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# PROMOTING INTEGRATED COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT AS A MEANS TO COMBAT DESERTIFICATION:

THE LIVING IN A FINITE ENVIRONMENT (LIFE) PROJECT  
AND THE #KHOADI //HOAS AND NYAE NYAE  
CONSERVANCIES, NAMIBIA

March 2007

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# PROMOTING INTEGRATED COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT AS A MEANS TO COMBAT DESERTIFICATION:

THE LIVING IN A FINITE ENVIRONMENT (LIFE)  
PROJECT AND THE #KHOADI //HOAS AND NYAE  
NYAE CONSERVANCIES, NAMIBIA

Brian T. B. Jones<sup>1</sup> and Alfons Mosimane<sup>2</sup>

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**International Resources Group**

1211 Connecticut Avenue, NW, Suite 700

Washington, DC 20036

202-289-0100 Fax 202-289-7601

[www.irgltd.com](http://www.irgltd.com)

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<sup>1</sup> Independent Environment and Development Consultant, P.O. Box 9455, Eros, Windhoek, Namibia; E-mail: [bjones@mweb.com.na](mailto:bjones@mweb.com.na).

<sup>2</sup> Head: Life Science Division, University of Namibia, Private Bag 13301, Windhoek, Namibia; E-mail: [amosimane@unam.na](mailto:amosimane@unam.na).



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# I. INTRODUCTION

## I.1 PURPOSE OF THIS REPORT

This report has been commissioned by the USAID-FRAME program and IUCN South Africa as part of a series of case studies on successful southern African natural resource management activities and their impacts on poverty and governance, particularly within the context of national action plans to combat desertification. The USAID-funded Living in a Finite Environment (LIFE) project has been supporting Namibia's community-based natural resource management (CBNRM) program since 1993. As part of this support, it has directly and indirectly assisted two community-based organizations—the #Khoadi //hoas and Nyae Nyae Conservancies. This report considers how the LIFE Project support to these conservancies has contributed to the aims of Namibia's Programme to Combat Desertification (NAPCOD) and to implementation in Namibia of the United Nations Convention to Combat Desertification (UNCCD). Overviews of desertification in Namibia, NAPCOD, and the LIFE Project are provided, followed by the results of CBNRM activities in the conservancies considered in more detail.

## I.2 METHODOLOGY

This report is the synthesis of a desk study covering existing literature and data, interviews with key informants who have worked with the conservancies, and field research in both conservancies. The authors have also drawn on their combined experience working with the two conservancies during a 16-year period, assisting in the formation of the conservancies, socioeconomic surveys, and data gathering for various purposes.

Impact assessments on environment, poverty/livelihoods and social/institutional issues were carried out in both conservancies. The field study took place in December 2006. In Nyae Nyae Conservancy, a total of 13 people were interviewed using focal group discussions (FGDs), comprising eight Nyae Nyae Conservancy Committee members and five Nyae Nyae Farmers Association Committee representatives. The Farmers Association FGD took place at the Ministry of Agriculture, Water, and Forestry (MAWF) offices. The 13 participants were males and San speaking, except for the chairperson of the Farmers Association who is Oshiwambo speaking and has lived in the area since before independence. Each FGD took at least three and a half hours. Individual key informant interviews were identified and interviewed separately in the households.

In #Khoadi //hoas Conservancy a total of nine people were interviewed using FGDs and in-depth interviews. In total six #Khoadi //hoas Conservancy staff members were interviewed and three conservancy members. A number of individuals working in or with the conservancies were interviewed (see annex 1).



# 2. DESERTIFICATION IN NAMIBIA

Namibia is a desert country—the driest south of the Sahara. Droughts are common, and much of the country is classified as arid or semiarid. Desertification is taking place in the form of land degradation in many parts of the country. Seely and others (1994) identified a number of symptoms of desertification in Namibia:

- *Overgrazing*: excessive trampling and consumption of grasses by livestock so that grass cover is reduced or destroyed; it is caused by overstocking of livestock.
- *Bush encroachment*: the increase of woody species at the expense of grass, leading to the development of a large biomass of thorny bushes, reducing available pasture, and resulting in a decline of carrying capacity; it is caused mainly by a combination of overgrazing, suppression of fire, and lack of bulk browsers.
- *Deforestation*: conversion of wooded areas of northern Namibia to open grassland through cutting of trees to clear lands for crops, firewood, and construction, as well as too frequent fires.
- *Overtilling*: in the northern and northeastern areas where people cultivate land without adding fertilizer or giving the land a chance to rest and resulting in impoverished soils.

The consequences of desertification have a considerable effect on the economy. Quan and others (1994) estimated that desertification was costing rural households in Namibia about N\$80 million (approx US\$13.3 million) a year in lost income.

In a study on the underlying and policy factors affecting desertification in Namibia, Dewdney (1996:17) suggested that on communal land over utilization and suboptimal allocation of land was being caused by the following principal factors:

- Insecure tenure
- Sedentarization with the expansion of permanent water points (and reduced options for transhumance as a result of private fencing)
- Increasing pressure on communal lands caused by individual fencing of communal land and population growth
- Livestock and limited household crop production being considered the only possible land use due to factors such as state control of wildlife and forests

## 2.1 NAMIBIA'S PROGRAMME TO COMBAT DESERTIFICATION (NAPCOD)

To research and address the symptoms, as well as the underlying factors causing desertification, Namibia developed a comprehensive national program. Namibia's Programme to Combat Desertification (NAPCOD) was established to implement the provisions of the United Nations Convention to Combat Desertification (UNCCD), which was signed in June 1994.

The UNCCD promotes sustainable use of natural resources, but also calls for development of alternative and diversified forms of land use and for central governments to devolve responsibility to lower levels, including local communities. The participation and involvement of local communities is emphasized throughout the UNCCD (United Nations 1997). In line with these approaches,

NAPCOD worked with rural resource users to investigate land uses, agricultural practices, and alternative livelihoods through pilot activities in a number of communities. Part of the work included assisting communities to identify and express their development needs clearly and to coordinate service provision by government and NGOs through a community development plan (NAPCOD web site 2003). The efforts of community-based organizations (CBOs) have been supported through capacity building and the transfer of knowledge. The main objectives were (NAPCOD web site 2003):

- Ensure that monitoring systems track and help understand key desertification indices are established and functional
- Strengthen capacity of selected community-based organizations and community members to plan and sustainably manage their natural resource base and promote diversified livelihoods
- Strengthen capacity of service organizations to provide more effective and appropriate services to community-based natural resource users, managers, and organizations
- Improve frame conditions conducive for sustainable natural resource management practices and develop a basis for implementation
- Communicate and share experiences with SADC partners and internationally.

NAPCOD was a collaborative program between the Ministry of Environment and Tourism and the Ministry of Agriculture, Water, and Rural Development (MAWF). NAPCOD officially ended in 2004, after which the Ministry of Environment and Tourism (MET) decided to incorporate some of these activities into the GEF Country Pilot Partnership (CPP), which will put environmental issues under one umbrella. A new GTZ program (2005–08), the Biodiversity Management and Land Support Program (BMSLP), currently supports the work done under NAPCOD Phase III, regarding ecological restoration of degraded lands in pilot areas; this program also worked closely with the recently finalized Bush Encroachment Project to work on the results provided by these studies.

# 3. THE LIFE PROJECT

## 3.1 DESCRIPTION OF PROJECT, APPROACH, AND IMPACTS

The LIFE Project is funded by USAID, Namibia's Ministry of Environment and Tourism (MET), World Wildlife Fund (WWF) and other sources of matching contributions.<sup>3</sup> Project activities are implemented by MET, local nongovernmental organizations (NGOs), and other Namibian institutions. The funding mechanism for the project is a cooperative agreement with WWF. The project is guided by the LIFE Programme Steering Committee, which is composed of representatives from MET, USAID, WWF, and a number of Namibian organizations involved in CBNRM.

The LIFE Project is being implemented in three phases, starting in 1993 and ending in 2008. The main aim of the project is to support the National Community-Based Natural Resource Management Programme in Namibia. This is done by assisting Namibian government agencies and NGOs to help local communities in establishing common property resource management institutions called conservancies that are provided for under Namibian legislation.<sup>4</sup> At the time of writing, there were 50 registered conservancies in Namibia, covering more than 11.7 million ha, and many more communities were in the process of forming conservancies.

The project is complex and multidimensional. It has three main focal areas: improving the natural resource base, establishing local institutions, and developing natural resource-based enterprises. It, therefore, integrates biodiversity conservation, democracy/governance, and enterprise development in one project. The LIFE Project goal and purpose statements remained consistent between phases I and II:

- **Goal:** Improved quality of life for rural Namibians through sustainable natural resource management.
- **Purpose:** Communities derive increased benefits in an equitable manner by gaining control of and sustainably managing natural resources in target areas.

The initial phase began in May 1993 and operated until June 30, 2000 at a funding level of US\$16.8 million. Phase II began on August 12, 1999, running concurrent with the last nine months of phase I and continued to September 2004. The level of funding was \$16.2 million. Phases I and II focused on supporting MET and Namibian NGOs to mobilize local communities into conservancies and develop various wildlife- and tourism-based enterprises. Capacity building of Namibian organizations was also a major focus.

The LIFE Project implementation strategy in phases I and II was to support local organizations by providing technical assistance, training, and funding through grants. In phase 1, the geographical target areas were limited to the northeast of the country. The target areas were expanded in phase II, covering parts of northwest Namibia, including the #Khoadi //hoas Conservancy, to which the project provided direct support.

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<sup>3</sup> This chapter is drawn largely from Jones (in preparation).

<sup>4</sup> Under Namibian legislation passed in 1996, rural communities wishing to form a conservancy must define the members and boundaries of the conservancy, have a representative committee, a benefits distribution plan, and a legally recognized constitution. Once registered by government, a conservancy gains use rights over certain species of wildlife, trophy hunting rights, the right to sell game, and the ability to enter into contracts with tourism operators. Conservancy status does not affect other forms of land use such as crop growing and livestock, but provides additional land use and income-generating options.

Phase III of the LIFE Project began in October 2004 and runs to September 2008 with a funding level of \$13 million.<sup>5</sup> Although aiming to consolidate existing activities and achievements, this phase contains some significant shifts in emphasis. Phase III is intended to promote greater diversification of CBNRM activities, which in the previous phases heavily relied on wildlife and tourism. There is a considerable reduction in funding available for grants to support NGOs and conservancies directly, and funds available have been further diluted by a heavily devalued U.S. dollar. The purpose of LIFE Phase III is:

- Improved livelihoods through sustainable integrated natural resources management.
- The four intermediate results are:
  - Strengthened institutional capacity
  - Increased economic growth
  - Improved governance
  - Enhanced recovery and sustainability of natural resources.

The LIFE Project was built on a foundation that was already being laid by Namibian organizations. When the project started in 1993, the following were already in place (Jones in prep.):

- Clear expression from local communities of interest in conserving and benefiting from wildlife and other resources
- Request from local communities for the same rights over wildlife as white freehold farmers
- Draft policy for giving such rights to local communities
- A number of pilot community-based natural resource management projects in different parts of the country
- An emerging collaborative group of government officials and NGO personnel who were developing a vision for CBNRM in Namibia.

