Full Length Research Paper

Towards sustainable financing of protected areas: A case study of the Swaziland National Trust Commission (SNTC)

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Accepted 27 April, 2012

Conservation of biological diversity is one of the main elements of sustainable development, given that biodiversity is the basis of life on earth. The current and potential role of protected areas in biodiversity conservation cannot be overemphasized. The objective of the study was to provide protected area managers with new innovations in protecting area financing on how to improve and diversify funding sources, basically towards sustainable financing. This was a case study, using a qualitative research design where a purposive sample of various levels of management of the Swaziland National Trust Commission’s protected areas was selected for interviews. It can be concluded that the Swaziland National Trust Commission (SNTC) has great potential for the conservation of natural and cultural heritage in Swaziland, as well as venturing into tourism. However, the SNTC is faced with financing challenges and needs interim models to ensure sustainable financing through the transition phase (restructuring and commercialisation) which might take a long time. Seven recommendations were made. These are: development of a sustainable tourism framework; adopting a business approach; embarking on a joint natural product enterprise development; designing a set of criteria for a viable marketing strategy; considering project finance as an option; developing investment proposals; and a theoretical framework for long-term financing of SNTC’s protected areas.

Key words: Protected area, sustainable financing, tourism, international conventions, values, biodiversity, conservation, heritage.

INTRODUCTION

The establishment of protected areas (PAs) in Swaziland has no logical pattern. However, there was a clear objective and purpose for the proclamation of the initial protected areas, Ubombo and Hlatikulu, which were to preserve species of large mammals through in-situ and ex-situ conservation initiatives. However, an outbreak of sleeping sickness amongst wildlife species in the two nature reserves in 1922 led to the disbanding of these areas in order to stop the potential spread of the diseases to livestock (Hackel and Carruthers, 1993: 10-13). After the de-proclamation of these nature reserves, large mammals began to disappear at an alarming rate, and it was then that it was realized that there was an urgent need for the declaration of protected areas to salvage the remaining population of large mammals. The national response to this crisis was the proclamation of Mlilwane Wildlife Sanctuary under the Game Act of 1953 (Roques, 2002: 7-14). Ultimately the Swaziland National Trust Commission (SNTC) was established in 1972 with the mandate to oversee the conservation of natural and cultural heritage throughout the four ecological zones of the country. The main focus of the SNTC programme was to ensure a full representation of ecosystems and habitats in the conservation areas (SNTC, 2002: 1).
Subsequently, initial country-wide protected-worthy areas surveys were carried out in 1972 resulting in the declaration of Malolotja Nature Reserve (Grimwood, 1973: 1-4). Follow-up protection-worthy areas assessments were done in 1978 and manifested in the proclamation of Mlawula Nature Reserve (Reilly, 1979: 10). Mkhaya Nature Reserve was proclaimed in 1985, while Hawane and Mantenga were proclaimed in 1992 and 1994 (Roques, 2002: 14-17). Consequently, Swaziland has seven protected areas (excluding private protected areas) which cover 3.7% of the total land areas of Swaziland.

Roques (2002) carried out a preliminary field assessment of protection-worthy areas in Swaziland under the Swaziland Biodiversity Conservation and Participatory Development Program. Consequently 44 protection-worthy areas were identified. A map of conservation (that is, proclaimed and protection-worthy areas) in Swaziland is presented in Figure 1.

Conservation of biological diversity is one of the main elements of sustainable development, given that biodiversity is the basis of life on earth (Roques, 2002: 7; IUCN, 1994: 1; 1997: 1; 2000: 3-5; 2008: 7; Hockings et al., 2006: 1; Convention on Biological Diversity, 2008: 77;
Slaney et al., 2009: 525-534). The current and potential role of protected areas in biodiversity conservation cannot be overemphasized. In addition to biodiversity conservation, protected areas provide goods and services that are categorized into direct benefits, indirect benefits and intermediated use services (such as tourism, recreation and ecosystem services) (Lawes et al., 2004: 227-235; Dlamini, 2007: 62-71; Dlamini and Geldenhuys, 2009: 311-318). However, biodiversity is disappearing at alarming rate and this is a threat to species’ survival on the planet (Crafter et al., 1997: 110-123; Chipeta and Kowero, 2004: 139-160; CBD, 2004a: 14-28; Dlamini, 2007: 132). The realization of the role of protected areas in biodiversity conservation has resulted in several regional and international policies and legislation underscoring the need for financing of protected areas. Central to these policies and legislation is the Convention on Biodiversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), World Heritage Convention and the Ramsar Convention on Wetlands. Swaziland has ratified these conventions and national policies and legislation supporting biodiversity conservation have been formulated and developed, and most are under implementation. However, protected areas in Swaziland are not adequately funded regardless of their unique contribution to nature conservation. As a result there is an urgent and serious need for the development of innovative, diverse and sustainable financing mechanisms for protected areas in the country.

