhere in Africa spent five times as much as Namibian tourists, while the average tourist from overseas spent almost 28 times as much. It is important when planning the expansion of tourism at the coast to consider the economic impact of tourism that is linked to it from neighbouring areas, either as part of existing or potential circuits, but also in combined products (SIAPAC 2007:67).

#### **4.2.2 The hospitality sector and environmental sustainability**

As with any growth industry (or product), tourism in Namibia is still grappling with issues of quality, standards and accreditation. Tourists are becoming more discerning about the tourism experience they are seeking and the standard of service and product quality.

The most widely developed programme in Namibia is the Eco Award Namibia Certification Scheme that has been developed to assist the tourism industry implement best practice standards for sustainable tourism practices.

The hospitality sector at the coast could become a sustainability leader, however, leadership qualities would be required in the sector to move beyond direct sector issues (overall energy saving, water recycling, waste recycling, reusing towels in hotels, etc.) to improve the environmental performance standards of its infrastructure and, most importantly, choosing its raw inputs in light of the full supply chain that includes both the direct and indirect effects of water and energy.

Growth in accommodation development outside the urban areas (lodges, camps and campsites) will be constrained primarily by access to water, particularly in the south and central coasts, where there are no ephemeral rivers (Walmsley 2001a, 2001b). But in some localities, there is potential to transport water, and to link coastal accommodation enterprises through excursions, to other inland or urban accommodation development. The physical potential for growth on the northern coast is higher. It is anticipated that, with appropriate zoning for wilderness, low impact and higher impact, overall numbers and values for non-urban tourism accommodation growth on the coast will grow at rates similar to those for urban accommodation.

#### **4.2.3 Hospitality sector - conclusion**

If the accommodation sector were to be measured in terms of local job contribution, then it can be concluded that some 8,356 (44%) direct jobs are contributed by the coastal regions to the industry's estimated total number of 18,840 jobs. The accommodation sector plays an important role in the overall economic contribution that tourism makes at local and national level. In this study, the focus was on the commercial sector where the rules of market economics apply. The hospitality enterprises are required to make profits so as to contribute a return on the capital invested. The principle economic concerns of the hospitality enterprises are their cost structure and the seasonal demand. The diversity of tourism expenditure is such that the most feasible method of assessing government support is to look at the impact that spending by visitors to the attraction has on local income and employment via the multiplier process.

For hospitality enterprises to survive and flourish, other elements of the tourism product must also be on offer at a destination, at a complimentary level, quality and price, to support the overall supply and to provide the tourist with the necessary infrastructure and superstructure. Hospitality enterprises at the coast of Namibia are rarely an attraction on their own but depend heavily on the natural resource attractions in their surroundings. The tour operators mainly supply the services to the visitor and depend on both the accommodation infrastructure and on a pristine environment for their businesses. The scope for expansion in the tour operator sector is considered to be ample. However this should be subjected to policy regulations.

### 4.3 *The tour operator sector*

#### 4.3.1 **Tour operator sector and socio-economic sustainability**

For all four regions a total of 68 land-based, 16 water-based and 8 air-based activity operators were found to be registered with the NTB in 2006. The majority of the coastal use practices are taking place in the Erongo region because the other three regions have limited access due to lack of infrastructure and mining use practices.

Inbound operators currently and potentially play a critical role in providing domestic and local benefits at many tourist destinations in Namibia including the coastal zone. Based on the total of 92 registered activity tour operators, their direct contribution to national income is N\$15.7 million per annum, and their total combined direct and indirect contribution to national income is N\$28.9 million per annum. Tour operators have an estimated number of 184 employees, of whom 92 are unskilled and 92 skilled. The proportion of income for unskilled employees amounts to an estimated N\$1.3 million (39.6%) and N\$2.0 million (60.4%) for skilled employees. The economic contribution and employment in this sector could be expected to grow by 60% and 30%, respectively.