It is difficult to specify clearly the impacts of the LIFE Project, because it has largely provided support to Namibian organizations that have implemented CBNRM; however, some of the cumulative impacts of CBNRM activities in Namibia are the following (LIFE 2006, NACSO 2006):

- Fifty registered communal area conservancies cover more than 11.7 million ha of land in five different biomes.
- In 2005 the total value of the contribution of the national CBNRM program to net national income and the increased capital value of wildlife<sup>6</sup> in northwest Namibia from 1990 to 2005 was about N\$715 million, which exceeds the total investment in CBNRM by government and donors of N\$680 million.
- Increased capacity of Namibian organizations to implement CBNRM and of the umbrella organization, the Namibian Association of CBNRM Support Organisations (NACSO).
- Development of innovative community-based wildlife census and monitoring systems.
- Well-documented increases in wildlife, particularly in the northwest of the country.

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<sup>5</sup> USAID funding has been reduced from US\$9.8 million to US\$7.4 million, and the end of project date has been brought forward from August 2009.

<sup>6</sup> Calculated at the value the animals would fetch if they were to be sold or harvested commercially (for which there are existing markets on which these values have been based).

- In 2005, income to conservancies was N\$13.7 million (about US\$2 million). This income was generated through conservancy/enterprise cash income, household/wage income, and conservancy nonfinancial benefits, mostly in the form of game meat from either harvested trophy animals or game cropped by the conservancies. An additional N\$6.1 million was generated by other CBNRM activities.

### **3.2 LINKS TO NAPCOD**

The overall approach of the Namibian CBNRM Programme fits very closely with the aims and objectives of the UNCCD and objectives and implementation strategy of NAPCOD. Jones (2004) found that the national CBNRM Programme and NAPCOD<sup>7</sup> shared much in terms of conceptual foundation and philosophy. Both recognize the role of land holders/local resource users in conservation and both recognize that if the appropriate conditions are in place, landholders/resource users are likely to manage their resources sustainably. These conditions include the following (Jones 2004: 20):

- Devolution of rights over resources
- Incentives for sustainable management
- Ability to benefit from use of resources
- Placing a value on resources
- Having the capacity to manage resources (including information, knowledge, skills, strategic planning capability, etc.).

Both programs are founded on the concept of sustainable use of natural resources and promote integrated land use planning and management. Both recognize the need for coordinated and integrated approaches between conservation projects and programs. The LIFE Project is founded on the same philosophy and principles and has applied these in its support to the National CBNRM Programme.

LIFE has contributed, more specifically, to achieving NAPCOD goals and objectives through its support for establishment of conservancies as common property institutions that have begun to take responsibility for managing local natural resources sustainably. LIFE liaised regularly with NAPCOD at the national level and partnered with NAPCOD in providing support to the #Khoadi //hoas conservancy at the community level.

### **3.3 SUPPORT TO #KHOADI //HOAS CONSERVANCY**

The #Khoadi //hoas Conservancy, located on communal land in Kunene Region in northwest Namibia, was unusual among the initial conservancies to be registered in that it emerged with very little NGO support (Jones 1999). Two American Fulbright scholars hired with funding sourced by MET advised the community on development of the conservancy for one year. Due to lack of strong support from a Namibian NGO, the LIFE Project provided considerable direct assistance to the conservancy. This took the form of a grant to assist the ongoing operations of the conservancy until it started generating its own income, support for institutional development and governance, advice and support for wildlife counting and monitoring, and support for developing a conservancy management and land-use plan. The grant was expected to assist the conservancy in addressing the following:

- Review the conservancy's staffing structure
- Develop operational guidelines and administrative systems

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<sup>7</sup> As well as the National Biodiversity Strategy Action Plan.

- Develop systems for financial sustainability
- Establish a training development plan
- Develop a land use zoning plan
- Develop an equitable benefits distribution plan.

As a number of other organizations began to assist the conservancy, the LIFE support has tended to diminish. The main focus of assistance is currently for continued wildlife monitoring and quota setting for trophy and other forms of hunting and assistance toward marketing and managing the conservancy's hunting concession.

### **3.4 SUPPORT TO NYAE NYAE CONSERVANCY**

The LIFE Project has assisted a Namibian NGO, the Nyae Nyae Development Foundation of Namibia (NNDNFN) to support the Ju/'Hoansi San in development and operation of the Nyae Nyae Conservancy since 1993. LIFE has provided grants to the foundation and the conservancy to improve the capacity of the conservancy to manage and benefit from its natural resources sustainably. In the formation stage of the conservancy, LIFE provided considerable technical support for institutional development. It has also assisted the Ju/'Hoansi in rebuilding their wildlife populations from historically low levels in the early to mid-1990s back to numbers that can contribute significantly to local livelihoods. The aim is to do this through benefits generated from trophy hunting, tourism, sustainable game meat harvesting, and potentially game farming of high-value species, such as roan antelope or buffalo (Weaver and Skyer 2003).

LIFE Project support in 1993–2007 has included assistance in mobilizing the Ju/'Hoansi into a conservancy, conservancy land-use zoning around different land uses (i.e., wildlife, integrated livestock, village areas, etc.), development and maintenance of game watering points, reintroduction of game to bolster the recovery rate and financial viability of the conservancy, support to the valuable disease-free buffalo herd, marketing and negotiation of trophy hunting concessions, and capacity building of the Nyae Nyae Conservancy committee to manage the above activities (Weaver and Skyer 2003, LIFE 2006).

# 4. SUSTAINABLE NATURAL RESOURCE MANAGEMENT AND COMBATING DESERTIFICATION IN THE #KHOADI //HOAS CONSERVANCY

## 4.1 SUMMARY DESCRIPTION

The #Khoadi //hoas conservancy was formed under wildlife legislation to gain rights over wildlife and tourism and to manage these for the benefit of the local community. In conjunction with a local farmers' union, the conservancy has begun to integrate wildlife management with rangeland and water management. Support to sustainable natural resource management by the conservancy has been coordinated through the conservancy's own development and natural resource management plan.

## 4.2 BACKGROUND

### 4.2.1 ENVIRONMENTAL SETTING

The conservancy falls in a semiarid area with an east-west rainfall gradient from the freehold farms on the eastern border (annual average 300 mm), westward to the Grootberg Pass (240 mm a year). The rainfall is highly variable and often erratic, both seasonally and spatially. The evaporation rate is about 3 m a year.

An east-west transect of the conservancy includes the relatively flat and sandy highland plains (elevation 1,000–1,200 m) dotted with granite hills, which stretch from the border with the freehold farms to the basalt ridges of the Grootberg in the west. Surrounded by a rocky plain of eroded basalt, the Grootberg rises to 1,645 m and forms the edge of the escarpment, which rises above the plains of the pre-Namib desert. Soils consist mostly of red sands on the highland plains and shallow eroded basalt and granite-based soils on the hills.

Mopane *Colophospermum mopane* is the dominant tree species in much of the area; mopane, the ana tree (*Faidherbia albida*), the camelthorn (*Acacia erioloba*), and the leadwood (*Combretum imberbe*) are found along the dry water courses. *Sterculia africana* and *Sterculia quinqueloba* are common on the larger granite koppies in the east.

The conservancy and surrounding area support at least 82 species of mammals, including six endemics, among them the Hartmann's mountain zebra (*Equus zebra hartmannae*). The only endangered mammal species is the black rhino (*Diceros bicornis bicornis*), found in extremely low numbers on the western margins of the conservancy. Predators include lions (very occasionally), leopards (*Panthera pardus*), cheetahs (*Acinonyx jubatus*), and spotted hyenas (*Crocuta crocuta*). There is a population of elephants *Loxodonta africana*, estimated at more than 200 (varying seasonally).

#### **4.2.2 LIVELIHOOD ISSUES**

The conservancy area of about 362,000 ha previously consisted of land owned by white farmers bought by the South African Government to help create the Damaraland Homeland as part of an apartheid-style division of Namibia. Many of the residents were forcibly settled in the area from hundreds of kilometers away. There is a scattered settlement pattern with the majority of people living on the fenced former white farms in small groups of two to five families close to artificial water points. Several hundred people live at the settlements of Erwee and Anker, each of which has a school and a clinic.

The human population of the conservancy is estimated at 3,000–3 500. Most people live a subsistence existence, although a handful of fairly wealthy livestock owners farm commercially. The main form of subsistence is sedentary livestock farming at low stocking rates (however in times of drought, the movement of livestock sometimes across large distances is an important coping strategy). Most farmers keep a mixture of cattle and small stock. The semiarid conditions, poor soils, and steep slopes in the hills make crop farming extremely difficult and even livestock rearing is precarious. The sale of livestock by the more wealthy farmers and the receipt of remittances and pensions by the poorer residents are important sources of cash income. There is little formal employment.

Many livelihood activities directly depend on the natural resource base, making people particularly susceptible to natural shocks, such as drought. Strong informal social networks and relationships of reciprocity serve as safety nets in difficult times (Kruger 2003).

Access to resources such as water and grazing is crucial for conservancy residents, but is not assured for many people because of tenure uncertainty. Jensen and others (2002) reported that residents are unclear about who has authority over the land and, in many of the more remote areas of the conservancy, one wealthy family has taken over control of land and grazing access. “In these and many similar cases, confusion about tenure status and related resource rights has allowed one or a few people to take de facto control of large tracts of productive land” (Jensen and others 2002:17). As a result, many people are confined to smaller or less productive areas, resulting in “extremely high pressure” on the marginal areas and constant pressure on the land controlled by the powerful.

The presence of wildlife adds to the difficulties for farmers. Elephants and species such as kudus, oryx and springboks use the same water points as livestock and compete with cattle and goats for grazing and browse. Elephants cause damage to water points, fences, and gardens, kill livestock, and threaten people. Jackals and other predators kill livestock.

#### **4.2.3 RESOURCES USED OR MANAGED**

Through various institutions (see next subsection), the community manages its grazing, water, wildlife, and tourism within the conservancy area. One of the main focal issues of this case study is the various means used to try to promote integrated management of these resources and integrated and coordinated service provision by support agencies with single resource mandates.

#### **4.2.4 INSTITUTIONS RESPONSIBLE FOR MANAGING RESOURCES**

The community has been relatively well organized since the early 1990s through a strong association of local farmers, who collaborate through the Grootberg Farmers’ Union (GFU). The GFU was responsible for establishment of the conservancy, and the relationship is always described locally as that of parent and child (Jones 2003). The #Khoadi //hoas Conservancy was registered by the MET in mid-1998, one of the first four communal area conservancies to be registered in Namibia.

Jones (2003) identified a number of institutions that play a role in land and natural resource management in the conservancy and to some extent compete with each other for authority. For example, the central government line ministry, the Ministry of Lands and Resettlement (MLR), has overall control of land, which is owned by the state. The Ministry of Agriculture, Water, and Forestry (MAWF) advises the traditional authority on allocation of grazing land. The regional government has no specific powers over land, but coordinates regional development activities that have an impact on land use. The traditional authority is responsible for the allocation of residential and grazing land.

The management of grazing land is not clearly defined; both the Traditional Authority and the MLR have a say, whereas MAWF controls agricultural production on the land. The lack of a properly defined use and management structure for grazing, such as the conservancy for managing wildlife in conservancies, is a limitation to sustainable management of grazing in communal areas. The need to integrate grazing management in conservancies has long been identified by communities, but lack of legislation to support the need has caused a management vacuum in many parts of the country. Through conservancies, communities try to influence the management of grazing within the conservancy; however, they are aware that they do not have the right to manage grazing.

Community water point committees are responsible for management and maintenance of water points and have the right to exclude those who do not pay user fees. It might be argued that whoever controls water in a semiarid environment controls the land. The water points established by the conservancy for game are controlled by conservancy members and the local water point committee. The conservancy's local environmental shepherds are given responsibility for maintaining and protecting these water points. The GFU is a strong institutional actor that also advises the traditional authority on land allocation and has a vested interest in promoting decisions that favor livestock owners. The conservancy has defined boundaries officially declared in the government gazette and this delimitation could be interpreted as strengthening the land rights of the conservancy members. The conservancy wishes to promote land uses that further its aims of increased financial benefit through wildlife and tourism.

