

Summary of Hoanib Catchment Study

Overview

The Ministry of Agriculture, Water and Rural Development has instigated an Environmental Issues Investigation Project on the Hoanib River catchment. The study will undertake basic socio-economic, anthropological, biophysical and policy research on environmental issues important for sustainable use of natural resources and development in the Hoanib catchment. The investigation will examine present methods of land use and associated living conditions and will highlight potential alternatives to existing demands and expectations. Potential conflicts in the area revolve around the dynamics of different discourses and include: escalating, uncontrolled tourism; increasing aspirations and expectations of local residents often based upon popular misinformation; interactions between and among NGO's, Government Ministries, and local people of different language groups; limited water availability and a relatively fragile landscape.

This project will involve collaborative efforts between relevant Government Ministries and Departments as well as local Non Government Organisations (NGO's). The Desert Research Foundation of Namibia (DRFN) will provide the principal scientist, other research scientists and the assistance of its publications unit to produce information pamphlets and brochures. The project will also involve participation of local and international scientists and students in the data collection and collation of information. A consultant sociologist and anthropologist has been appointed and will work closely with the environmental researchers and the communities. The communities of the Hoanib river catchment are an integral part of the project and will be involved in data collection and dissemination of the results. Sida, who will be kept fully informed of the progress, has funded this project.

The Ephemeral Rivers Project (ERP) that was completed in 1995 highlighted the value of focused environmental research and information synthesis for decision-makers in Namibia. The Hoanib River Catchment Study is an outgrowth of that project, the interest it engendered and the need, also identified by local residents, for a catchment level perspective on development in the area.

This project has been accepted as one of the SADC exhibits (Namibian Country Project) by the Expo 2000 committee for the Hanover conference. The SADC theme for the joint exposition will be the sustainable water use and development. The general theme for Expo 2000 is "Humankind, Nature Technology" of which the Ephemeral Rivers Project and the Hoanib River Catchment Study provide good examples. In addition, results of the research, synthesised together with other appropriate information, will be incorporated into information and awareness documents for decision makers, environmental educators, communities, tourists and the general public as well as into the peer-reviewed scientific literature.

Introduction

Namibia is the driest country in southern Africa. Nevertheless, the knowledge base concerning the functioning of this arid environment is limited. While a number of small, focused studies are being and have been undertaken, however a holistic overview integrating economic, political, social and ecological aspects is lacking. Information concerning many of

these aspects is available, but scattered in filing cabinets, amongst rural inhabitants and other disparate locations.

Decision-makers on all levels are not always fully aware of the economic or other developmental consequences of decisions taken that impinge upon the environment. Frequently, the environmental constraints and/or consequences of planned development are not recognised, nor the linkages identified. There is a great need for easily accessible, integrated information concerning the environmental framework for policy determination, planning and decision making in Namibia.

The Hoanib River catchment is one of twelve major catchments that occupy semi-arid northwestern Namibia. All twelve rivers flow into the Atlantic Ocean or end in the Namib Sand Sea. Many originate in commercial farmlands, flow through communal farming areas and, near their mouths, traversing a protected conservation area. The Hoanib catchment in particular occupies an area of 17 200 km², 3% of which lies in private farms land, 91% in communal farm lands, 6% is protected in Etosha National Park and Skeleton Coast Park.

The Hoanib River constitutes the boundary between former Damaraland and former Kaokoland that since Independence in 1990 have been incorporated into the Kunene Region. The catchment area of the Hoanib can be divided into three broad geographic sections. The eastern section (east of the Khowarib Schlucht) is relatively densely vegetated with mopane woodland dominant. The middle section of the Hoanib (from the Khowarib to Skeleton Coast Park eastern boundary) is sparsely vegetated. In the western section of the river (from the Park boundary to the coast) virtually no vegetation exists outside of the river course.

There appears to be very little understanding at the community level of a catchment and how it functions. This project will seek to work in collaboration with communities not only disseminating scientifically gathered information, but identifying and addressing community perceived problems with their natural resources. It is hoped to incorporate the ecosystem approach to resource management in any future development projects in the catchment.

Aims and objectives of the Study

In an arid and semi-arid area like the Hoanib, water is the single most important natural resource. While its occurrence may not be a limiting factor, other essential natural resources like grazing and browse are limited by the amounts, spatial distribution and timing of the rains. These resources are required for survival by communities, their domestic stock and wildlife. The role of water in the Hoanib Catchment will be a major focus of the study, where it comes from, how the catchment works and who is using it. With this in mind the aims and objectives of the study are to:

- (a) Examine the interactions between people and the environment; the limiting factors for development with respect to natural resources of existing and proposed land uses.
- (b) Examine the effect that water use and extraction in all areas of the catchment are having on the environment and the possible sustainability of present and future landuse and water development projects

Resettlement and Rehabilitation, Integrated Rural Development and Nature Conservation (IRDNC), Save the Rhino Trust (SRT) and the conservancy committees in the catchment area. In addition the data gathered will be made available to any interested party.

Project design

The project will be carried out over a 3-year period.

- The researchers will become involved in tertiary education and research training in Namibia related to his/her research area.
- Project design will incorporate involvement with government (e.g. agricultural extension personnel and projects), regional and local officials, NGO personnel, donor activities, etc. Wherever possible collaborative links will be forged with other research and development initiatives in the area.
- Project design must include gathering of additional essential information and synthesis of this, together with research results, into awareness materials for decision-makers, environmental education, tourists and the general public.
- Community researchers will assist in specific areas of research and will be given appropriate training in basic methodology (e.g. environmental monitoring and socio-economic surveys), thereby developing a skills base which will be useful in future projects within the catchment.
- Project outputs will include: awareness materials as appropriate (e.g. poster, radio tape, video, and environmental education materials), as well as publications in the international scientific literature. The researchers will facilitate the production of some of this material at a local level.

The project has been divided into three phases:

Phase 1:

- production of a report detailing project methodology, context, aims and objectives
- production of a brochure for people living in the catchment describing
 - (a) the catchment concept
 - (b) the project aims and objectives
 - (c) general information on flora and fauna
 - (d) production of an overview of on-going and planned economic developments in the catchment;
 - (e) participation in DRFN's annual summer student project in December 1998
 - (f) interim report based on the data gained from the first 12 months of the study.
 - (g) Research planned for Phases 2 and 3 will be revised on the initial results gained during this study.

Phase 1 is now complete

Phases 2 and 3

The following will be based on the research and other activities that emerged from Phase 1:

Outputs to include:

- interim and final reports for policy makers and donors;

- a booklet or series of booklets in English, Damara and Herero produced by and for local decision-makers and resource users;
- an interim workshop for exchange of information and ideas;
- feedback sessions in settlements within the catchment using local facilitators with visual material such as slide shows, pamphlets and posters.
- presentations of final research results in relevant government, NGO and public forums.

Ongoing outputs throughout the course of the Project - fact sheets summarising relevant issues for policy-makers and institutions

- articles for relevant newsletters (e.g. Agriviews)
- papers for scientific periodicals
- participation in Namibian and foreign student projects

Financial support

The study has been fully supported by Sida. The total cost of this project is estimated to be \$N 2 793 412. Initially, the study received a grant from Sida for \$N 578 419 for a Phases 1. Funding has now been extended to cover phases 2 and 3 of the study.