

REHOBOTH
ACACIA TREE FOREST
IN
NAMIBIA

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Cooperating with the Namibian Government &
Non-Government Organizations

Introduction

a) PROJECT OBJECTIVES

- to preserve the Acacia Forest and other indigenous species of plants occurring on the Oanob river plain south east of Rehoboth.
- indigenous plants which have been traditionally exploited for economic purposes will be surveyed and the most promising species identified for use in breeding programs thereby reactivate and/or intensify their utilization
- to establish an environmental school
- to contribute towards developing the area as a tourist attraction
- to assess and encourage the establishment of other small industries such as the production and sale of fuel-efficient stoves, solar ovens etc.

b) EXPLANATIONS

One of the major factors threatening Namibia's ecosystem is the uncontrolled deforestation in the rural areas. The uncontrolled felling of trees, which in most cases have gone without restocking, has left the land bare and open to rain and wind, the two major soil erosion agents.

In order to reduce the momentum of deforestation, desertification and bush encroachment, lifestyles and habits will have to be changed (e.g. the use of fuel-efficient stoves instead of open fires or using alternative fencing materials to wood etc.). The degraded woodlands would also recover more speedily if protected from livestock.

The testing of different methods of bush harvesting and development of harvested biomass to charcoal has taken place and should proceed.

The Namibian Government passed a National Forest Policy aimed at more comprehensive strategies that will give first priority to equal opportunity of both development and conservation.

These objectives in accordance with the Namibian Constitution Art. 95: "..... the maintenance of biological diversity.....and utilization..... on a sustainable basis....", however, can only be achieved in collective efforts by the public, the government, the private sector and NGO's.

Unless our ecosystems are protected, their capacity to sustain plant and animal life will cease.

c) **BALANCING THE SITUATION**

The immediate human needs vs an intact sustainable environment have to be redefined more urgently than ever. Historically, protected areas in Namibia were developed to protect declining populations of large mammals, with little consideration given to protect representative portions of ecosystems.

Furthermore, areas were protected mainly for the recreational needs of mostly foreigners. Rural communities adjacent to protected areas received little or no benefit from the parks. They seldom have access to these recreational facilities. Past park management policy seemed aimed at the exclusion of people. This has resulted in growing problems and conflicts. Park boundaries have become frontiers of conservation and military strategies were employed to police and protect these boundaries.

Nonetheless, the effects of global changes in environmental conditions, due to problems such as the greenhouse effect, destruction of ozone layer, etc. are already conspicuous in arid lands like Namibia: the threat to our natural environment is great.

These cumulative changes in the environment have great social impacts, so that the struggle against environmental degradation is a struggle for survival.

These new challenges make it absolutely necessary to change and improve, i.e. find better and other methods and techniques of conservation in order to preserve our natural biological diversity.

The relationship between park management and park neighbours has to be "normalised" and the role of protected areas redefined. Where possible, it should be an open system which exports resources for the economic and material benefit of neighbouring communities, thereby integrating conservation and development.

People presently considered to be squatters could be engaged as guards or guides to visitors/tourists. They could be encouraged to offer services such as refreshment stands, donkey car rides, walking trails or horse back riding. The possibility of joint ventures and partnerships exists.

Proclamation of land as parks is no guarantee that effective protection will follow or that biodiversity will be maintained in the long term.

Effective protection can be achieved only when the biodiversity of Namibia is popularly perceived as a national asset and when people see worthwhile benefits from parks coming to them and their communities.

The role of private and communal landowners in the protection of special places or species must be given greater recognition. It might not be possible or feasible to proclaim every unique or special place as a protected area, nor to appropriate land for protected areas.

The key to protection in such cases will be the cooperation of landowners, i.e. partnership between state, private and communal agencies and an awareness of their obligation to protect their natural environment.

The natural biodiversity of Namibia represents an irreplaceable portion of the world's biodiversity. It further serves as the major attraction for tourists from all over the world and provides many Namibians with highly valued recreational, research and educational opportunities. It forms significantly the basis of the country's subsistence and market-oriented economy.

STOCK FARMING

The enormous expansion of farming and animal husbandry since the settling of white South Africans in Namibia in 1920 and the concentration of black subsistence farmers in the reserves, upset the ecological balance tremendously.