Through its legal status as a conservancy the community receives trophy hunting rights and the rights to operate tourism on its land from MET, which approves hunting quotas and permits for the use of wildlife. The conservancy has a contract with a professional hunter for a trophy quota received from the MET. The quota is set mainly based on the results of game counts carried out jointly by the conservancy, the MET, and NGOs. The conservancy is also able to buy and sell game animals. It has its own mid-market tourism lodge on its land zoned for wildlife and tourism. The lodge infrastructure was paid for by donor funding, and the lodge and associated tourism operations are managed by contract with a private company. The conservancy also has its own campsite on a major tourist route through Kunene Region.

#### **4.2.5 FUNDING**

The LIFE grant that ran from May 2000 to April 2002 was worth N\$300,000 (about US\$31,250 at the exchange rate then). A further institution- and capacity-building grant under LIFE II through the Namibia Nature Foundation Cooperative Agreement with USAID was for N\$108,480 and ran from June 2003 to November 2004.

### **4.3 DETAILED DESCRIPTION**

#### **4.3.1 GOAL**

The overall goal of LIFE support to the #Khoadi //hoas Conservancy has been to build the institutional and technical capacity of the conservancy and its members to manage their natural resources sustainably. In particular LIFE is intended to promote wildlife and tourism as additional, complementary forms of land use.

#### **4.3.2 PROBLEM TO BE RESOLVED**

The key NRM problems in #Khoadi //hoas Conservancy are closely aligned with the key desertification issues noted in subsections 1.3 and 2.2 above and are related to the livelihood issues noted in subsection 3.2.2 above. Tenure and the necessary institutional arrangements for collective management of the area's natural resources are central issues. The conservancy approach represents an attempt to provide some form of resource tenure in the absence of clear mechanisms for groups or communities to gain secure tenure over their land. The lack of formal tenure recognition and the weakening of past institutional arrangements have led to tenure insecurity among individual livestock owners described by Jensen and others (2002) and noted in subsection 3.2.2.

Although some movement of livestock still takes place in times of drought, fixed artificial water points have led to greater sedentarization of people and their herds putting greater pressure on grazing areas around the water points. There is a need to adapt existing grazing management systems and adopt new practices and technologies for improving livestock. The difficulties of farming with livestock in the conservancy and managing water are increased by the damage to water installations caused by elephants and their use of water that has been pumped for livestock.

Given the climatic uncertainty of the area and the poverty of most residents, there has been a need to diversify livelihood activities and find ways of providing jobs and income that can reduce reliance on natural resources.

Furthermore, a need exists to promote greater efficiency and synergy in service provision to the residents and promote an integrated approach to natural resource management, instead of one driven by the single resource interests and agendas of government line ministries and NGOs.

### **4.3.3 DESCRIPTION OF ACTIVITIES**

One of the most important activities of the LIFE Project and other service providers in the #Khoadi //hoas conservancy has been the development of the FIRM approach. FIRM (the Forum for Integrated Resource Management) was initiated in 1996 by the Directorate of Environmental Affairs in MET in partnership with a number of other organizations to coordinate the support being provided by different government departments, NGOs, and projects to the residents of the conservancy area. The aim was to assist the community in identifying its own development objectives and a program of action and then coordinate the activities of service providers through collaborative action in support of the community vision and action plan. A system evolved where detailed annual work plans were developed at the start of the year jointly by the GFU and the conservancy; service providers would attend a meeting to indicate where they could assist; and additional meetings were held during the year to assess progress and adjust work plans if needed (Kruger and others 2003). LIFE was a member of the group of organizations that initiated FIRM, and provided considerable support to the development of the community vision and action plans.

As part of the FIRM approach, LIFE has assisted the conservancy in developing financial management systems, carrying out needs assessments, quota setting, and establishing tourism potential. It has played a major role in supporting baseline surveys of wildlife and the development of a game monitoring system used by the conservancy's environmental shepherds. It has provided training to the shepherds in monitoring resources other than wildlife. LIFE contributed to the development of an adaptive management plan for the conservancy and the development of a land use plan for the conservancy. Other partners in FIRM, including NAPCOD and its partner organizations, have provided support to improved livestock production and management and monitoring of range productivity. LIFE has also provided continual guidance on income generation activities through facilitation of trophy hunting agreements and assisted with the advertising the Klip River Joint venture lodge development that ultimately led to the placement of the Grootberg community lodge in the conservancy.

## **4.4 RESULTS**

### **4.4.1 LIVELIHOOD RESULTS**

The livelihood results of the CBNRM activities in the conservancy have been mixed. The conservancy has taken longer than expected to generate sufficient income from wildlife and tourism to start providing significant benefits to residents. Schiffer (2004) found during her field work in 2002 that community members in #Khoadi //Hôas were becoming impatient at the lack of tangible benefits as their conservancy had already been registered for nearly five years. A number of factors had contributed to this situation. The receipt of income from trophy hunting was delayed because the conservancy initially entered into a poorly constructed contract with a professional hunter who failed to bring hunters to the area. This was because the conservancy wanted to develop its own contract without technical support. LIFE subsequently helped the conservancy to terminate the

contract and to find an appropriate, qualified concessionaire. The conservancy's ability to generate income from trophy hunting is limited by the lack of a permanent quota for elephants.<sup>8</sup> An initial quota that included one elephant brought in N\$150,000 (about US\$25,000), but without an elephant the quota is worth about N\$75,000. The conservancy had expected to generate income from an existing tourism concession on land within the conservancy, but managed by the MET. Although MET had adopted a policy of converting such concessions to conservancies, this did not take place in #Khoadi //hoas and negotiations are continuing on the future of the concession.

Some improvement has occurred, however, since the time of Schiffer's research. The mid-market Grootberg Lodge is owned by the conservancy (constructed with donor funding) and in its second year of operation (2007) its occupancy rate is increasing. Once the lodge achieves a sufficiently high occupancy rate, the benefits for the community will be important. The lodge currently employs 23 local residents at N\$550 per person per month with an additional N\$250 worth of rations per person per month. The operating company takes 15 percent of gross turnover (less marketing fees and taxes) as a management fee, 15 percent of gross turnover goes to the conservancy and the remainder goes back into the lodge for maintenance and further investment in infrastructure. The projected income to the conservancy for the first year was N\$300,000 (about US\$40,000), but this amount will not be realized because the lodge was completed too late for marketing to be carried out (D. DuRaam, September 2<sup>nd</sup> 2005, pers. comm.). The intention is that the managing company will train local staff to the level at which the conservancy can take over operation of the lodge itself. The aim is to buy local crafts and assist one or two families to grow vegetables for sale to the lodge. The lodge also buys 12 head of game annually from the conservancy for meat for staff for a total of N\$6,000. The lodge management also wishes to explore a number of potential tourism activities involving conservancy residents.

For a number of years, the conservancy largely depended on donor funding, but it has now become self-reliant. By using donor funding to cover operating costs in its early years, it had managed to build up a surplus of nearly N\$400,000. In 2004 the conservancy began using its funding to provide benefits for residents. Table 1 shows how the conservancy has benefited local residents in 2004 and 2005. In addition to the benefits reflected in the table, the conservancy employs seven fulltime personnel: a conservancy coordinator, a liaison and communication officer, one camp-site manager, and four environmental shepherds responsible for wildlife monitoring and preventing poaching. The conservancy employs an additional three part-time environmental shepherds. Its wage bill in 2006 will amount to nearly N\$100,000, an important injection of cash into an area with few full-time jobs. Conservancy-related job creation is the second highest source of employment in the area after government and close to 200 people are benefiting indirectly from the wages.

Results from the field research indicate that employment has positively affected household assets. Salaries and wages earned by both conservancy and lodge staff have contributed to positive social mobility. Salaries and wages are used to buy livestock (mainly goats) and people also buy other household necessities such as furniture, clothes, blankets, toiletries, and food. Others use their hard earned cash to send their children to school (payment for hostel fees), an opportunity some participants said was only made possible through their income. Box 1 provides some insights into the impacts of conservancy-related employment for households.

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<sup>8</sup> Although elephant numbers are increasing in north west Namibia, environmental factors will always limit general numbers and, therefore, the number available for trophy hunting.

### **Box. 1. Impacts of conservancy related employment on households**

Mr Barman !Guim is employed as a tracker at the Grootberg Lodge, earning N\$550 a month. He started as a community environmental shepherd earning N\$200 a month. He says his new job which he started in 2006 has motivated him to become a responsible young man who can provide for his family. He can now afford to buy livestock, covers all costs related to his children going to school, and buys household necessities. He lives with five other adults, including his sister and parents and has two children. He shares with his family the food ration he gets from the lodge.

Ms Helga /Howoses is the Conservancy Liaison and Communication Officer, earning N\$1 758 per month. She has been employed by the conservancy since 1998. She spends between N\$600 and N\$800 monthly to support her three children and six other dependents. She has bought goats and chickens and intends to buy sheep to add to her livestock.

The conservancy distributes meat from trophy hunting and its own hunts, but the amounts received per household are small; at the time of Schiffer's research, some residents were unhappy with the distribution (Schiffer 2004). The last hunt was for 168 animals on a quota approved by MET. The value of the meat distributed to households in 2005 was N\$201,528.<sup>9</sup> The conservancy has made a number of other contributions to social welfare locally. In 2003 it donated N\$12,500 to a local school to pay for renovations, it has paid for the purchase of breeding stock to be loaned to members to help improve livestock quality and regularly pays for a soup kitchen to provide food for the elderly.

The conservancy has invested heavily in measures to prevent or mitigate problems caused by elephants. These problems include threats to humans, killing of livestock at water points, damage to water point installations, consumption of water pumped for people and livestock at the cost of residents, damage to fences around grazing areas and around homesteads, and damage to small gardens.

In 2004 more than half of the amount spent on community benefits was used for elephant-related issues, and in 2005 nearly all of the spending on community benefit was on elephant-related issues (see table 1). In both years the greatest part of the money spent on addressing elephant problems was the conservancy's matching contribution to a Global Environment Facility (GEF) small grant for building elephant protection walls around water points. Protection of seven water points from elephants is having important positive impacts on livelihoods through ensuring the maintenance of water supplies for people and their livestock. The conservancy also provides diesel at a 50 percent discount to members for pumping water when it is used up by elephants, and compensates water point committees for elephant damage.<sup>10</sup>

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<sup>9</sup> Based on actual market prices for venison.

<sup>10</sup> Water point committees are expected to levy residents to pay for maintenance of installations, and this can be very costly due to damage of pumps and pipes by elephants.

**Table I. Spending by the #Khoadi //hoas Conservancy on Community Benefits in 2004 and 2005 (N\$)**

Benefit	2004 (Overall income: N\$133,932, accumulated surplus: N\$388,599)	2005 (Overall income: N\$214,245, accumulated surplus: N\$340,705)
Contribution to two schools	25,000	
Support for livestock vaccination	4,000	
Diesel for elephant water points (collected by residents to pump water)	6,235	4,580
Diesel at subsidized price to pump water for livestock when elephants consume most of water at a settlement	15,645	10,292
Payment to offset livestock losses to elephants	700	5,500
Payment to local traditional authority	2,500	2,500
Loan of breeding animals for improving farmers' small stock	20,000	
Soup kitchen for old people	7,824	6,000
Contribution to building elephant protection walls around water points	61,520	116,100
Support to Grootberg Farmers' Union		2,000
Implementation of benefit distribution plan (fuel and travel)	14,952	16,391
<b>Total N\$</b>	<b>158,376</b>	<b>163,363</b>

Source: Jones and Barnes 2007).