The Overall aim of the study was to provide protected area managers with new innovations in protected area financing on how to improve and diversify funding sources, basically towards sustainable financing. The specific objectives of the study include:

1) To identify the existing and potential sources of funding at the various protected areas under the SNTC.
2) To identify and categorize the main customers for protected areas at SNTC.
3) To review the current services provided by the respective protected areas at SNTC and assess their potential for diversification.
4) To investigate existing and potential partnerships of the SNTC with other organizations in protected area conservation.
5) To investigate the existence of initiatives for government taxes/levies and political will for conservation.
6) To formulate a set of recommendations towards sustainable financing mechanisms for all protected areas and associated programmes under SNTC.

METHODS

Study area

The study was conducted in Swaziland and covered the protected areas under the SNTC (that is, Malolotja, Mlawula and Hawane and Mantenga). The map of the protected areas is presented in Figure 2.

Malolotja Nature Reserve was designated a conservation area in 1978 and is administered by the Swaziland National Trust Commission under the SNTC Act of 1972. The Malolotja Nature Reserve is located in the north west of Swaziland and is approximately 18,000 ha. Hawane Nature Reserve is located in the nearby vicinity and is also managed by the SNTC (SNTC, 2008: 15-22). In 1978, Hawane Nature Reserve was established to protect an area of marshland along the Mbuluzi river, including some of the natural habitat of the Swaziland endemic, *Kniphofia umbrina*, an extremely rare "red hot poker".

Mantenga Nature Reserve is located in Ezuwini Valley and is a small protected area measuring 725 ha; and was established in 1994. Mantenga Falls is the area of eminence with its 95 m Mantenga Falls regardless of the construction of the Laphohlo Dam some 15 km upstream, where water was diverted to generate power. The nature reserve includes the Swazi Cultural Village with the adjoining restaurant and tent accommodation (SNTC, 2008: 15-22).

Mlawula Nature Reserve is situated between two bio-geographic regions and occupies an area of 16,500 ha. These are the dry thorn savannas of the west, and the moister coastal thickets of the east. Although small, the reserve is adjacent to other protected areas (Mbuluzi and Simunye Nature Reserve, Hlane Wildlife Sanctuary, Shewula Community Nature Reserve) and other areas of natural vegetation (north bank of the Mbuluzi River, Mhluweni area, adjacent area in Mozambique) with which they form the Lubombo Conservancy (Roques et al., 2003: 15-60; SNTC, 2008: 15-22).

Study design

The study design and sampling procedure were based on guidelines set out in Robson (2002: 20-40), Babbie and Mouton (2001: 15-25), Saunders et al. (2003: 5-14) and Welman et al. (2005: 35-40).

This was a case study which followed a qualitative methodology. Qualitative information on the sources of funding, services provided, types of customers, partnership and support, as well as initiatives towards conservation taxes was collected from managers of protected areas (that is, the research participants or subjects). The study was site specific and concentrated in Swaziland and only in protected areas under the SNTC (an institution which is a single bounded system) and not any other. The unit of analysis was individual responses categorised into specific protected areas where the various managers are stationed.

Subjects

Permission was obtained to conduct the study in the SNTC protected areas that comprise wildlife nature reserves of fauna and flora. Participation in the study was at the instruction of the Chief Executive Officer and Director of Nature Conservation at SNTC. In total, 17 managers were approached to participate in the study, and 17 completed the questionnaire on which the analysis was based. A purposive sampling method was used involving various levels of management at the SNTC’s protected areas (key informant interviews); a self-selective sample of executive, senior managers, wardens and other relevant staff of the SNTC’s protected areas (key informant interviews). The following people participated in the study:

The Chief Executive Officer, Director of Heritage, Director of Nature Conservation, Chief Financial Officer, Education Officer, Trainee Warden (2), Tourism Warden, Environmental Education Officers (3), Education Programme Officer, anonymous officer (1), Senior
Data collection

Primary data were obtained through the completion of semi-structured interview questionnaires by SNTC protected areas management staff (Annex 1). The five sections of the interview questionnaire contained the following broad dimensions: funding sources, customers, services, partnerships and support; and initiatives towards government taxes/levies (the detailed questionnaires is in Annex 1).

Secondary data were obtained from review and analyses of the following documents and records: annual reports; strategic plans; management plans, business plans and financial plans; national, regional and international policies and legislation relevant to protected areas; marketing strategies; and records of physical capital, technological capital, natural capital, human capital and financial capital.