Expansion of tour operator activity will depend on the use practices themselves. As discussed below, for economic and sustainability reasons it is generally recommended to transform tourism as much as possible from open access, unguided use practices to guided operations. Thus, where possible, expansion of tour operator use practices should be encouraged. Some use practices, such as dolphin watching in Walvis Bay, will be constrained by carrying-capacity problems. Air-based use practices might ultimately be constrained by noise pollution problems. Generally, however, land-based and other water-based use practices have significant expansion potential and can be expected to grow at the same rates as, or faster than, the urban accommodation sector, i.e. hotels. Given this, it is suggested that the number of tour operator use practices will increase by some 50% over five years. The economic contribution and employment in this sector could be expected to grow by 60% and 30%, respectively.

#### 4.3.2 **Quad bike tour operators and socio-economic sustainability**

Quad bike activities in the dune belt take two forms. Firstly, there are the quad bike tour operators (two firms). These operators provide their facilities and equipment (quad bikes) and *guides* to incoming tour operators as facilitators and to the general public, (those who don't own their own quad bikes). Secondly, there are the activities of the general public (holidaymakers), owning their own quad bikes and driving up and down the dunes unguided.

The first of the two types generates income and jobs. Based on the data obtained from Dare Devil Adventures Quad Bike Operators (M Campbell, 2008, pers. comm.) the estimated average number of quad bike tours per day is 200 at an estimated average rate of N\$280/per ride (guided) at 365 operation days. The estimated total gross turnover per year amounts to N\$20.4 million, and the likely annual contribution to the national income is some N\$9.6 million. The current number of permanent employees amount to eight people of which two people are in management and six are guides. In the high season from April to November 6 more guides are employed, their wages amount to approximately N\$6,000 per month based on the basic salary and the tips from clients.

According to Dare Devil Adventures Quad Bike Tours (M. Campbell, 2008, pers. comm.), the safety of the tourists on their guided tours is endangered by the unguided holidaymakers on their bikes, dune boards, etc. because they sometimes race under the influence of alcohol. No official statistics of the number of accidents are available but, there are at least several incidents each year, and some of them are fatal. There is also an extensive problem of uncontrolled littering of the dunes by the general public. The guides have no authorization to show to transgressors in order to get details to report the culprits.

### **4.3.3 The tour operator sector and environmental sustainability**

As stated, the expansion of tour operator activity will depend on the use practices themselves. It is generally recommended that coastal tourism be transformed as much as possible from open access, unguided use practices to guided operations with some property rights, for economic and environmentally sustainability. Generally, however, land-based and other water-based use practices have significant expansion potential and can be expected to grow at the same rates as, or faster than, the urban accommodation sector, i.e. hotels. Given this, it is suggested that the number of tour operator use practices will increase by some 50% over the next five years.

Regarding the problem area of quad bike activities referred to above, it was stated in the SEA (DHI Water & Environment, 2007) that following the intent of a March 2007 Cabinet decision, the dune belt, which is currently managed by MET, should be included in the Walvis Bay Nature Reserve, and free zones for off-road driving should be maintained east of Walvis Bay and east of Long Beach. The demarcation of the free zone east of Long Beach should take account of the area used by breeding Damara terns south of Long Beach. The management and environmental monitoring of the area should be part of the activities proposed for the Nature Reserve. Expansion of eco-tourism activities should be promoted through inclusion of the Dune belt in the proposed Walvis Bay tourism development plan. Once the existing mining licenses expire, new reconnaissance, prospecting or mining licenses should not be granted in the dune belt. The zoning of eco-tourism and free zones for off-road driving should become the object of a detailed Environmental Impact Assessment.

### **4.3.4 Tour operator sector - conclusion**

For economic and environmental sustainability reasons it is generally recommended that tourism excursion use practice be transformed as much as possible from open access, unguided activities to guided operations. Thus, where possible, expansion of tour operator activities should be encouraged. Some activities, such as dolphin watching in Walvis Bay, will be constrained by carrying-capacity problems. Air-based activities might ultimately be constrained by noise pollution problems. Generally, however, land-based and other water-based activities have significant expansion potential and can be expected to grow at the same rates as, or faster than, the urban accommodation sector, i.e. hotels. Given this, it is suggested that the number of tour operator activities will increase by some 50% over five years. The economic contribution and employment in this sector could be expected to grow by 60% and 30%, respectively.