The conservancy has built special water points for elephants, so that they do not visit the water installations at villages and cause damage or drink the water pumped for people and livestock. According to Mrs. Susana Hogobes at the settlement of Soutpos, the elephant dam has reduced damage done by elephants, which included killing of livestock, breaking of water pipes, and breaking of windmills and pumps. Elephant-people conflict has diminished from about nine incidences a year to a maximum of three a year. Because the elephant dam was built in 2001, elephants do not go into the village, unless the elephant dam is empty.

### **Box 2. The Livestock Loan Scheme**

The Conservancy started a livestock loan scheme in 2004, which has so far benefited 20 members. Each member received five goats and needed to pay back for the goats in cash after two years.

Mrs. Berndt is a beneficiary of the loan scheme. She is 40, a mother of four, and because she was unemployed, she could not afford livestock. Due to the loan scheme, she now has 25 goats and feels proud, because she is contributing to her family in a way she never could before. She says life has changed here, because she owns livestock. Benefits include selling livestock for cash, which she uses to send her two older children to school, paying for clinic fees, and buying food and other household necessities. She also milks the ewes. She says that due to high unemployment in rural areas, the main livelihood activity is farming; conservancies should try hard to support its members in farming and should provide training in animal husbandry.

Due to the good working relationship between the GFU, the local-level Farmer Associations and the conservancy, the conservancy has been able to assist its members and local farmers during an outbreak of anthrax and lung disease. The conservancy bought vaccination drugs and used its own fuel to assist farmers in vaccinating their animals.

Participants in a focal group discussion also said that before training in animal husbandry, farmers never wanted to sell their livestock, but after training and awareness campaigns, they understand the negative impact of overstocking. This led to farmers selling older animals and those not used for breeding; however, partial overgrazing was still being experienced in some villages.

Training has improved the skills of a number of people within the conservancy and can be viewed as another contribution to improving livelihoods. The Conservancy coordinator and the liaison and communication officer have received training related to:

- Financial management (semiformal training and mentoring)
- Secretarial duties (semiformal)
- Law enforcement (hands on training and mentoring)
- Wildlife management and monitoring (hands on training and mentoring)
- Rangeland management ( semiformal training and mentoring).

The lodge and camp staff received training on hospitality and tourism. The trackers received training on rhino-elephant tracking and behavior from the NGO, Save the Rhino Trust (SRT). The staff and members of the conservancy have received training on desertification, rangeland management, and animal husbandry. During focal group discussions, participants said the training and support related to desertification and range management provided by the Desert Research Foundation of Namibia (DRFN) was well received and appreciated, especially by farmers, because the topics addressed their immediate needs. Over the years, support and frequency of training has decreased. The participants said that capacity building has led to better livestock and range land management.

Participants in the focal group discussions during field research said the main contribution of the conservancy to reducing poverty in the area was through:

- Employment.
- Reducing elephant-people conflict
- The livestock loan scheme
- Training in animal husbandry
- Training and awareness in desertification and rangeland management.

They also said that the conservancy and the Namibian CBNRM program could improve its contribution to reducing poverty in the following ways:

- According to some participants, conservancies brought both wealth and poverty. On wealth, it was already demonstrated, but what the participants meant by poverty was the livestock losses experienced by farmers annually due to predation; hence, it was advised that conservancies should introduce a compensation scheme to assist those farmers who sometimes lose up to 30 heads of small stock. Participants suggested that such a scheme could be cofunded by both the conservancy and government.
- The livestock loan scheme should become more vigorous by loaning livestock to more people within the conservancy area and on a more frequent basis.

- The #Khoadi //Hoas Conservancy should diversify its income generation activities to increase job opportunities for its members.
- The conservancy was also requested to financially SME development by making startup capital available for SMEs to allow members to start their own businesses; that could also further contribute to job creation within the community. Such support could be facilitated by rural vocational training centers. SME development was also intended to diversify the rural economy.
- The conservancy should get more involved in HIV and AIDS awareness campaign, training in home-based care, and giving support at the village level to those affected and infected by HIV.

#### 4.4.2 NATURAL RESOURCE RESULTS

Schiffer (2004) found general agreement among stakeholders that the conservancy helped to reduce large-scale and commercial poaching by outsiders, although local hunting for the cooking pot was not as easily controlled. The environmental shepherds were in a difficult position, because on the one hand, they were community members, but on the other hand, it was their job to control their neighbors. Wildlife experts working with the conservancy agree that, although local poaching takes place, it is not at a level that is causing declines in numbers (C. Weaver September 5<sup>th</sup> 2006 pers. comm.; G. Stuart-Hill September 7<sup>th</sup> 2006. pers. comm.). Data from game counts and personal observations suggest that most populations of large mammals are stable or increasing, although fluctuations take place at different times and in different years, because of the movement of certain species across large areas (even beyond conservancy boundaries) in response to rainfall and grazing availability. Most of the wildlife in the conservancy is concentrated in the Klip River area, which has been zoned by the conservancy for wildlife and tourism, although wildlife is found across the conservancy, but in lower numbers. The Klip River area serves as a core conservation area from which wildlife can move out into surrounding areas of the conservancy. The Ministry of Environment and Tourism has demonstrated its confidence in the conservancy's ability to manage wildlife by reintroducing three black rhinos into the conservancy's core wildlife area.<sup>11</sup>

Results from the focal group discussions in the conservancy show that local people perceive increases in species such as giraffes, Hartmann's mountain zebras (a Red Data species), springboks, and elephants. They say these increases are because of the rights given to local people through the conservancy to control unauthorized hunting, awareness raising, direct benefits derived from wildlife, and the reintroduction of animals into the area. They say illegal hunting has decreased tremendously and this is evident in the number of animals seen. Residents also report an increase in cheetahs (with accompanying increases in stock losses).

The conservancy carries out own-use hunting, from which venison is distributed to members. Both trophy hunting and own-use hunting is well monitored by the environmental shepherds recording the number and type and sex of animals harvested. Reports are submitted to the Ministry of Environment and Tourism on an annual basis. Monitoring of wildlife is taking place through game counts (jointly with MET and nongovernmental organizations) and regular field patrols by the environmental shepherds. In the past, wildlife monitoring was only carried out by MET and did not involve local people.

The conservancy is looking at options that could strengthen its control of veld and plant products, such as registering as a community forest.<sup>12</sup> Veld products and mopane caterpillars (which are dried and eaten for protein) are open access resources for residents and outsiders. For example, all forest/plant products such as wood, veld fruits, and medicinal plants, are accessible to conservancy inhabitants, unless harvesting is for commercial purposes. Any veld product for commercial use is controlled by the government through its line ministries. Members of the conservancy will report

<sup>11</sup> An additional black rhino has moved into the area on its own accord.

<sup>12</sup> Community forests may be established and registered under legislation administered by the Ministry of Agriculture, Water, and Forestry.

suspicious activities within the conservancy to rangers, the conservancy committee, the police, and MET, especially if such activities are related to harvesting wood products and poaching.

Participants interviewed believe the harvesting of mopane caterpillars by non-Conservancy residents poses a threat to the future availability of the caterpillars. During the harvesting season, there is a high influx of people from neighboring towns harvesting the mopane worms. Local farmers indicated that they only harvest for household consumption, while those coming from outside the conservancy harvest the mopane worms for town and city markets. The conservancy coordinator said the conservancy felt powerless and there was nothing they could do about this situation. Conservancy staff reiterated the need for line ministries to communicate better with the conservancy and its leadership when it comes to allocating permits for especially wood harvesting in the conservancy area and for other permits used to harvest other natural resources.

Conservancy staff said it was difficult to determine the overall quality of forest/veld products. This was because there were no monitoring tools for forest resources; thus participants could not positively answer whether resource conditions had changed. The only resource they could evaluate in terms of quality or quantity was wood. They indicated that, in the past, local users walked to collect wood. In recent years, conservancy inhabitants are using donkey carts and vehicles to collect wood due to the long distances that people need to travel to collect wood. Many participants are blaming commercial harvesting of the wood by people coming from neighboring towns and constituencies.

The participants were also worried about the future of mopane worms. Participants believe that it is only a matter of time before mopane worms disappear. The conservancy is pressuring the Directorate of Forestry in MAWF to carry out coordinated monitoring of forest resources. Participants felt that population increase and high unemployment could lead to overexploitation of natural resources, including those such as hoodia and devil's claw, as people move from subsistence use to harvesting for commercial purposes.

Participants believe that fires are the main causes of poor rangeland. Fires can destroy grass and shrubs producing food for both wildlife and livestock. Participants said the main culprits were the livestock herders who are smokers.

According to the conservancy chair, Asser Ndjitezeua, and the conservancy coordinator, Bob Guibeb, August 28<sup>th</sup> (2005 pers. comm.) the conservancy aims not only to manage its wildlife and generate income from it, but also to help local farmers to farm sustainably. Support to livestock management from the conservancy through the environmental shepherds has included monitoring of livestock quality, rainfall, grass density, and vegetation quality. Considerable emphasis is being placed on improving livestock quality to reduce the need to keep large numbers of livestock. Farmers are assisted in grading their stock, removing weak and sick animals, improving quality, and keeping a smaller number of good animals that are worth more. Although NAPCOD funding has ended, the conservancy and the GFU are doing their best to continue with these activities, although not at the same scale. Ndjitezeua and Guibeb say that some residents are beginning to respond positively, particularly the younger farmers. The quality of livestock is beginning to improve and some farmers are willing to reduce numbers, as their stock improves. They also say that residents are beginning to respond to conservancy awareness creation about deforestation and some people have started using stone and earth bricks for construction, rather than wood.

Participants had mixed feelings about whether the conservancy concept could be applied to other resources and in particular livestock management. Some felt that it could increase competition between livestock and wildlife, whereas others felt it could be done if the target community was interested in the program and that such conservancies focused more on range management issues.

#### **4.4.3 GOVERNANCE AND MANAGEMENT CAPACITY RESULTS**

Two main areas relating to governance issues are considered. The first is the overall management of the conservancy in relation to the inputs of external service providers through the FIRM approach. The second is the relationship between the conservancy and its members. According to Kruger and others (2003) the main outputs and products of FIRM are: the development of integrated work plans

in a participatory manner, the development of demand-based project proposals involving all relevant stakeholders, and regular participatory monitoring, evaluation, and adjustment of work plans. They suggest that “this community-driven approach empowers community decision making, provides opportunities for capacity building, and ensures community control over development. Success depends on all other stakeholders taking a more responsive role, as directed by and in support of community priorities and helping only when and where requested” (Kruger and others 2003: 1759).

The development of an integrated community vision and action plans was facilitated by the close links between the GFU and the conservancy. This meant that from the beginning, the local institutional mechanisms existed in integrating livestock management with wildlife and tourism. The support of the livestock farmers in the GFU was important for securing agreement on the setting aside of the Klip River area as a wildlife and tourism zone largely free from livestock and settlement.

A survey was carried out in 2002 to assess the impacts of FIRM in the conservancy. The results are summarized in table 2.