Specifically, the following data were solicited from the aforementioned SNTC reports: existing sources of funding in the various protected areas under the SNTC; the protected areas’ main customers of the protected areas under SNTC; the current services provided by the respective protected areas at SNTC and assess their potential for improvement; worthiness of potential partnerships of the SNTC with other organizations; and to study sections on the possibilities of government taxes/levies and political will for conservation. These data collection methodologies were based on frameworks developed by Robson (2002: 20-40), Babbie and Mouton (2001: 15-25), Saunders et al. (2003: 5-14) and Welman et
al. (2005: 35-40).

**Data analysis**

*Qualitative data analyses*

Data were recorded, transcribed, coded, analyzed and interpreted accordingly into various interview categories (that is, themes) in a matrix. The themes were funding sources, customers, services, partnerships and government levies/taxes.

The data analysis methodology used was modified from Babbie and Mouton (2001: 15-25) and Welman et al. (2005: 35-40), where qualitative data is coded into themes and presented in a matrix and later interpreted in a narrative format.

**RESULTS AND DISCUSSION**

**Initiatives by SNTC towards sustainable financing**

The study revealed, through a review of official documents, that the SNTC has embarked on a restructuring and commercialisation process, which means changing from being stereotype natural resources and cultural conservation oriented to being an organization that embraces public-private partnerships (PPP) in its tourism development (SNTC, 2008: 25). The ultimate result of the restructuring would be increased operational efficiencies and maximised returns from tourism facilities in the SNTC parks. Over and above this, the SNTC will endeavour to keep up with the international trends, requirements and standards and play a major role as a conservation and cultural heritage regulatory authority.

Most importantly, the memorandum of objects and reasons for an act to amend the Swaziland National Trust Commission has been drafted. Consequently the Swaziland National Trust Commission (Amendment) Bill of 2009 will be presented by the Minister of Tourism and Environmental Affairs as a legal notice (a Bill) in parliament.

**Implementation progress on programme initiatives**

The SNTC has endeavoured to align its operations of conservation of cultural and natural heritage with national and regional policy frameworks and international conventions. In response to the government’s privatisation policy commercialisation of nature-based tourism and eco-tourism activities have been initiated. As earlier mentioned, Haley Sharpe Southern Africa (HSSA) was engaged to guide the implementation of the recommendations of the Hawarth Restructuring Plan. Phase 2 of the SNTC restructuring and commercialization commenced in the 2007/2008 financial year (that is, signing of Joint venture management and lease agreements and sourcing of suitable joint venture partners). Consequently, this resulted in partnerships with Hawane Resort for the joint management of Malolotja Nature Reserve and Matsamo Cultural Park for the joint management of Mantenga Cultural Village.

In order to address labour issues associated with the transition and progression of SNTC into public private partnerships, KAEDS Labour Consultants were engaged to ensure a smooth transfer of staff from SNTC employ to the joint venture partners. National labour laws were followed. In addition to that, to ease the implementation of the restructuring and commercialisation process the SNTC Act needed to be reviewed and the SNTC has compiled a package of all pertinent amendments. Notwithstanding the government call for parastatals to reduce their dependency on government subvention and the SNTC overall strategic objective towards achieving that, still certain key sub-sectors within SNTC are not capable of generating enough income to sustain their operations (these include: ecology, national monuments, archaeology, law enforcement and environmental education.

The implementation of the restructuring and commercialisation programme (that is, through the turn-around strategies for conservation and eco-tourism) has increased expenditure. To meet the expected reduced dependency on government subvention and SNTC’s overall strategic objective to reduce this dependence a lot of capital is required to upgrade the tourism operations (particularly infrastructure) within the SNTC protected areas.

**Funding**

*Sources of funding*

According to the management at SNTC, approximately 90% of the organization’s funding is from national government (that is, Government of Swaziland), that is for the recurrent budget that includes salaries and operations amongst other things, and about 10% is from internal revenue and other sources. Capital projects are funded 100% by the Government of Swaziland upon approval. Donor funding is usually small (unstipulated) and comes from the Peace Park Foundation which funds the purchase of a vehicle and salary payment for one officer under the Trans-Frontier Conservation Areas (TFCA) Programme. The other sources of funding are from various projects but they are unreliable and these come from some regional and international organizations. This funding arrangement may not be relied on in the long run, particularly that the government funding is threatened by declining revenues and other global economic turmoils. Specific details on funding sources are presented in Annex, Box 1.

These results reflected that all SNTC protected areas have a severe lack of sustainable financing mechanisms. Similar findings were reported by Gutman and Davidson (2007: 11-37) in their review of innovative financing

**Strategies for improving funding**

The senior leadership team mentioned that in order to increase, extend or strengthen funding sources the following could be done:

1) Extensive and rigorous fund raising needs to be initiated as a strategic activity for the SNTC. This should involve an intensified networking approach coupled with capacity building in proposal writing and project management and implementation.