#### 4.4 *The tourism related sector*

##### 4.4.1 **The tourism related sector and socio-economic sustainability**

It was estimated that the tourism related sector, (car rental, travel agencies, restaurants, etc., associated with tourism on the coast) makes a direct contribution to national income (direct value added only) amounting to N\$540 million per annum. With around 4,761 direct employees, of these, 3,306 (70%) are unskilled, 622 (14%) semi-skilled, and 743 (16%) skilled/management.

## 5. **RECOMMENDATIONS FOR SUSTAINABLE COASTAL TOURISM DEVELOPMENT**

### 5.1 *Strategic directions for sustainable tourism development*

Recommendations for improving coastal tourism as well as ensuring it expands and remains sustainable are presented below and embrace two primary directions:

- Improvement of the planning framework for tourism development: SEA and zoning plans being devised through NACOMA should guide development in order to ensure that such developments are appropriate, environmentally sound, and economically efficient. Zones should be as flexible as possible, while ensuring that carrying capacities are not exceeded, and
- The incorporation of property rights through leases and concessions: This should ensure the minimisation of open-access tourism and increase the economic enhancement and environmental care associated with guided lodge and tour operator activities. Such incorporation of property rights should be a gradual, balanced process, and should not jeopardise the need to cater for all segments of the tourism industry. The market demand of all sectors, including that of domestic tourism (Moseley et al. 2007), should guide the process.

#### 5.1.1 **Recommendations for broader tourism development**

1. It is recommended that, *in the long term*, tourism development on the coast be aligned with the MET Concessions Policy (MET 2006), with guided tourism and camp/lodge development being undertaken as joint ventures between the private sector and the State and/or local community groups. This will have the effect of reducing open-access problems, increasing the economic value and sustainability of tourism, and improving resource rent capture from the sector.
2. A simple financial and economic appraisal model based on those referred to under 5.2, below, should, *in the long term*, be developed for planning concessions and evaluating tenders.
3. Use of land and resources for tourism should, *in the long term*, be integrated with the SEA and findings from baseline surveys recommended under 5.2, below, in order to develop a zoning plan that is environmentally and economically sound.

4. In view of the current mainstream nature-based tourism development and the economic use values derived from it, it is pertinent, *in the long term*, to emphasise ecotourism in concessions development, stressing the need to increase the benefits of coastal tourism development for rural communities in adjacent inland conservancies. The MET Concessions Policy is currently being finalised to serve this purpose.
5. It is recommended that, *in the long term*, a fund be developed for financial grant support to developing ecotourism enterprises. This should be structured so as to correct inherent economic distortions, providing incentives for training, community involvement, unskilled employment, and marketing.
6. The tourism product in inland escarpment areas outside the coastal zone is growing rapidly. This development could be enhanced if it is linked, *in the long term*, to coastal tourism developments. Access to concessions on the coast in the Skeleton coast Park should be possible for inland communal land conservancies. It is further recommended that routes be opened up to facilitate joint product development.
7. Urban disadvantaged communities on the coast should be evaluated, *in the long term*, with a view to their mobilisation into conservancy groups that could be involved in joint ventures in tourism concessions on the coast.
8. The development and acceptance within the coastal tourism establishment of a *code of conduct*, should be promoted *in the long term*. Thus tourism on the coast should follow policies on environmental performance, involvement with communities and environmental business groups, energy management, waste water and solid waste management, responsible purchasing and chemical management, nature and biodiversity conservation, sound employment practice and employee relations. Acceptance of such a code of conduct could be effected through the use of certification (eco-labeling). This involves provision of a logo to those companies that exceed a baseline standard, thereby giving them some possible competitive market advantage. Namibia has one such a certification programme called the Namibia Eco Award Scheme. This currently has a narrow base and could possibly be expanded to provide wider certification.