**Table 2. Summary of Perceived Achievements and Challenges\***

Achievements	Challenges
1. Involves a variety of stakeholders interested in the same issues	1. Mainly driven by external service providers (mentioned by only one respondent)
2. Serves as a platform for sharing of information and knowledge	2. A lack of buy-in from a number of other important partners in the field of natural resource management
3. Provides a platform for integrated planning, involving a variety of stakeholders	3. A gap between the GFU and its membership
4. Focuses on support where it is really needed	4. Some competition among certain service providers
5. Puts the community in the “driver’s seat”	5. Institutional and financial sustainability not clarified for when donors withdraw
6. Is conducive toward improving understanding and developing long-term visions	6. Irregular attendance of some partners
7. Minimizes duplication of activities	7. A lack of continuity amongst representatives from different partners.
8. Provides a holistic picture of the challenges and opportunities within a community	
9. Allows opportunities for participatory monitoring, evaluation, and adjustment of planned activities	
10. Improves transparency with respect to roles and responsibilities of different partners	
11. Ensures more efficient use of human and financial resources.	

\* Based on perceptions of a variety of people (n=15) directly or indirectly involved in FIRM in #Khoadi //hoas and interviewed during October 2002.  
*Source:* Kruger and others (2003).

An ongoing problem in #Khoadi //hoas is the gap between the conservancy committee and ordinary members. This has been identified by a number of researchers (e.g., Jones 1999, Deutsch 2002, Vaughan and Katjiua 2002, and Schiffer 2004). During research carried out by the WILD project, when asked to rank local organizations in terms of priority for supporting NRM and livelihoods, a group of residents placed the conservancy last and the majority of the group said that it had little effect on their livelihoods, did nothing for them, and just controlled the illegal use of wildlife (Jones and others 2002).<sup>13</sup> None of the residents interviewed in the initial group-based work carried out by WILD, except for those employed by the conservancy and their families, had seen a copy of the conservancy constitution or had it translated into a local language.

<sup>13</sup> At this stage, no benefits had been distributed by the conservancy to residents.

The key problems were a lack of information about conservancy activities, a perceived lack of transparency about conservancy decision making and benefit distribution, and a lack of interest by conservancy residents in the affairs of the conservancy. Schiffer (2004) suggested that the lack of interest stemmed from:

- *History of nonparticipation:* The local community does not have a history/culture of organizing themselves. The history of colonialism meant people still wait for things to happen and the scattered nature of Damara social organization was an obstacle to self-organized participation.
- *Impeding procedures and structures:* These are linked to provisions in the conservancy legislation and shortcomings in the conservancy constitution, hinder participation.<sup>14</sup>
- *Lack of information/education:* Inadequate education and knowledge about the conservancy were seen as obstacles for strong participation of the community; poorly educated communities are more prone to being manipulated by better-informed individuals.
- *Logistical issues:* The size of the conservancy (in area as well as membership numbers) makes getting people together on a regular basis challenging. Dissemination of information, options for participation, and a feeling of ownership of the conservancy decreased the farther people lived from the central settlements and the conservancy office.
- *Unpleasant experiences lower participation:* Community members complained that criticism was not taken notice of, questions were not answered, and people were not allowed to talk at meetings.
- *Exclusive power networks/favoritism:* Members of certain networks were more likely to become influential committee members. Lack of community interest in conservancy matters is a problem. Participation is low, because people do not see significant benefits from the conservancy.

The committee is aware of these issues and, since the above research was carried out, has made attempts to encourage more participation in key decision making. It has, for example, held conservancy-wide meetings to discuss and develop a conservancy benefit distribution plan. There are now more than 2,000 registered members, which make up a large portion of the adult residents. The conservancy has been divided into smaller area units, based on the area covered by the local farmer associations that make up the GFU, in an attempt to increase participation and improve communication. Participants in the field research said the key decisions are taken at two levels; at the area meetings and at member meeting held in the main settlements of Anker and Erwee. In general, according to the participants, decisions are taken in a transparent manner, especially at the Area and member meetings. Most decisions are taken at the member meetings in Anker and Erwee. At these meetings, the members scrutinize and approve conservancy work plans and budgets. Financial reports only become official conservancy documents after being reviewed by members and approved by them.

A Grootberg stakeholders meeting has been set up as a platform for conflict resolution in the conservancy. It consists of representatives from the Farmers Union, Farmers Associations, Conservancy, Traditional Authority, Conservancy Womens' Desk, and the Youth Group. NGOs and line ministries are invited on a case by case basis, depending on the issue at hand.

Most participants suggested that the #Khoadi //hoas Conservancy management capacity has improved in general, and more specifically in the key areas of wildlife management, community assets management and accountability. Participants indicated, however, that they will continue to require external support; they could also not say for how long this support will be needed. Support would in essence be needed until the conservancy is able to manage its own affairs independently and it generates enough income.

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<sup>14</sup> In particular, committee elections that resulted in overrepresentation of one area of the conservancy led members from other areas to feel they were not well represented in decision making.

External support currently includes among other things:

- Wildlife monitoring
- Rangeland management and desertification
- Mentoring to sustain the above training
- Continuous training and mentoring on financial management
- Computer skills
- In-service training on office administration
- Most important, the staff indicated that a proper training needs assessment needs to be carried out to ensure that services provided to them are priority.

#### **4.4.4 UNEXPECTED RESULTS**

No unexpected results have been identified in the literature reviewed.

## **4.5 CONCLUSIONS**

### **4.5.1 LESSONS LEARNED**

Evidence suggests that one of the lasting impacts of the support provided by LIFE in conjunction with other FIRM partners is the institutional capacity building to the #Khoadi //hoas Conservancy. Deutsch (2002) in an evaluation of NAPCOD activities in southern Namibia found a higher likelihood of success in combating desertification with consistent support focused through “a community organizational medium.” The experience in #Khoadi //hoas would appear to be similar. Jensen and others (2002: 18) found that “while the conservancy model has by no means been perfect, it has proven to be a viable alternative for wildlife resource management. Through this model, a social and political institution has been built, which may well have the capacity to manage land rights in the future.” Vaughan and Katjiua (2002: 19) found that “communities within KHC recognize the conservancy institution as an important stakeholder in the area for decision making on some development activities, and conservancy leaders (along with other local figures such as agricultural extension officers) are often called on for advice in land and resource disputes.” In relation to #Khoadi //hoas, Deutsch (2002: 139) suggests that the conservancy AGM is “a public event of growing importance, an indicator of local governmental and organizational development.”

Such findings on the institutional importance and relevance of the conservancy for local residents make it particularly important that the internal governance issues noted in subsection 3.4.3 are adequately addressed. If the conservancy is to continue to function as a useful and relevant institution, it needs to increase its legitimacy so that it can be seen to represent the people of the area. Much of the focus of FIRM support has been to the conservancy committee. There is a need to provide much greater focus on the relationship between committee and members and how accountability and transparency can be developed. The WILD project researchers have suggested that conservancy activities need to be more relevant to the livelihood needs of residents in order for conservancies to gain more support (Long and Jones 2004). #Khoadi //hoas conservancy is doing this through its support to livestock and range management activities in conjunction with the local farmers’ union. It is also doing this through support to water points that are damaged by elephants and provision of subsidized diesel for pumping water. The conservancy needs to expand these activities to reach greater numbers of residents. It also needs to consult widely among its members about how best to use the income that should start to flow from its newly developed tourism activities.

The conservancy is currently going through what Deutsch (2002) calls rule by “middle management”—the committee—and suggests that in the initial stages of conservancy formation, such an approach might be necessary, provided the committee is responsible to members and

informs them of decisions. There are, however, key decisions that require greater participation if they are to be accepted by the membership. The setting aside of a large area of potential grazing land for wildlife and tourism is a decision that needs broad agreement, if it is to be successfully implemented. The conservancy benefit distribution plan is another example of an issue that needs broad debate and agreement so that benefits can be defined by the beneficiaries themselves. In essence the conservancy needs to strike a balance between grinding to a halt in a never-ending round of community consultations conducted with one unreliable pickup truck across many square kilometers of semidesert, and losing their legitimacy because the committee makes decisions on behalf of the people without consulting them. Finding the balance is, it is hoped, where #Khoadi //hoas is heading. The conservancy is increasingly using the eight local-level farmer associations that make up the GFU for dissemination of information. This process could be extended to decision making providing internal devolution to lower levels of authority within the conservancy.

Noting the problems regarding transparency and participatory decision making in #Khoadi //hoas, Schiffer (2004) found that local people in 2002 were only starting gradually to exercise their rights. To do this, people need to be aware of their rights and to have incentives to exercise them. Increased benefits to a larger number of individuals could lead to greater participation and interest in conservancy affairs, including the rights of members and the procedures for decision making.

Although donor funding to the conservancy has been reduced and some technical support has gone, as a result, the conservancy—albeit with reduced resources—is continuing with a number of important activities that can contribute to combating desertification; however, the income that it hopes to generate from hunting and tourism in the future can help to fund some of these activities that will also be important for providing greater livelihood security.

So far, the conservancy has proven a successful vehicle for wildlife conservation. A large area of land has already been set aside to be used for wildlife and tourism only, which reduces the risk of overgrazing and of desertification in this area of the conservancy. If the start is made in improving livestock quality and range management can be built on, this can begin to translate into positive livelihood impacts for larger numbers of conservancy members. It can also start to become an important mechanism for preventing land degradation in the areas of the conservancy zoned for farming.

# 5. SUSTAINABLE NATURAL RESOURCE MANAGEMENT AND COMBATING DESERTIFICATION IN THE NYAE NYAE CONSERVANCY

## 5.1 SUMMARY DESCRIPTION

The Nyae Nyae Conservancy was registered in February 1998 and is the first Conservancy to be gazetted in Namibia. The 9,003 km<sup>2</sup> conservancy is located in the Otjozondjupa Region in north-eastern Namibia (see figure 2.), where it borders with Botswana to the east, communal lands to the west and north, and to the south, a veterinary quarantine “Red Line” fence established by the Ministry of Agriculture, Water, and Forestry (MAWF) to prevent movement of potential disease-harboring animals (wildlife and livestock) into Namibia’s recognized livestock export zone. The conservancy supports approximately 2,300 people, mostly Ju/’hoansi San and 752 adults registered as conservancy members.

## 5.2 BACKGROUND

### 5.2.1 ENVIRONMENTAL SETTING

Nyae Nyae is the second largest conservancy in Namibia and encompasses approximately 9,030 km<sup>2</sup> of Kalahari woodlands; when combined with Kaudom Park’s 3,842 km<sup>2</sup>, this joint park/conservancy incorporates almost 13,000 km<sup>2</sup> of wilderness wildlife habitat (Weaver and Skyer 2003). The area receives approximately 400–450 mm of rainfall per year, and it is estimated that more than 4,000 elephants move between the Kaudom Game Reserve, the Nyae Nyae Conservancy, and neighboring communal lands. The area is home to Namibia’s largest population of roan antelopes and also provides habitat to other common game species, such as blue wildebeests, oryx, kudus, red hartebeests, elands, tsessebe, springboks, giraffes, duikers, and steenboks. Predators include a sparse population of lions and cheetahs, but healthy numbers of leopards, spotted hyenas, and wild dogs. In addition to the above, the Nyae Nyae Conservancy also contains a potentially very valuable herd of 160 disease-free buffaloes that are confined to a recently expanded 9,000 ha compound due to veterinary health restrictions. The pans in the area are subject to seasonal flooding and provide wet season habitat for a variety birds, including flamingoes (in good rain years) and a number of regional and palearctic migrants.