2) There is a huge opportunity for tourism revenue from internal sources to be increased by diversifying the sources of income. Strategic marketing and product development and improvement are key in this regard to ensure a consistent and improved customer service.

**Types of customers at SNTC’s protected areas**

The SNTC management team gave a general overview of the existing customer base for the organisation, and these were outlined in the following manner: sightseers, campers, hikers, boaters, fishermen, tourism service operators, shops, restaurants, visitors of the cultural village and bird clubs. These customers are distributed through the four protected areas under the SNTC, that is, some are common amongst all sites while others are limited and unique to particular sites. These customers are similar to those reported by IUCN (1994: 6-13), Eagles (1995: 25-33), Norris (1999: 1-4), and Hockings et al. (2006: 11-30). According to protected area management, customers come from within the country and the Republic of South Africa including some from overseas. The customers highlighted currently contribute nothing to the costs of managing the SNTC protected areas other than just paying user fees for specific activities upon entry into the various nature reserves; customers are not charged for paying towards management costs (Annex, Box 2). Area specific information on types of customers and proportion of customers is given in Table 1, where hikers are leading at Malolotja and the cultural village dominates Mantenga while no specific proportions were given for Mlawula.

**Services provided by protected areas**

Management highlighted the main services provided by the SNTC protected areas and these are as follows: parking, picnic areas, campsites, boat launching, trails, anchorage, education centres, restaurants and shops. No statistics or figures were given for Mlawula (Table 2). These services are similar to those in other protected areas in the region and many parts of the world as reported by Schmidt-Soltau and Brockington (2007: 2182-2202).

In all the SNTC protected areas users pay for these services, except parking. It was reported that user fees can be increased to be comparable with private protected areas and other protected areas in the region as long as the products and services provided are upgraded. However the user fees on the other hand are regulated by the public enterprise unit which would determine whether or not users pay more. Managers of protected areas mentioned that users are prepared to pay more for services in the SNTC protected areas (Annex, Box 3).

New services have been identified in the commercialization initiative of the organization as clearly articulated in the review documents for SNTC in the subsequent section under review of official SNTC documents. The likelihood of the profitability of new services would largely depend on business planning and sensitivity analysis of the current and expected clientele.

A list of the proposed services includes the following: more conference facilities, more accommodation, abseiling and rafting, promoting and marketing the waterfalls, promoting and marketing the sightseeing of more interesting sights, introducing more wildlife in the reserve, cycling, horse trails, swimming pools, more game drives, canoeing, additional campsites and more picnic sites.

**Partnership and Support**

**Potential and current partnerships**

Organizations that are interested in the SNTC protected areas include national, regional and international conservation institutions that are interested specifically in the conservation of biodiversity. Over and above that, there has been some interest from potential tourism operators/business ventures in some protected areas. Current partners include the Swaziland Government (Ministry of Tourism and Environmental Affairs and Ministry of Natural Resources and Energy), Swaziland Tourism Authority (STA), Swaziland Environment Authority (SEA) and Big Game Parks. Non-governmental organizations interested in partnering with the SNTC are Yonge Nawe Environmental Group, COSPE and ACAT. Donors of the SNTC are mainly the Swaziland Government, the World Conservation Union, Worldwide Fund for Nature (WWF), Peace Parks Foundation, Global Environment Facility, Small Grants Fund Programme of the RAMSAR Convention on Wetlands, Birdlife International, UNESCO and others (Annex, Box 4). The El Nido-Taytay protected area demonstrates a successful
Table 1. Responses from management on customers for various nature reserves and programmes.

<table>
<thead>
<tr>
<th>Protected area</th>
<th>Area customer</th>
<th>Percentage</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malolotja Nature Reserve</td>
<td>Sightseers</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Hawane</td>
<td>Hikers</td>
<td>65.0</td>
<td>Hikers are the main customers</td>
</tr>
<tr>
<td></td>
<td>Fisherman</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tourism operators</td>
<td>Undisclosed</td>
<td>Four operators were reported</td>
</tr>
<tr>
<td>Mantenga Nature Reserve</td>
<td>Sightseers</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Campers</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hikers</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boaters</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shops</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural Village</td>
<td>40.0</td>
<td>Visitors of the cultural are the main customers</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eco-lodge</td>
<td>29.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guides</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Mlawula Nature Reserve</td>
<td>Sightseers</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Campers</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hikers</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bird clubs</td>
<td>Undisclosed</td>
<td>Eight types customers of were mentioned (as outlined in column two) but no statistics were given (column three)</td>
</tr>
<tr>
<td></td>
<td>Shops</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural Village</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eco-lodge</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guides</td>
<td>Undisclosed</td>
<td></td>
</tr>
</tbody>
</table>


Table 2. Responses from management on services provided in various nature reserves and programmes.