### 5.1.2 Recommendations for specific tourism sites or sectors

1. It is recommended that tourism in the *Swakopmund–Walvis Bay dune belt area* be monitored and managed with the LAC planning system or a good derivate thereof such as the TOMM developed in Australia (Manidis Roberts Consultants 1997), together with the input of managerial, public and scientific expertise. Appendix D.2 gives examples of two indicator report cards modelled on the TOMM.
2. The conduct of an EIA in the *Swakopmund–Walvis Bay dune belt area* has become a necessity. Based on the results of the EIA, strategies should be developed for managing resource impacts. The issue of managing resource

impacts is complex and beyond the scope of this study, but would entail strategies and tactics to:

- reduce the use of the entire area
  - reduce use of problem areas
  - modify the location of use within problem areas
  - modify the timing of use
  - modify the type of use and visitor behaviour
  - modify visitor expectations
  - increase the resistance of the resource, and
  - maintain or rehabilitate the resource.
3. The tourism development in Henties Bay overlaps with an urbanisation of prime land along the beach. It is therefore recommended that future profitable and sustainable tourism development along the coast of the town of Henties Bay be considered.
  4. It is recommended that a visitor information centre be developed at the Cape Cross Seal Reserve. Considering the extent of pollution (mainly litter) at the reserve causing a threat to the seals, it could be better to build a visitor information centre serving a dual purpose of:
    - educating visitors on the history of the location, the biological features and behaviour patterns of the seals, and
    - educating visitors on the dangers of visible pollution to the seals and the environment.
    - Furthermore, the centre could incorporate a shop to sell sealskin merchandise and other seal-related souvenirs, books, etc.
  5. A cost-benefit analysis of the proposed extension of walkways at the Cape Cross Seal Reserve is suggested. The current use pattern of tourists indicates a minimum average stay of 30 minutes. This time suffices for viewing the seals before proceeding to the next destination. The short stay is closely linked to the typical smell of the seals and the lack of other attractions at the site. There are no bottlenecks; therefore, longer walkways to prevent congestion would not be required. An increase in beneficiaries' income is also unlikely to result from such investment. The focus should be on expansions that will increase visitor spending in line with the ecotourism approach, and not an increase in numbers as the traditional approach advocates.
  6. A dune fee should be charged for use of the dune quad bike activity to capture resource rent. The current quad bike guides working for the local quad bike tour operators should be granted the official status of 'Dune Rangers' for the purposes of reporting trespassers causing pollution (litter), health and safety risks to other quad bikers, albeit tourists on guided quad bike tours.
  7. A concession fee should be charged to the entrepreneurs operating on public land to capture resource rent. Ideally, concessions should not be granted for more than ten years, unless the investment is based on fixed assets.

8. All tourism accommodation developments along the entire Namibian coast that propose accommodation with more than 20 beds or destinations that anticipate more than 500 visitors a year should require an environmental and socio-economic impact assessment.
9. In line with the principles outlined above, guided fishing tours and excursions should, *in the long term*, be promoted and given priority within the recreational angling sector. Within the framework of sustainable visitor management, the use of the coastal area and the adjacent fragile park territories for recreational fishing should be permitted only in a guided form along predetermined routes, i.e. as is done with hunting safaris. This would minimise damage to the fragile environment, ensure that the demand for a pristine environment (becoming a rarity worldwide) is met, and at the same time create job opportunities for *qualified* guides. The focus should be on positive planning and provision rather than negative restrictions and prohibition. The interaction between local and alien factors directed and governed by the planning process will then determine the impacts. This should apply to the coastal zones of all four Regions.
10. It is recommended that visitor education strategies and a code of ethics are developed to alter the behaviour of visitors and drivers in order to reduce their impact. Traditionally, use-reduction strategies were favoured in the industry, but research demonstrating that indirect strategies such as influencing rather than regulating visitor activity or behaviour through tactics such as facility design or management, information dissemination and visitor education also minimise the costs of visitor impacts on the environment. Direct strategies and tactics that regulate and restrict, such as rationing of use, designation of use areas or limiting group sizes, may be appropriate and necessary if indirect actions prove ineffective.
11. A project to support craft development on the coast should be initiated as an adjunct to the local tourism sector. This should include support for market-orientated product development, and logical and financial assistance with marketing. Shell harvesting and processing could form part of this initiative.