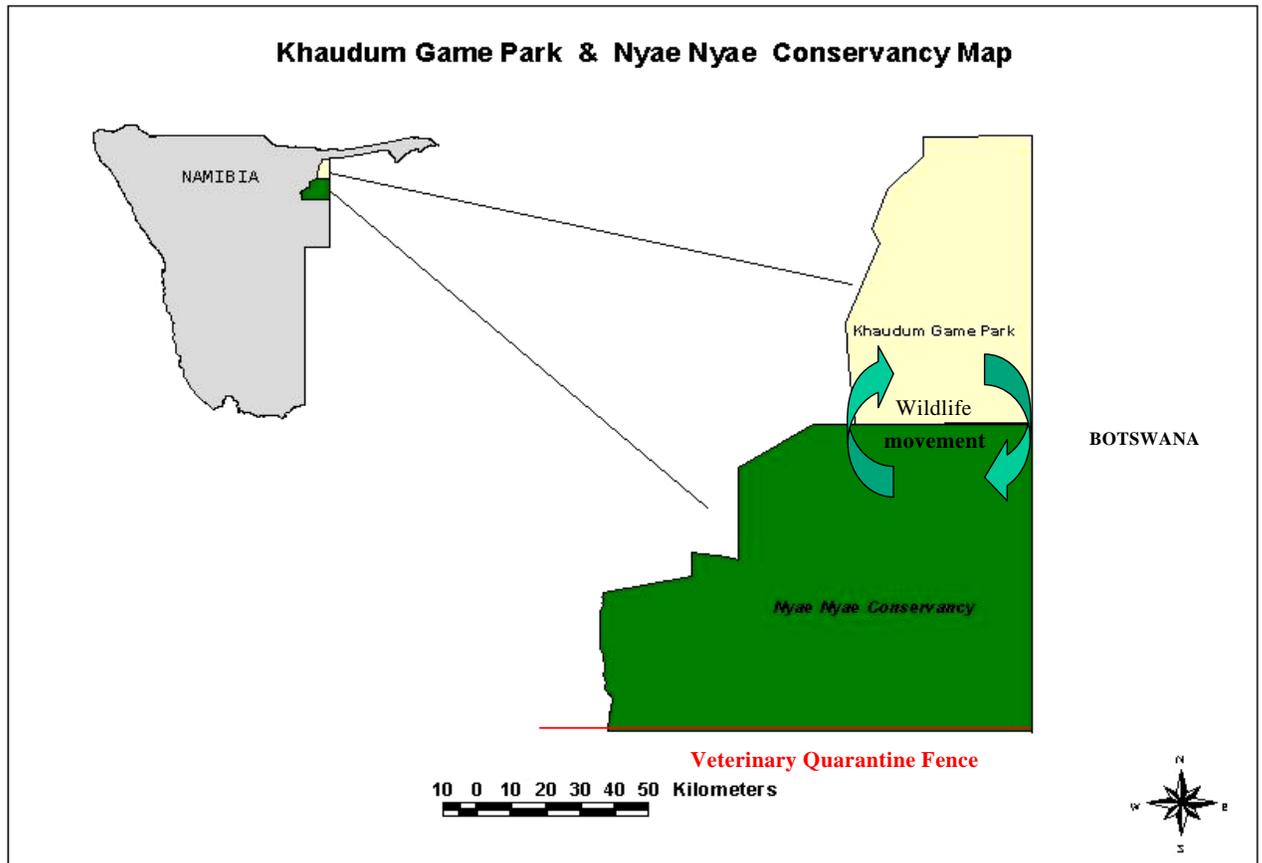
### 5.2.2 LIVELIHOOD ISSUES

The San people of Nyae Nyae Conservancy are among the poorest and most marginalized in Namibia. Only a handful of people have received education above Standard 8, and few adults are literate or numerate. People live in small villages, most of which are remote from the small administrative centre of Tsumkwe. People are trying to make the transition from a hunting and gathering society to the modern cash economy. They still live from some hunting and gathering along with small herds of livestock, small-scale gardening, and pensions. Few jobs are available in this remote area, and few people are in full-time employment.

### 5.2.3 RESOURCES USED OR MANAGED

The area is divided into traditional family hunting and gathering areas, called *n!ores*. Within these areas a family or clan group has rights to gather various veld foods, including roots and tubers, wild melons, and fruits from trees, and also to hunt. Burning is sometimes used to stimulate the growth of certain veld foods and to open up areas to provide a clear view for hunting. Some attention is given to appropriate forms of livestock management. Wildlife is one of the main resources for generating income and meat.

**Figure 2. Map of Nyae Nyae Conservancy and Kaudom Game Reserve**



Source: Weaver And Skyer 2003.

### 5.2.4 INSTITUTIONS RESPONSIBLE FOR MANAGING RESOURCES

As with #Khoadi //hoas Conservancy, the Ministry of Lands, Resettlement, and Rehabilitation (MLRR), has overall control of the land, which is owned by the state. The regional government has no specific powers over land, but coordinates regional development activities that have an impact on land use. The traditional authority is responsible for the allocation of residential and grazing land. The conservancy has defined boundaries officially declared in the government gazette; as with #Khoadi //hoas, this could be viewed as strengthening the land rights of the conservancy members. The conservancy emerged from an earlier organization, the Nyae Nyae Farmers' Cooperative (NNFC) that in its early days provided some basic services to residents, acted as a voice for the community to government and other outsiders, and allocated land according to the *n!ore* system (Jones 1996). A separate Nyae Nyae Farmers' Association was started in 2003 with the support of the MAWF and that represents the livestock owners in the conservancy.

Through its legal status as a conservancy, the community receives trophy hunting rights and the rights to operate tourism on its land from MET, which approves hunting quotas and permits for the use of wildlife. The conservancy has a contract with a professional hunter for a trophy quota received

from the MET. The quota is set mainly based on the results of game counts carried out jointly by the conservancy, the MET, and NGOs. The conservancy is also able to buy and sell game animals. It has an agreement with a tourism operator for development of two tented camps.

A wildlife planning meeting takes place quarterly. This involves the conservancy, the conservancy's NR and Agriculture Advisor, MET and the Department of Rural Water Supply. These are the stakeholders that are involved in water provision for game or villages. They discuss issues, problems, priorities, etc. and then between them allocate actions. This started about three years ago, due to a lack of coordination among the different organizations (L. Diez. February 27<sup>th</sup> 2007, pers. comm.).

### **5.2.5 FUNDING**

The most recent grants from the LIFE Project have been N\$235,000 in 2005 and N\$280,000 in 2006. This funding has been used to support the natural resource management activities of the conservancy, including development of water points, game monitoring, and the salary of a NR and agriculture advisor to the conservancy working for the NNDFN (C. Weaver March 5<sup>th</sup> 2007, pers. comm.). LIFE has also funded the building of a game-proof fenced enclosure to hold disease-free buffalo in the conservancy.

## **5.3 DETAILED DESCRIPTION**

### **5.3.1 GOAL**

The overall goal of LIFE support to the Nyae Nyae Conservancy has been to build the institutional and technical capacity of the conservancy and its members to manage their natural resources sustainably. In particular, LIFE aims to promote wildlife and tourism as land uses compatible with the culture of the local San people.

### **5.3.2 PROBLEM TO BE RESOLVED**

The main NRM problems are controlling the unsustainable use of natural resources by outsiders and residents (including poaching) and developing sustainable livestock management systems, while people also retain hunting and gathering as livelihood activities. Key issues include controlling hunting by people for their own use, in particular ensuring that people do not hunt high-value species that can provide greater overall benefit through the income earned from trophy hunting or live sale. Uncontrolled burning is a problem. Some burning takes place for clear management purposes, but some occurs through carelessness, or because a fire set for a management purpose in one area spreads to another area where burning is not desired. As hunting and gathering is still important for people, a key aim of the conservancy is to maintain sufficient land to which people have access for hunting and gathering and on which to develop livestock farming. This is important as people from other areas are keen to move on to the rangeland in Nyae Nyae, which they view as unutilized land.

### **5.3.3 DESCRIPTION OF ACTIVITIES**

Since 1993 the LIFE Project has assisted the Nyae Nyae Development Foundation of Namibia (NNDFN) to support the Ju/'hoansi San through grants to improve the Nyae Nyae Conservancy's ability to manage and benefit from its natural resources sustainably. The LIFE 1 Grant, covering the period June 1995–Jan 2000, was awarded to the NNFC, which later became the Nyae Nyae Conservancy. The grant supported a process of conservancy preparation up to registration with MET and the first steps of implementation. The LIFE 2 Grant, February 2000–September 2004, focused LIFE's support on natural resource management, particularly on game reintroduction, and redirected institutional development support through the NNDFN. The LIFE 3 Grants have continued to support game reintroduction, as well as provision of water for wildlife, the salary of a natural resource management and agriculture advisor to the conservancy and technical support for wildlife monitoring and tendering trophy hunting quotas. The conservancy has gradually reduced its dependency on funds from LIFE. It is now covering its running expenses, while the NNDFN continues to provide management and capacity- building support.

One of the main aims of the support has been to assist the Ju/'hoansi in rebuilding their wildlife populations from historically low levels in the early to mid-1990s to numbers that can contribute to the Ju/'hoansi's welfare through benefits generated from trophy hunting, tourism, sustainable game meat harvesting, and potentially, game farming of high-value species, such as roan antelope and buffalo (Weaver and Skyer 2003).

## 5.4 RESULTS

### 5.4.1 LIVELIHOOD RESULTS

The conservancy earns income from trophy hunting and some limited tourism activities, such as a bed night levy from a local lodge and craft sales by members. It also receives income from film fees, and devil's claw harvester fees. In 2005 the total income to the conservancy was N\$742,701 and the total income to households from conservancy-related activities was an additional N\$317,241 (LIFE 2006). In 2006 the conservancy earned N\$804,032. The way in which the conservancy spends this income on community benefits is indicated in table 3.

**Table 3. Spending on Community Benefits by the Nyae Nyae Conservancy**

Benefit	2005 (overall income: N\$742 701 or about US\$106,100)	2006 (overall income: N\$804,032 or about US\$114,861)
Water protection team transport	96,080	66,000
Water protection equipment	2,593	8,000
Natural resource monitoring transport	50,901	67,000
Governance meetings	9,453	16,484
Cash dividend distribution		197,100*
Cash dividend distribution costs		11,913
Seed for gardens		4,876
<b>Total</b>	<b>159,027</b>	<b>359,460</b>

\* 657 members received N\$300 each. There was no cash dividend in 2005.

Source: NNDFN.

In addition to the benefits reflected in the table, the conservancy employs 17 full-time staff and six casual workers as game water point protectors. Of the 17 full-time staff members, 12 are community rangers, two are water point maintenance personnel, and three are conservancy office administrators. In 2005 the conservancy spent N\$139,985 on salaries and travel and subsistence for staff. According to LIFE (2006) conservancy-related activities, such as trophy hunting, generate around 32 part-time jobs annually.

Weaver and Skyer (2003) show that in, 2003, the conservancy directly provided 28 percent of the jobs in the area and approximately 35 percent of the cash income of the 2,000 conservancy residents. They suggest that the conservancy's natural resource management and support framework also strongly enhances handicraft and tourism revenues, meaning that as much as N\$1,073,100 (or more than 50 percent) of the cash income received by the conservancy residents in 2003 could be viewed as conservancy related. In addition the conservancy supports the maintenance of village and wildlife water points, pays for local teachers and provides game meat from trophy hunting (worth N\$317,241 in 2005).

The conservancy has used its income to make a number of cash “dividend” payments to members. In 1998 around 550 members received N\$75 each, in 2002 about 770 members received a dividend of N\$620 each, in 2004 the dividend was N\$300, and in 2006 members also received N\$300 each. These cash payments are extremely important in such a cash-starved society. According to Berger (2003), members spent about two-thirds of the cash distributed in 1998 on food, clothing, beads, and tools sold in the villages at the time of the payments. Following subsequent payouts, some members have bought livestock.