The pressure on the land is great, since no areas have been set aside for emergency grazing in times of droughts. The unfavourable climatic conditions in Namibia do not allow excessive utilization of the land. The effects of overstocking are overgrazed areas, erosion and bush encroachment.

With approximately 70% of the population directly or indirectly dependent on agriculture, Namibia is an agricultural country. However, the contribution of the agricultural sector to GDP averaged only 10% during the eighties. Because of the importance of agriculture in the social and economic life of society, drought is a serious threat.

Successes are being reported in the conservation of game in Namibia. Legislation was changed in 1986 so as to allow landowners to become owners of the game resources on their farms. Landowners started to control and protect their game. Poaching, which was rampant in the past, decreased significantly. A year later a national tragedy was prevented due to the change in legislation: the overstocked kudu population was threatened by disease.

The privately erected fences prevented the spreading of disease. The kudu populations were further controlled by hunting, which brought economic benefit to the farmers. Game is not only protected by the laws of the country, but by the landowners, too, for aesthetic and commercial value as well as for own consumption.

This resource can be further exploited by recording and possibly applying the knowledge of people like the San.

CROP PRODUCTION

Crop production plays a minor role in Namibia. Communal farmers predominantly grow millet for own consumption; to a lesser extent maize.

The high rate of crop failure during 1992 left many communal farmers without food and income. The economic position of livestock farmers is not only threatened by the imminent death of the livestock, but also by poor prices.

Agriculture's contribution to GDP can double if communal areas develop. An increase in output in communal agriculture will have a far greater impact on the living standards of the majority than an equal increase in the output of any other activity. For the living standard of these people to rise they must be provided with the means for producing a marketable surplus. If these increases could be converted into cash, it would not only benefit those who receive the income, but also the economy as a whole.

The Namibian flora comprises a number of plants which are very well adapted to arid land and with potential use (also outside their natural habitat). These plants can be used in breeding programmes with the aim of producing drought resistant crops.

If the natural crops could be domesticated for local (or export) markets, it could help to retain such species, contribute to development in rural areas as well as making the farmers less dependent on imported monoculture. The Kew International Conference on Economic Plants for Arid Lands (July 1984) recommended that many arid land problems could be solved by using arid land plants.

The Rehoboth Museum has been implementing ethnobotanical projects. One of these aims is that of studying, utilizing, cultivating and ultimately domesticating **Acanthosicyos horridus** (The Nara) endemic to the Namib Desert. Such a pilot project could be followed up by work on a host of indigenous plants with economic potential.

d) METHODS

A team of at least three qualified people (Biologist, Conservationist, Anthropologist) are to design, undertake and coordinate a variety of activities which will focus on implementing the objectives of the project. This steering committee will report to the Rehoboth Museum Board.

The area in which work is going to concentrate will be clearly demarcated on maps and air photographs.

A survey of the flora in the area will be carried out and their location indicated on square plans.

A survey of the fauna of the area, both domestic and wild, incl. their numbers, will be carried out.

Knowledge and contributions of local inhabitants, i.e. individuals and institutions, etc. on conservation, management and utilization of natural resources of the area in the past and present will be collected in form of interviews, seminars, workshops. This knowledge was ignored in the past but is now recognised as vital.

Discussions should deal with issues such as: traditional lifestyles, development and conservation, according to the manifesto of conserving the natural environment and its diversity. It is therefore necessary to conserve and (re) integrate the knowledge and experiences of the past and present in a constantly changing global and local environment.

This paper was presented as part of a talk illustrated with colour slides at the SADCAMM meeting held in Maseru/Lesotho in November 1995 by Dr. B. Sandelowsky, curator of the Rehoboth Museum and Chairperson of the Museums Association of Namibia. The co-author of the paper, Mr Ronnie Bock is a biologist working at the Veterinary Laboratory of the Ministry of Agriculture. The theme of the conference was Museums and the Environment.