## 5.2 Long-term recommendations for data capture

1. As discussed above, where the OI 2 baseline data were updated, there are rather significant problems concerning available data, which reduce the accuracy of the M&E process. While these do not preclude M&E for NACOMA, there is a need in the longer term for systematic collection of economic data among enterprises in the coastal zone. In van Zylø (2004) study, baseline values were collated and estimated from a variety of primary and secondary sources. In the present study, this process was carried further to include more recent data, as well as further estimation of current values and expansion potential. However, by their nature, these findings are not based on systematic surveys.
2. Systematic surveys for monitoring key indicators are recommended as essential to professional management of the environment. Management can be

seen as the periodic and systematic measurement of key indicators of biophysical and social conditions, and performs two major functions: it allows managers a formal record of resource and social conditions over time, and it helps assess the effectiveness of management action. (It should be noted that there may be factors other than management actions that influence the changes in conditions identified through monitoring programmes.)

3. Economic and social impacts in coastal zone tourism have had to be estimated indirectly using secondary data sources. For effective planning and M&E, however, this is unsatisfactory. It is therefore recommended that, *in the long term*, a systematic quantitative baseline survey be undertaken of coastal tourism enterprises. This should be followed successively every four years by follow-up surveys to measure trends and impacts. The baseline survey should be of a stratified sample of some 200 establishments, covering all types. The data collected should include output and expenditure, enabling the development of models as suggested in Recommendation 4 below. The baseline survey should also include some natural resource use enterprises in mariculture, seal harvesting, guano production, salt production, and !nara harvesting.
4. Based on the results of a baseline enterprise survey, it is recommended that, *in the long term*, financial and economic budget and cost-benefit models be developed for typical coastal tourism enterprises, to be updated later through follow-up surveys. Such models can form the basis for effective valuation, policy analysis, land-use zoning, and planning.

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## GLOSSARY

**Backward linkage** ó The link between an enterprise or activity in the economy and another enterprise in the broader economy which is induced to supply factors or resources to that enterprise or activity, as a result of the presence of the enterprise or activity.

**Biodiversity** ó The diversity of biological resources, in terms of ecosystems, species and/or genetics; an object of conservation, as it is held to reflect various values, such as existence and option value, ecosystem health and ecosystem resilience.

**Community** ó Group of rural or urban residents that have formed a legal entity that has a defined membership, defined boundaries, and an elected body which represents the interests of the membership; or a group of Namibian citizens that have defined themselves as a community and by virtue of being formerly disadvantaged are being considered as beneficiaries.

**Concession** ó The rights ó whether full or restricted, or shared or exclusive ó to conduct tourism use practices and/or to commercially use State-owned plant and/or animal resources (collectively referred to as wildlife resources) on business principles in proclaimed protected areas and any other State land for a specified period of time.

**Conservancy** ó A community-based organisation, registered by the MET under the Nature Conservation Amendment Act, 1996 (No. 5 of 1996) for the purpose of providing an economically based system of sustainable management and utilisation of wildlife on communal land.

**Direct contribution to national income** ó The annual contribution made to the national income by a specific enterprise activity or sector, excluding any indirect or induced effects through backward or forward linkages or multiplier effects.

**Economic value/contribution/impact** ó In this report, the amount by which an activity, enterprise or production unit changes the national income; costs and benefits are measured in terms of their *opportunity costs* to the national economy; involves some *shadow pricing* adjustments to the transaction values which measure private costs and benefits in financial analysis.

**Enterprise or production unit** ó An entity which invests capital to derive a return through production of goods or services.

**Excursion** ó A short return trip or tour undertaken by a tourist away from his/her basic route or itinerary, usually lasting less than a week.