Participants in focal group discussions during field research valued the cash dividends, as these have a much bigger impact on the community as a whole than the wages of the 17 full-time employees. The cash from wages and from dividends positively affect household assets (box 3). Those in employment use their income to buy livestock (mainly goats) and other household necessities such as clothes, blankets, food, and toiletries.

### **Box 3. Impacts of Employment in Nyae Nyae Conservancy**

Khallan Botas comes from the village of #Abacea North in the northern part of the conservancy. He is a conservancy member and was appointed to the water protection unit to work on all conservancy village water points and also game water points in the area. He said employment had changed his life, as unemployed San people in the villages did not do much, except to sleep, hunt, etc. He has put up a house in Tsumkwe and also has a house at his village. His children are able to go to preprimary school, and those in the school at Tsumkwe have uniforms, which he buys in contrast to children from unemployed San in villages. He also bought some livestock and can now drive a vehicle. His wife is also making some crafts now. He has the opportunity to attend workshops and to benefit from conservancy support programs, such as seeds for gardening or cattle from the conservancy sold to members. He says he can do lot things with his salary also, because he now often travels to Grootfontein, the nearest big town.

There are, however, problems associated with the cash distribution. The cash has to be collected from a town around 200km way and transported under guard. Some of the cash has gone missing during the process. Although a mobile shop enables people to buy household necessities at the time of receiving the cash, if they want other items they need to get to town to buy them. Often people do not hold on to the cash long enough to save and tend to spend it on alcohol (L. Diez, February 27<sup>th</sup> 2007, pers. comm.). As a result the conservancy and the NNDFN are exploring other means of providing benefits to members.

The conservancy has contributed to the building of five village schools and paid the salaries of seven teachers until these were taken over by the Ministry of Education. The conservancy has developed seven water points for farming purposes and this has contributed tremendously toward livelihood improvement according to focal group participants. Due to lack of permanent surface water, the San could not own livestock or farm efficiently, people moved from one place to another in search of water and the San could also not improve their food security by building small individual gardens. The situation has now changed. Participants said some of the people willing to work hard have gardens producing their own crops (only for household use and not for sale); seeds are provided by both the conservancy and the Ministry of Agriculture, Water, and Forestry (MAWF); those earning some money are buying livestock; and water is readily available for most of the San people living in the conservancy.

Participants also said another important contribution of the conservancy is the provision of support to community gardens. In the past few years, the Conservancy has been providing seeds to the community gardens and to individual conservancy members. By doing so, the conservancy has contributed to continuation of community gardens, thus improving food security at the household level (box 4).

#### **Box 4. The Impact of Gardens on Household Food Security**

G/ago Kagece is a member of Nyae Nyae Conservancy and has been living in Nyae Nyae Conservancy since birth apart from some time spent in the town of Gobabis. He comes from the southern part of the conservancy, N=ama village. G/ago was elected as a treasurer of the village development committee, and recently he was elected at the AGM as a conservancy board member. He said gardens were contributing to household food security, and his family harvests a lot of tomatoes, carrots, and cabbages. They made a lot of cabbage soup throughout the year and were still selling cabbage leaves for N\$1.00 each to make some money. They could also sell some tomatoes and other vegetables. The gardens are very useful, because there is enough water so the wives can go to the garden, take something, and prepare food for the family. He said the Directorate of Forestry started planting guavas, paw paws, and other food trees because they realized that gardens could contribute to livelihoods. There are problems at some villages, such as infighting or lack of ownership regarding the gardens, but on the whole, gardens have been good for the people.

Participants said the conservancy had contributed positively toward poverty alleviation in the region through:

- Employment
- Establishment of water points
- Support given to gardening projects
- Dividend distribution.

Participants said that the provision of water points had made a huge difference to their livelihoods. Due to lack of permanent surface water, livestock farming was difficult in the past and people moved from one place to another in search of water. Now people are able to gain access to clean water, provide water for their livestock, and can improve their food security by building small individual gardens.

Participants were asked how the Namibian CBNRM Program and conservancies could improve their contribution toward poverty reduction. Their suggestions were as follows:

- The conservancy should address food insecurity by increasing its current supporting to gardening projects.
- Livestock farming should become a priority on the conservancy agenda. This can be demonstrated by buying livestock for members and by allowing more cattle per water point, because the current number of cattle allowed per water point is 50 animals.
- Cash or dividend distribution to conservancy members should be reintroduced.
- Compensation for livestock death due to predation should be introduced and formalized.
- The Nyae Nyae Conservancy should diversify its income generation activities to increase job opportunities for its members.
- The conservancy was also requested to support SMEs so that members can start their own businesses and could also further contribute to job creation within the community.
- Due to lack of books and funds, primary education in the conservancy is very poor; hence the conservancy is requested to provide funding so that a shortfall within the primary education sector at the village level is improved.

## 5.4.2 NATURAL RESOURCE RESULTS

Wildlife populations have significantly recovered in the Nyae Nyae Conservancy (see table 4 and figure 3.). Although this recovery has been aided by introduction of about 2,114 animals since 1999 (supported by LIFE and the MET), the latest population estimates confirm that current population growth is also due to the breeding of existing and reintroduced populations (NACSO 2006).

According to participants in focal group discussions, there is now a greater appreciation and participation of the local people in the CBNRM program. Also, there is better understanding of San rights over the resources they are harvesting and managing. According to participants, they (San community) are the police and monitor the use of their resources within the community and especially by outsiders.

**Table 4 Estimated Changes to Game Populations for the Nyae Nyae Conservancy**

Species	1995	1998	2004	Estimated Population Change
Buffalo ( <i>Syncerus caffer</i> )	30	33	90	60
Eland ( <i>Taurotragus oryx</i> )	0	12	97	85
Elephant ( <i>Loxodonta Africana</i> )	302	552	967	665
Oryx ( <i>Oryx gazella</i> )	110	429	1,196	1,086
Giraffe ( <i>Giraffa camelopardalis</i> )	6	47	89	83
Red hartebeest ( <i>Alcephalus busephalus</i> )	31	18	282	251
Kudu ( <i>Tragelaphus strepsiceros</i> )	249	283	1,502	1,253
Ostrich ( <i>Struthio camelus</i> )	190	311	412	222
Roan ( <i>Hippotragus equinus</i> )	123	0	44	-79
Springbok ( <i>Antidorcas marsupialis</i> )	0	0	421	421
Warthog ( <i>Phacochoerus aethiopicus</i> )	0	160	149	-11
Blue Wildebeest ( <i>Connochaetes taurinus</i> )	164	204	1,037	873
Total Estimated Change in Game Numbers				4,909

\* Based on Ministry of Environment and Tourism Aerial Censuses in 1995 (Stander), 1998 (Craig), and 2004 (Stander).

Source: WWF LIFE Project.

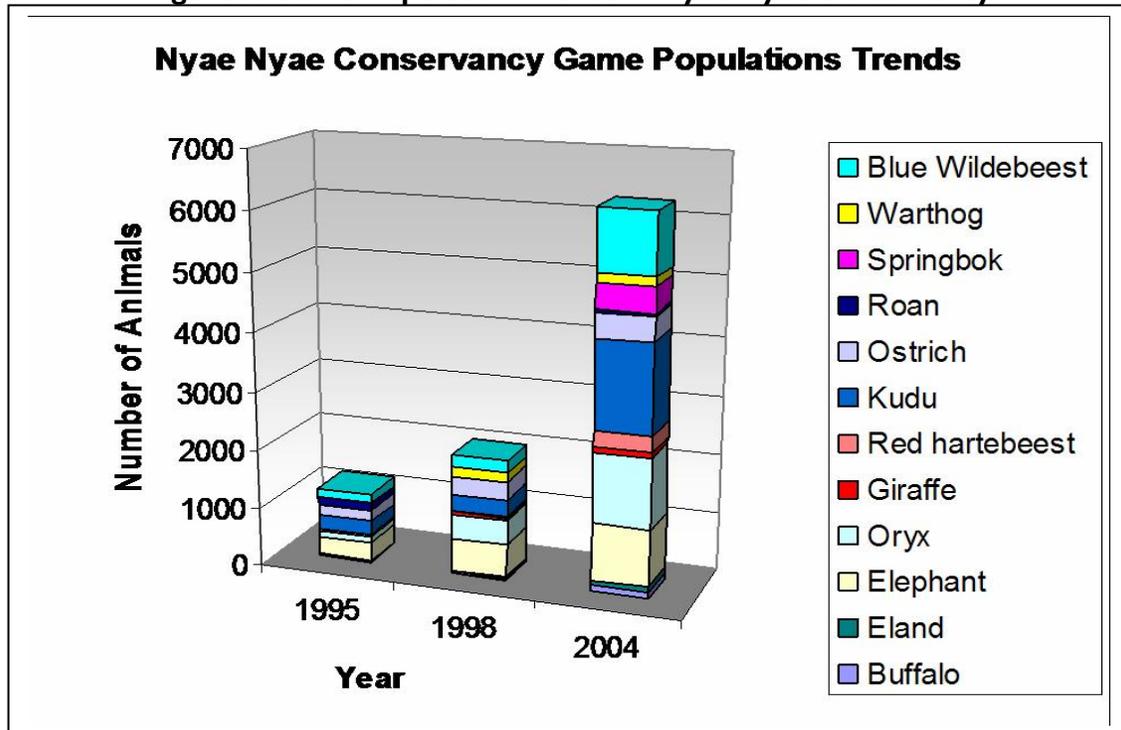
Despite problems from elephants and predators, attitudes toward wildlife are generally positive. Matson (2005) reports the results from an attitude survey in which people in the conservancy said that elephants damaged infrastructure, compete with people for bush foods, and are dangerous; however, “despite widespread fear, people said they wanted to live with elephants, because they represented income and employment through tourism and trophy hunting. Most people said that, given the choice, they would prefer to live with elephants than without them” (Matson 2005).

Conservancy rangers monitor wildlife and offtake from trophy hunting, but there is no control of subsistence hunting of game animals or any offtake monitoring. Subsistence hunting is only allowed in designated hunting areas; however, wildlife experts suggest that the increases in wildlife demonstrated in the tables above do not indicate unsustainable subsistence offtake even making allowances for introductions (Weaver and Skyer 2003). Household hunting is only permitted through the use of traditional methods and hunting with dogs and snares or on horseback is not allowed. The conservancy has decided that people should also refrain from hunting high-value species such as giraffes and roan antelopes. Participants in focal group discussions suggest that due to the

employment of community rangers and raising awareness on conservation and the rights and obligations of conservancy members, poaching has been reduced.

The conservancy has instituted some controls over livestock farming. This is done by limiting the number of cattle per water point (borehole). The maximum number of cattle allowed per water point is 50 animals. The Nyae Nyae Farmers Association is reportedly not happy about the restriction. Participants asked whether CBNRM could be extended to communal rangelands and to other resources had mixed feelings on the issue. Some felt that it could increase competition between livestock and wildlife, whereas others felt it could be done if the target community was interested in the program. Some participants also questioned the main objective of conservancies and whether livestock populated areas were appropriate to achieve such objectives.

**Figure 3. Game Population Trends in Nyae Nyae Conservancy**



Source: WWF LIFE Project.