<table>
<thead>
<tr>
<th>Protected area</th>
<th>Area service</th>
<th>Percentage</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malolotja Nature Reserve</td>
<td>Camping</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td>and Hawane</td>
<td>Trails</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Picnic</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parking</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Campsites</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Picnic areas</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Mantenga Nature Reserve</td>
<td>Boat launching</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trails</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural village</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Mlawula Nature Reserve</td>
<td>Parking</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Campsites</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trails</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Picnic sites</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bird watching</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fishing</td>
<td>Undisclosed</td>
<td></td>
</tr>
</tbody>
</table>

public private partnership in natural resources management and preservation, and other good examples include those in South Africa, Philippines, Tanzania and Zimbabwe where government is working smoothly with private partners in realizing the ultimate goal of effective nature conservation and economic development. While hybrid partnership arrangements are common in the United States and Indonesia (Font et al., 2004).

Benefits derived from partnerships

Business partnerships or joint venture partnerships, if well designed, can be a way the SNTC could use to offset some of the operational and administrative costs and further increase the revenue base. The SNTC can get campaign services pro bono from local companies such as radio, TV, newspapers, advertising agencies, celebrity appearances, site/food/music for a special event and so on. Donors on a regional and global scale such as the Peace Parks Foundation, IUCN, and selected South African Conservation have supported mainly capacity building, technical advice and institutional strengthening for conservation albeit on a smaller and ad hoc scale.

The current and potential partners are being made aware of the plans to develop the SNTC protected areas to international standards, and there is still room for improvement with regard to communication and publicity. The partnership and support reported in this study is similar to that reported by UNEP (1999: 1-6).

Government taxes and levies

The Government of Swaziland has considered taxes and levies as part of the revenue generation drive. The pros and cons of such programmes in the country are:

Pros: If these are introduced in the form of a conservation levy, they could substantially boost the revenue of the SNTC. Barton et al. (2009: 901-911) evaluated biodiversity conservation trade-offs and cost-efficiency in the Osa Conservation Area in Costa Rica and reported increased revenues from environmental services payments (otherwise known as conservation taxes).

Cons: This could adversely affect the operations of the SNTC, which by design is not a commercial entity as a considerable portion of its activities are of social service and cultural nature. It could also result in raised expectations regarding the commercial value of the organization in addition to the punitive mentality this would probably bring (Annex, Box 5). The punitive mentality being the perception of SNTC as an organization that wants to punish people rather than create a good atmosphere of voluntary compliance.

Management reported that the likelihood and possibility of establishing such a programme as that of a national conservation sales tax or levy is within reach. Conservation levies are in place in most other countries and, as such, Swaziland can follow suite particularly when one considers the total economic value of ecosystems and their services. The payment for ecosystem services (PES) approach is being implemented elsewhere and could be adopted in Swaziland albeit on a scientifically ascertainment basis. Payment of ecosystems is increasingly becoming a solution to protected areas financing (Armstrong and Weiler, 2002; CBD, 2004a; WCPA, 2002; Barton et al., 2009). In Belize a US$ 3.75 departure tax is charged for every tourist travelling by air or ship and this revenue is used in directly protected areas conservation, and in the Sychelles, a US$ 90 tax was proposed and accepted for all travellers entering the country and the money collected in form of tax is used in environmental conservation programmes (Font et al., 2004: 6-13).

Key leaders who might be instrumental in establishing a conservation sales tax or some type of surcharge or levy are: the SNTC Chief Executive Officer and the Honourable Minister of Tourism and Environmental Affairs (Annex, Box 5).

Conclusions

Successful implementation of the recommendations of the Horwath Restructuring Plan of 2002 and the SNTC Parks EU Private Sector Support Programme of 2006 on commercialisation would provide the STNC with the following:

1) Good plans for conservation with appropriate management systems
2) Adequate financial resources for effective management of nature conservation programmes
3) Sufficient trained staff for effective management of conservation programmes
4) Social support through links with all relevant key stakeholders and local communities for partnership and support
5) Political support through development and implementation of effective local and national policies and strategies for effective nature conservation
6) Preserved natural features through protection of pristine biodiversity, landscapes and geodiversity.

However, in light of the fact that funding the implementation of the recommendations of the Horwath and European Union (EU) partnership is a big challenge, then implementation of the recommendations of this study will save the SNTC. The recommendations of this study provide an interim strategy towards sustainable financing of the SNTC protected areas under the prevailing circumstances (that is, where SNTC is
confronted with challenges of lack of sustainable finance, whilst restructuring and commercialisation seem to be moving too slow).