SUMMARY:

Organization: Rehoboth Museum (under the auspices of TUCSIN)

Private Bag 1017 Rehoboth

Project Title: Social Survey in Acacia Forest Rehoboth
part of Acacia ECO Park Project

Dates: from 18/11/1996 - 15/12/1996

Project Location: Rehoboth and vicinity

Project goal and objectives: Assessment of the social and demographic indicators in the forest

Total estimated cost : N\$19,000.00

DESCRIPTION

1 Project Rationale

1.1 Problem Statement

The Acacia Forest in Rehoboth is the oldest and largest of its kind in southern Africa. The trees are up to 2000 years old. As in the whole of Namibia deforestation is increasing dramatically in Rehoboth and so the forest and its biodiversity is threatened with extinction, due to the use of the wood as firewood and by overgrazing. The overall goals of "Acacia Eco Park Project" are :

assist in realizing the ideal of sustainable development in Rehoboth

to preserve the Acacia Forest and other indigenous species of plants occurring on the river plain of the Oanob river south east of Rehoboth

indigenous plants which have been traditionally exploited for economic purposes will be surveyed and the most promising species identified for use in breeding programs thereby to reactivate and/or intensify their utilization

to establish an environmental school

to contribute towards the development of the area as a tourist attraction

to assess and encourage the establishment of small industries such as the production and sale of fuel- efficient stoves, solar ovens etc.

To achieve this goal a social survey of the area concerned must be done. There still are many families living in and partly off the forest. To environmentally educate the people and to stimulate environmental awareness one must know who they are and what they think about the forest and the environment in general. To insure the survival of the Acacia forest for generations to come these people must learn to recognize that the forest must be utilized in a sustainable manner.

1.2 Achievements to date

Protection of the Acacia Forest required as first step an awareness raising campaign. This was done by setting up displays, collecting literature and exhibiting it in the Rehoboth Museum.

Events like World Environmental Day and Arbor Day have been celebrated for many years, at such occasion school children were involved to plant trees, to make up plays, participate in processions and to put up performances. The media were informed and museum staff published articles about the forest in the press and in relevant publications. In 1995 a paper was given at the SADCAMM „Conference on Museums and the Environment“ in Lesotho (appendix).

An archaeological site in the forest has been reconstructed and serves as an important venue for educational excursions. Staff, visitors and volunteers have familiarized themselves with the forest and an area of ± 6500 ha can be identified as comprising valuable botanical, zoological, geological and cultural places of interest. Ms. Marilyn Truscott a representative of UNESCO declared the area as high priority one for proclamation as a heritage area.

The forest features as a tourist attraction to visitors of the museum. Thus scientists, scholars and members of the public from all over the world have been conscientized about the Acacia Forest.

The following decision making groups have committed themselves to support the project:

The Directorate of Forestry

Ministry of Environment and Tourism

Ministry of Agriculture

GTZ (Gesellschaft Für Technische Zusammenarbeit)

Desert Research Foundation of Namibia

Acacia Resorts

Municipality of Rehoboth - regular/weekly meetings with the Town Clerk in order to develop plans for making the area available for sustainable utilization.

2 Project Framework

2.1 Justification

The money requested will be used to conduct the social survey which is crucial for the further realization of the whole project. The people living in the forest must be provided with alternatives for their own future by participating in the project or with possible solutions for their well being if they leave the area. Discussions with the Town Council and responsible persons from the „BUILD TOGETHER PROGRAM“ showed that there is a mutual understanding of the situation and solutions are possible.

2.2 Goal

The goal of the project is to address one aspect of the larger and many faceted Acacia Eco Park Project.

They will identify and describe all the people whose lives depend on or are influenced by the Acacia Forest, i.e. numbers of people, their background historically, culturally, economically. Their gender and age distribution needs to be established and their degree of awareness and potential for involvement in the project has to be assessed.

2.3 Statement of objectives

The proposed survey is an important objective towards achieving the sustainable development of the Acacia Forest. The survey will provide statistical information on those people, their skills and potential, their needs and their resources.

While this systematic survey will focus on that clearly identifiable group of people physically living in and off the forest, it will show up how the forest fits into the much larger matrix of the society. The information becoming available will link up with the interest of the other people and groups of people connected to the future of the Acacia Eco Park Project. Indirectly a few thousand people will eventually be affected.

2.4 Project Activities

The grant is to finance the survey. A questionnaire is to be finalized (see attached draft). Contacts with the target groups have to be followed up and the questionnaires will have to be filled out. Presumably interviews will be of different kinds. Where possible questionnaires will be administered. Alternatively interviews will be tape-recorded or handwritten notes will facilitate filling in the questionnaires. The information gathered will be collated and analyzed with the help of a consultant (Social Scientist). An analysis will be presented.