Nyae Nyae Conservancy is also looking at options that could strengthen their control of veld/plant products, for example, to register their conservancy as a community forest. This is because people still depend on gathering veld food in the dry season and the conservancy wishes to control access by outsiders. All natural resources are accessible to conservancy inhabitants, unless harvesting is for commercial purposes. Any veld product for commercial use is controlled by the government through its line ministries. Members of the conservancy report suspicious activities within the conservancy to rangers, the Conservancy Committee, the police, and MET, especially if such activities are related to grazing, harvesting of devil's claw, and poaching. Some of the participants highlighted the need for line ministries to communicate better with the conservancy and its leadership when it comes to allocating permits for devil's claw harvesting and other permits used to harvest other natural resources.

Participants believe, however, that the overall quality and quantity of veld products has not declined. There is only a seasonal variation in both quality and quantity of veld food. During the wet season, veld food is plentiful and can be easily found and harvested, whereas in the dry season the quality and availability of the veld food decreases. Berries and tubers during the wet season are easily accessible and of good quality, but in the dry season, the berries are dry and the tuber stems are

harder to see in the bushes. Some of the participants also stated that the veld food quantity remained the same due to low livestock numbers in the conservancy. They fear that if the number of livestock increased, the impact on the availability of veld food would be negative.

Fires also affect the availability of veld food. Fires can destroy trees or plants producing food for both wildlife and human consumption. Most trees or plants producing food do not grow into big trees (e.g., berry bushes), and fires can damage them. After big veld fires, veld food become scarce and harder to find.

### **5.4.3 GOVERNANCE RESULTS**

The conservancy has helped empower an extremely marginalized group of people. According to participants in focal group discussions, before the conservancy, other tribal groups such as the Ovaherero and the Kavango people exploited the resources of the San without proper or any consideration of the plight of the local San people. Now that the conservancy is operating and local San have been given rights over the use and management of natural resources, other tribal groups are now respecting the conservancy and their members. According to participants, “the conservancy has become the bargaining agent for the San.”

The constitution guides the overall activities of the conservancy. According to participants, the constitution prescribes how meetings should take place, when meetings should take place, who should be a members, how conflicts should be resolved, etc. In Nyae Nyae Conservancy, the decisions are taken mainly at three levels; at the AGM, at committee (board) meetings and at the office (staff) level. In general according to the participants, decisions are taken in a transparent manner, especially at the AGM. The lowest ranked level based on degree of transparency is at the office level (mainly due to funds misappropriation), followed by committee level (due to not always being able to follow through on planned activities). Most decisions are taken at the AGM and more detailed planning is done at the committee level. Implementation of activities decided on at the AGM is carried out by both the office (staff) and by the committee.

Issues of representation and decision making are complicated by the lack of a hierarchical political structure within the San. Generally within the Ju/'hoan society, the n!ore is the core institutional level for decision making, with no one else mandated to speak on behalf of the n!ore owners. The main political interaction in the past was between n!ore owners who maintained coordinating relationships with other n!ore owners, which involved giving and strategically withholding access to key resources (Biesele 1994 quoted in Jones 1996). Early attempts to assist the San in Nyae Nyae to articulate their interests to outsiders, however, focused on developing a representative institution that could speak on behalf of the local residents. It was realized with time that this system did not work well, because the n!ore owners did not believe that elected representatives could make decisions for them or speak on their behalf. Subsequent restructuring of the decision-making processes tried to combine the need for a representative system that could provide a community “voice” to outsiders and the need for n!ore owners to retain a substantial say over their own affairs.

Management capacity remains a problem in Nyae Nyae, largely because so few adults are literate or numerate, most people have never had any income or cash to budget with, and conservancy staff members have lacked a strong sense of the income belonging to the community (L. Diez. February 27<sup>th</sup> 2007 pers. comm.). This makes accounting for funds, keeping records of decisions and general administration difficult. Much of the administrative capacity and local institutional memory was lost when the former manager was elected as a regional councilor. The three administrative staff members, including the new manager, have been removed from office for mismanagement of funds.

As a result of these problems, the Nyae Nyae Development Foundation of Namibia (NNDNFN) and the Conservancy Board agreed to set up a trust (mainly made up of the NNDNFN Board) to administer the conservancy income. The trust controls the conservancy funds, making annual and monthly disbursements to cover benefit distribution and operational costs. This system has reduced the amount of money unaccounted for from several thousands of Namibian dollars to N\$200 in the past five months (L. Diez. February 27<sup>th</sup> 2007 pers. comm.). The trust charges the conservancy an administrative fee of 0.25 percent on each transaction to cover its own costs. This amount is more than covered by the interest received through investing the conservancy income in an appropriate savings account.

The director of the NNDNFN, Lara Diez, believes it will take some years of education to produce conservancy staff that are numerate and literate. A big cultural adjustment is also required as currently there are no San businessmen who can provide expertise to help run the conservancy or to act as role models.

The conservancy staff and committee members continue to receive training from various organizations including:

- Financial management (semiformal training and mentoring)
- Law enforcement (on-the-job training and mentoring)
- Trophy hunting (on-the-job training and mentoring)
- Wildlife management and monitoring (on-the-job training and mentoring)
- Teacher training by the Ministry of Education (formal training).

Participants in the field research said that conservancy institutional capacity is currently the key challenge. According to some participants, “the conservancy needs just one strong, hard working, and honest manager.” They said the conservancy required ongoing support in the following areas:

- Mentoring support to conservancy manager and committee
- Continuous training and mentoring on financial management
- Fleet management
- Wildlife monitoring
- Water points maintenance
- Planning, monitoring, and evaluation of conservancy performance.

Some participants said the conservancy still needed capacity building on every aspect of its activities. This was not because of poor support by external agencies, but because the conservancy and its members were to blame for poor performance. Although provided with good support in terms of training, planning, business development, and mentoring, the conservancy tended to make wrong decisions against the recommendations provided by the support organizations.

#### **5.4.4 UNEXPECTED RESULTS**

No unexpected results have been identified.

## **5.5 CONCLUSIONS**

### **5.5.1 LESSONS LEARNED**

As in #Khoadi //hoas, the members of Nyae Nyae Conservancy have focused on wildlife and tourism as their main management activities, but have also given attention to the management of

other resources that are important to residents. The conservancy has proven a successful mechanism for sustainable management of wildlife, providing an institutional base for decision making (e.g., not hunting high-value species for meat), wildlife monitoring, and the distribution of income from trophy hunting and tourism. Attitudes toward wildlife remain positive despite stock losses to predators and fear of elephants. The benefits from the conservancy would appear to outweigh the costs of living with wildlife for most conservancy members. The conservancy is benefiting households directly through cash dividends, jobs, meat distribution, and support for developing gardens, including the provision of seed. It is assisting households indirectly through the protection of water points, acting as a voice for the community, and acting as a channel for ongoing support from outside agencies.

Institutional development has been slow, partly because institutional development usually is slow, but also partly because of the particular gaps in capacity within the San society. As a result, external support will be required for longer than in other conservancies in Namibia.

The threat of desertification is not high in the conservancy, partly due to low livestock numbers. The San are keen to maintain a balance between livestock and other land uses, particularly while gathering veld food and hunting are still important to them; however, as incomes increase and people aspire to own more livestock, the conservancy will need to find ways to address this. Already the farmers' association is unhappy at the restrictions on the number of livestock at water points imposed by the conservancy. The establishment of the farmers' association, largely due to the efforts of the MAWF extension officer in Tsumkwe, is another example of how ministries are establishing community organizations that follow narrow sectoral interests. The conservancy emerged ironically, from the former Nyae Nyae Farmers Cooperative, which, supported by NNDFN, assisted the people to obtain livestock. For some years, after its formation, the conservancy focused mainly on wildlife. In more recent years, it has started to give more attention to livestock again, but a parallel organization promoting livestock has now been formed. This situation could create tension in the future, unless the conservancy and farmers' association work closely together and try to establish some common objectives. The introduction of the FIRM approach in Nyae Nyae might be a useful means of promoting greater cooperation and coordination and finding ways for wildlife as a land use to coexist with livestock farming. This could also be a useful mechanism for ensuring that appropriate management of livestock prevents overgrazing and land degradation.

### **5.5.2 OVERALL CONCLUSIONS AND LINKS TO UNCCD**

CBNRM in Namibia was not established with a desertification agenda. It has focused mainly on sustainable management of wildlife and biodiversity conservation, particularly in relation to large mammals and the habitats on which they depend. Increasingly though, conservancies are becoming involved in the management of other natural resources and are breaking down some of the sectoral barriers to implementing a more integrated and holistic approach to land and resource management. Conservancies such as #Khoadi //hoas, other conservancies in the north-west and Nyae Nyae are starting to give more attention to livestock and range management. In much of the communal land of Namibia use of the rangeland remains unregulated and there are few areas where there is a common management regime between individual livestock owners. The Director of Agricultural Extension and Engineering Services in the MAWF, Mr. Stoney Steenkamp, believes that conservancies could provide the means to establish some form of control and management of the use of rangeland. He said that, to establish management, there needed to be a defined area within which someone has the authority to make decisions. Conservancies could meet these requirements. Clearly then, there is some potential for conservancies to address range management issues, but they need to align themselves more closely with livestock farmers and their representatives, and the MAWF needs to work more closely with conservancies on rangeland issues.

The results of research in the #Khoadi //hoas and Nyae Nyae conservancies in Namibia shows that despite its biodiversity focus, CBNRM has clear links to achieving Namibia's and global objectives regarding combating desertification. The key contributions are:

- Supporting the development of community-level institutions that can develop appropriate local management regimes for a variety of resources

- Providing additional and complementary land uses that can generate income to fund community priority activities
- Generating income from resource use, which communities can plow back into land and resource conservation
- Improving food security, which can eventually lead to less reliance on natural resources
- And building capacity to identify and address desertification issues locally.

In both conservancies, communities were using wildlife income to build up other assets, such as livestock. To many conservationists, this might seem a contradiction and a negative trend; however, it needs to be recognized that wildlife is unlikely to replace livestock as a means of livelihood for people in uncertain environments and who tend to spread risk by engaging in diversified livelihood activities. Furthermore, both conservancies were taking steps to ensure that livestock farming is carried out sustainably so that it does not contribute to desertification. Wildlife income was also being used to ensure provision of water for people and livestock as a basic need. Both conservancies have set aside areas for wildlife and tourism only and these remain relatively undegraded.

Both #Khoadi //hoas and Nyae Nyae are among the oldest of Namibia's conservancies, being registered in 1998. It has taken them some years in which to start showing clear benefits from wildlife and tourism to their members and to develop their own management capacity. They have been trying to address livestock and range management issues for only a few years. This is too short a period in which to produce results that indicate effects on land degradation; however, if wildlife and tourism as land uses can provide more direct benefits for more conservancy members, people are likely to give more consideration to the trade-offs with livestock farming, and they will remain willing to maintain large areas of land for wildlife and tourism only. Furthermore, the results reported in both conservancies regarding adoption of improved livestock production and range management techniques could contribute with time to combating desertification if more widely replicated.

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## **WEBSITES**

NAPCOD: [www.namibia-desertification.org](http://www.namibia-desertification.org)

# ANNEX I

## LIST OF INDIVIDUALS CONSULTED

Lara Diez	Director, Nyae Nyae Development Foundation of Namibia
Dominic DuRaen	Manager, Grootberg Lodge, #Khoadi //hoas Conservancy
Bernardus Guibeb	#Khoadi //hoas Conservancy coordinator
Helga /Howoses	#Khoadi //hoas Liaison and Communications Officer
Asser Ndjitezeua	Chairperson, #Khoadi //hoas Conservancy
Stoney Steenkamp	Director: Agricultural Extension and Engineering Services, MAWF
Greg Stuart-Hill	NRM advisor: WWF LIFE Project
Chris Weaver	Chief of Party: WWF LIFE Project