It can be concluded that the SNTC has great potential for the conservation of natural and cultural heritage in Swaziland, as well as venturing into tourism. However, the SNTC is faced with financing challenges and needs interim models to ensure sustainable financing through the transition phase (restructuring and commercialisation) which might take a long time. Seven recommendations were made. These are:

a) Development of a sustainable tourism framework  
b) Adopting a business approach  
c) Embarking on a joint natural product enterprise development  
d) Designing a set of criteria for a viable marketing strategy  
e) Considering project finance as an option  
f) Developing investment proposals  
g) A theoretical framework for long-term financing of

SNTC’s protected areas.

A detailed schematic diagram of the proposed theoretical framework for long-term financing of the SNTC Pas is presented in Figure 3. More research on sustainable financing models for protected areas in southern Africa is needed for effective conservation management.

ACKNOWLEDGEMENTS

My sincere gratitude goes to all staff at the Swaziland National Trust Commission for their cooperation during the interviews. Dr M.B. Masuku of the University of Swaziland is greatly appreciated for supervising this research study. Lastly my sincere thanks and gratitude go to all those individuals who gave me moral support throughout the duration of the research study. Wisdom Dlamini of SNTC is appreciated for his effort in designing the map of SNTC protected areas for this report. Many thanks go to the University of Stellenbosch Business School for their invaluable contribution throughout the

Figure 3. Proposed theoretical framework for sustainable financing of protected areas at SNTC. Source: modified from Emerton et al. (2006).
duration of this research study.

REFERENCES


APPENDIX

Annex 1. Semi-structured interview questionnaire-sustainable financing of protected areas (Swaziland) target respondents:

1) Management of Malolotja Nature Reserve and Hawane
2) Management of the National Environment Education Programme
3) Management of the Mantenga Nature Reserve
4) Management of the Mlawula Nature Reserve
5) Executive Management and Herbarium Division (Cultural Heritage)

<table>
<thead>
<tr>
<th>Name of interviewee:</th>
<th>Name of protected area:</th>
</tr>
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<tbody>
<tr>
<td>Designation:</td>
<td>Date:</td>
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Section one: Funding sources

1) What are the current sources of funding in the protected area?

2) Are they reliable in the long term?

3) What can be done to strengthen each one of them?

Section two: Customers

1) Who are the protected area's customers?

2) What do the customers currently contribute to the costs of managing the protected area?

Section three: Services

1) What services are currently provided by the protected area?

2) Do the users pay for all the services listed above?

3) Are the fees charged by the protected (SNTC) in line with other protected areas in Swaziland?

4) What new services might be provided by the protected area?

5) What is the possibility that proposed/new services provided above would add value to the protected area?
**Section four: Partnerships**

1) What organizations are interested in partnering with SNTC in nature conservation in this area?  

2) Can the SNTC form a partnership with the organizations listed above to for financial support?  

3) Can the protected area get support from local partners and stakeholders in promoting the nature conservation agenda?  

4) What regional and international donors have supported activities similar to what is included in the conservation plan in this protected area?  

5) Have the organizations listed in section 4 (1) been made aware of the plans of this protected area to sound out their interest?  

**Section five: Government taxes/levies**

1) Has the Swaziland Government considered special taxes or levies for nature conservation?  

2) What are the likely positive impacts and negative impacts of conservation taxes or levies in the area/country?  

3) Can a solid argument or proposal be put forward in favour of establishing conservation taxes/levies, and can the necessary alliance of stakeholders be built to support it?  

4) Are there influential executives who might be instrumental in advocating and lobbying government into establishing a conservation sales tax/some other type of surcharge/levy?  

5) Who could join them in leading the campaign for establishing a conservation sales tax?  

Source: Modified from UNEP (1999).
Box 1. Responses from management on funding sources for various nature reserves.

**Malolotja Nature Reserve and Hawane**

The management of the Mantenga Nature Reserve comprised the Education Officer, Trainee Warden and the Tourism warden. In terms of sources of funding for the nature reserve government accounts for a major share, and revenue generated within the reserve and donations amounts to approximately 10% of the overall funding sources. Sometimes donor funding is made available but is not reliable.

It was indicated that government funding sources can be relied on indefinitely due to the fact that the Mantenga Nature Reserve is a non-profit making organization that needs Government’s full support and funding. However donor funding cannot be relied on since donors have many organizations to support at any given time and with prevailing competition it will be difficult for the reserve to rely on donors as a steady and stable funding mechanism.

Revenue collected is very small to be relied on because the money charged is little since this is a service rendered to citizens of the country, targeting the youth who do not have money.