The most important material or resource to be developed will be the demographic information on and an understanding of the survey's target group.

The questionnaire which will be designed and used might guide similar work in the future. The analysis and interpretation of the data will be of critical importance in planning further project related activities. It will guide the pre-feasibility study of a long term project. The day to day work will rely on the infrastructural resources of the Rehoboth Museum and on private or hired facilities such as a vehicle and equipment e.g. computer, taperecorder, camera. Apart

from the target group to be surveyed members of the community will cooperate in obtaining sound data.

2.5 Target group

The main target group consists of approximately 20 households whose homesteads are situated in the area of \pm 6500 Ha of forest in question.

There will not be any immediate material benefit to this group in the short term. In the medium to long term it is hoped that this group of people will be able to participate in the proposed project activities aimed at preserving and the sustainable utilization of the area in which they are living. They should be able to generate an income which they presently do not have. They will also be exposed to opportunities and possibilities of training which are presently unavailable. The people living next to the forest will eventually also share in the benefits of the Acacia Eco Park Project. This could finally affect several thousands of people. The neighbors of the park can be grouped as follows:

Block E a township where the lowest income group in town lives borders on the park. A dairy farm and a abattoir have also been established next to the park. Private farms as well share the border with the park. For the future possibilities like conservancies will be investigated and that will extend the benefits in all directions around the park.

Budget explanation

Project Leader - Salary N\$ 6000.00

The Project Leader Mr.Ralf Boll ,has already done a great deal of work at his own expense. He carries the responsibility for and will be implementing the entire survey. Not only this phase of the project, but the future of the Acacia Eco Park Project to a very large extent, depends on him.

Consultant - Fee N\$ 2500.00

The services of an experienced and well qualified consultant will have to be obtained for a minimum of 2-3 days. The consultant will advise on the final design of the questionnaire and will observe the method and consistency of it being administered. More importantly the consultant will assist in the analysis and interpretation of the data.

Casual assistance - N\$ 1500.00

It is anticipated that qualified persons from the community, e.g. Wilma Möller (Conservationist), Cliff Olivier (Educationist) and Ronnie Böck (Biologist) will assist in the administration of this survey with an eye on the future of the Project. It would be advisable to involve them quite seriously at this point already. Minimum expenses that would have to be covered for such persons would be travel expenses and subsistence at a rate of at least N\$ 250.00 per day.

Transport

Since the Museum has no own transport cars would have to be hired. At a theoretical rate of two in-depth interviews per day ten field trips have to be catered for. It is anticipated that 8 of them would require 4x4 vehicles which are rented at a daily rate of N\$ 400.00.

Other field trips would be undertaken by ordinary truck which is more economical at N\$ 200.00 per day.

Mr. Boll will, however move around in town and visit Windhoek once or twice a week. For that trips his own car could be rented for N\$ 2.25 per kilometer.

Equipment

Equipment would have to be hired at going rates.

2.6 Budget summary

Budget	
Project Leader	6000.00
Consultant	2500.00
Casual assistance	1500.00
Transport	8 days 4x4 = 3200.00
	5 days Bakkie = 1000.00
	10 days Sedan = 1000.00
Equipment/hire	Camera 250.00
	Taperecorder 250.00
	Computer 500.00
Office expenses	Photocopies 750.00
	Fax 250.00
	Telephone 300.00
	Stationary 250.00
	Photographical work 750.00
Contingencies	500.00
Total	N\$ 19000.00

2.7 Work Plan

18/11/1996-30/11/1996 Field trips for gathering information

30/11/1996-07/12/1996 Analysis of data

07/12/1996-18/12/1996 Writing of report

We hope this application finds your approval all people involved believe that the project will add to the quality of live for the inhabitants of Rehoboth on all social levels in the long run.

Draft questionnaire:

Name:

Reference number:

When arrived in the area:

Number of people in the house:

Age distribution:

Education:

People able to work in the family:

Live stock: small: large donkeys: horses:

House erected with bricks or sink:

Aware of alternatives to open fire:

Waste disposal:

Income: Sources and amount:

Probing questions for eliciting environmental beliefs