**Financial analysis** ó In this report, analysis of the private transactions in a production unit, to measure the costs and benefits, return on investment, and profit accruing to the investor.

**Forward linkage** ó The links between an enterprise or activity in the economy and another enterprise in the broader economy which is induced to make use of, process, or market products from that enterprise or activity, as a result of the presence of the enterprise or activity.

**Gross national income** ó The measure of the income earned, whether domestically or abroad, by factors of production owned by nationals (equals gross national product) (see national income).

**Income multiplier** - The multiplier as it applies to national income.

**Indirect contribution to national income** ó The annual contribution made to the national income, by a specific enterprise activity or sector, through any indirect or induced effects caused by backward or forward linkages or multiplier effects; also referred to as total economic impact.

**Gross output or output** ó In this study, the total annual value of goods and/or services produced by an enterprise or activity; the economic term for turnover.

**Joint venture** ó In this report, an enterprise in which the landholder (Government or local community) enters into an operational agreement with a private sector operator; the private sector partner invests in and manages the venture, providing capital and specific operational and marketing skills, in return for rentals, royalties and dividends, depending on the structure of the agreement.

**Multiplier** ó In this report, the proportional increase in national income that occurs from each unit increase in new spending from some autonomous source such as private or Government investment, or the outside world (through exports); expressed as a factor and usually calculated using the SAM.

**National income** ó The total earnings of labour and property employed in the production of goods and services in a nation during some accounting period, usually a year; commonly measured by the gross domestic product, the gross national product, and the gross national income; measured either as the value of all expenditure on final goods and services, the value of all payments to factors of production, or the value of all value added by producing units.

**Natural resources** ó Natural animal or plant species and natural tourism attributes that can be used to derive a commercial value.

**Open-access resource** ó A resource in which access to its use is unrestricted; commonly results in utilisation of the resource in excess of its most productive and/or profitable use level, reducing total output and dissipating use profits.

**Opportunity cost** ó The benefit forgone by using a scarce resource for one purpose instead of its next best alternative use.

**Profit or net income** ó A financial measure of the amount remaining in a production unit or enterprise after all costs have been subtracted from all revenues; measured in market prices.

**Regional Council** ó A Regional Council as defined in the Regional Councils Act, 1992 (No. 22 of 1992).

**Resource rent/economic rent** ó The return a factor of production receives in excess of the minimum required to bring forth the service of the factor, or the surplus available in the production unit after accounting for the costs of production including a reasonable return to capital; resource rent is the economic rent generated from the use of a natural resource.

**SAM (social accounting matrix)** ó An economic input-output model of the national economy, used as a tool for impact analysis; expands the national accounts to show the linkages between production and generation of income, and between production and distribution of income.

**Semi-skilled worker** ó A worker with some basic vocational skills for which s/he is able to take responsibility, or a worker employed in a job for which basic vocational skills are necessary

**Shadow price** ó The value used in economic analysis for a cost or benefit of an activity, to represent to opportunity cost to the economy of the cost or benefit, when the market price does not correctly represent this opportunity cost.

**Sustainable development** ó Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Sustainable tourism development** ó Tourism development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Tourism satellite accounts** ó A set of accounts separate from, but drawn from and supporting, the national accounts, which describe the economic characteristics of the tourism industry; tourism is a demand-based industry and is not delineated among the production-based industries of the conventional national accounts.

**Tourist** ó In line with the World Tourism Organisation definition, any person who spends more than 24 hours away from their normal place of abode.

**Turnover** ó The total annual financial value of goods and/or services produced by an enterprise of activity; the financial term for gross output.

**Unskilled worker** ó A worker with no specific vocational skills, or a worker employed in a job where no specific vocational skills are necessary.

**Value added** ó The amount of economic value generated by the activity carried on within a production unit or enterprise; measured as the returns to, or income earned by, the internal factors of production in the production unit or enterprise (capital, labour and entrepreneurship); all value added in the economy amounts to its national income.

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