Means and ways to increase or strengthen funding sources:

1) Government subventions should be increased to cater for the non-profit making centres like Malolotja Nature Reserve;
2) Government subventions must be expedited in time to allow for proper planning and operations;
3) Donors should provide greater support for such centres because they are focused on the environment;
4) More local people should be encouraged to visit the environmental education centres;
5) To bring more visitors and tourists there is a strong need to upgrade tourism attractions, like new tourism products such as ‘tree top canopy’ to entice tourists in the park throughout the year;
6) Marketing strategies need to be improved to attract more visitors and tourists to the reserve.

**Mantenga Nature Reserve**

The management of Mantenga Nature Reserve was represented by the Trainee Warden and another officer who preferred to remain anonymous.

The funding structure is such that Capital Projects are 100% Government funded, with Recurrent at 90% Government funding and 10% comes from SNTC revenue and donations. In terms of the Public Private Partnership, it is a small segment of the Mantenga Reserve that is involved and no figures were disclosed in terms of financing, except Peace Parks Foundation (PPF) which covers salary and vehicle at 100%.

The management designates indicated that funding sources may be relied on for the Nature Reserve as long as Government upholds its Constitutional obligation of conserving the environment.

To increase, extend or strengthen current financing the actions below should be taken:

1) Strategic marketing of SNTC to Government;
2) Assign specific personnel to oversee the funding needs of the SNTC, for instance the Chief Financial Officer; and
3) Improve the general marketing of the SNTC products.

**Mlawula Nature Reserve**

The Senior Warden, Environmental Education Officer, COP Officer and Law Enforcement Officer represented the Mlawula Nature Reserve in the interviews.

Funding sources are said to be mainly the Government of Swaziland and internal revenue (user fees) from visitors and tourist without giving any precise figures or statistics. These funding sources cannot be relied on indefinitely and there is a need for more funding sources.

In order to extend, increase or strengthen funding the following issues were raised:

1) Seeking more funding nationally and internationally to start massive projects with huge sustainable financial gains;
2) Lobbying for other Non-government financial sources for conservation;
3) Improving Sport Hunting;
4) Introducing taxes;
5) Introducing new activities such as quad bikes, mountain bikes, game drives, promotions;
6) Striving to develop income generating projects, that is, tapping the tourism potential (already existing); and
7) Introducing Sustainable Tourism, where tourism can be managed in a manner that it starts paying for conservation without compromising the conservation ethics.

Box 2. Contribution to protected area managements.

**Malolotja Nature Reserve and Hawane**
In terms of contribution to the costs of managing the reserve, customers only pay entrance fees, accommodation for those who lodge, and camping fees.

**Mantenga Nature Reserve**
The customers contribute significantly to the costs of running the Nature Reserve as 75% accommodation is constituted of rooms, while 25% remains tents.

**Mlawula Nature Reserve**
Most of the highlighted customers spread favourable news about the area through word of mouth. Some of the customers come to do scientific research. Overall the customers only pay user fees which contribute to operational costs of the nature reserve.


Box 3. Responses from management on the payment for services and future services in various nature reserves and programmes.

**Malolotja Nature Reserve and Hawane**
All services are paid for in different minimal fees, except for picnicking which is paid as entrance fee. Fees are determined by the willingness of users and potential users to come, as normally would prefer nature reserves that charge less, but generally the fees are reasonably high. New services that may be provided include:
- Rock climbing;
- Bird hide;
- Abseiling; and
- Tree Top Canopy

Likelihood of profitability of new services would depend on various factors. However, more primary school children will prefer rock climbing while a few high school students will go for bird watching.

**Mantenga Nature Reserve**
Users pay for all services except parking, boat launching and abseiling. The fees are quite satisfactory, and users would pay more. New services that may be provided are:
- Conference facilities
- More accommodation
- Introduction of abseiling and rafting
- Marketing the waterfall, especially during the rainy season
- Marketing the sightseeing of interesting sights such as unique birds (*Narina irogon* and *African finroot*)
- Introduction of wildlife in the reserve
- Cycling and Horse Trails

The new services would result in significant increase in profits for the Nature Reserve.

**Mlawula Nature Reserve**
Users pay for fishing and campsites, and the rest of the services are not paid for, except inform of entrance fees into the reserve. Fees are fine in view of quality of services, but need to be reviewed as they seem to be lower than market rates in related business ventures in private nature reserves. Users are willing to pay more on condition the quality of services (including infrastructure and facilities) in improved and upgraded.

New services that might be provided in future are:
- More swimming pools, Game drives/viewing, Mountain climbing/Hiking, Abseiling, Restaurants, Bar services,
- Mountain bikes, Canoeing and Bicycle riding.

If these services can be developed and maintained in good quality they would increase the diversity of the clientele, and if well marketed profitability is assured.

Box 4. Responses from management on partnerships and support in various nature reserves and programmes.

Malolotja Nature Reserve and Hawane
Organizations that are interested in the conservation programmes at Malolotja include:

- Yonge Nawe
- Africa Cooperative Action Trust (ACAT)
- Swaziland Tourism Authority (STA)
- Big Game Parks
- Swaziland Environment Authority (SEA)

Malolotja has formed a partnership with the Swaziland Tourism Authority which caters for marketing and advertising and can also assist with fund raising for the nature reserve. The Swaziland Environmental Authority participates in fundraising for environmental education and environmental awareness at Malolotja. Both the STA and the SEA boost the existence of Malolotja Nature Reserve and in particular the Environmental Education Programme.

Malolotja gets campaign services pro bono through the STA that specializes in promoting and advertising events and activities that take place in the nature reserve. This is done through radio, TV, newspapers, SABC news. Yonge Nawe and the SEA advertise events and activities of the nature reserve on national radio and in the local newspapers.

Donors include the South African Embassy that donated camping equipment and LOGICA that donated bicycles. Donors have been made aware that Malolotja Nature Reserve has limited financial resources for its day to day operations and nature conservations programmes at the moment.

Mantenga Nature Reserve
Various organizations are interested in the conservation programmes at Mantenga Nature Reserve and these are:

- Swaziland environmental Authority
- Swaziland Tourism Authority
- Ministry of Natural Resources and Energy
- Ministry of Tourism and Environmental Affairs
- Big Game Parks

Mantenga Nature Reserve is willing to form partnerships with these organizations to launch and share the costs of a fundraising campaign. Mantenga can also get services pro bono from local companies. The Swaziland Television Broadcasting Corporation has a special time slot to promote the activities of the Swaziland Cultural Village at Mantenga Nature Reserve. While the Swaziland Tourism Authority publishes information on all protected areas in Swaziland in hard copies and internet. Concerning regional and international donors that have supported the nature reserves the management team did not submit anything.

Mlawula Nature Reserve
Management listed a number of organizations/entities/groups that have shown interest in the conservation of nature at Mlawula and these are:

- Various NGOs (that is, the Co-operation for the Development of Emerging Countries (COSPE))
- Peace Parks Foundation
- Social Groups
- Schools Groups

Mlawula is willing to form a partnership with interested organizations and groups. Mlawula gets pro bono services from local companies especially in certain events of national importance such as the visits from royalty, and advertisements in tourism newspapers and magazines.

Donors that have supported Mlawula include:

- The World Conservation Union (IUCN)
- World Wide Fund for Nature (WWF)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- Global Environment Facility (GEF)
- Peace Parks Foundation

Peace Parks Foundation has a project at Mlawula nature Reserve. Donors have been made aware of future development plans for the nature reserve.

Box 5. Responses from management on government taxes and levies in various nature reserves and programmes.

**Malolotja Nature Reserve and Hawane**

Whilst management of the Malolotja Nature Reserve applauded the idea of Government taxes and levies, they did not have facts to support how this could be moved forward.

**Mantenga Nature Reserve**

The management designates are not aware of initiatives on Government taxes and levies, but feel the funds generated would be ploughed back into the conservation programmes, at the same time the staff interviewed felt this would encourage irresponsible behavior by polluters who can afford to pay the taxes and levies, though this does not seem to be a valid point considering that conservation taxes and surcharges are a success in many countries as discussed in section 4.7. Key leaders who can move this agenda forward would be the executives of the Swaziland Environmental Authority (SEA), Swaziland National Trust Commission (SNCTC), Swaziland Tourism Authority (STA), Ministry of Natural Resources and Energy (MNRE) and Ministry of Tourism and Environmental Affairs (MTEA).

**Mlawula Nature Reserve**

Management is not aware of Government initiatives towards special taxes or levies. However, in case a programme on taxes and levies is approved and implemented and reported pros and cons:

The pros are:

1) Conservation would sustain itself within the nature reserve
2) Legitimate agencies can benefit
3) It can sustain conservation practices in the country
4) Ensure sustainable use of resources nationally
5) Further enhancement of environmental conservation

The cons are:

1) Could lead to challenges in the stipulation of charges for penalties for the various offences as these need to go through parliament first and; 2. Development projects can be reduced/minimized

A case for establishing conservation taxes can be made in view of the following issues:

1) The revenue that would be collected would be utilized in spearheading new projects in the country.
2) With time dedication and positive-goal driven thinking the required coalition could be established.
3) The coalition would be made of the gazette and registered participating organizations in nature conservation.
4) This would bring Government and Parliament in the picture by directly engaging them to get their support to gain political will on nature conservation.
5) The key leaders who might be instrumental in establishing a conservation sales tax or some other type of surcharge or levy are: the Prime Minister and Cabinet Ministers through the relevant Ministries. They could be enlisted in the campaign by conservation stakeholders.