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*Ministry of Environment and Tourism  
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## **SUSTAINABLE FORESTRY SECTOR DEVELOPMENT IN NAMIBIA: An Overview of Ongoing Programmes and Emerging Opportunities.**

### 1. INTRODUCTION

Forests are the richest of the terrestrial ecosystems of living organisms in the world. The forests produce a huge volume of biomass (stemwood, branches, leaves, ground vegetation) and other produce, which changes continuously. These changes can be regulated by man, and in fact, human beings have had and will have a major impact on the forest cover and its composition.

Therefore we must remember to put the human beings and environment to the dimensions of forest development, as it is stated in the first principle of the well-known Rio Declaration on Environment and Development (*Earth Summit 1992, Agenda 21: "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature"*).

This paper attempts to give a general overview of the main current development projects and some emerging opportunities of the Namibian forestry sector. The principal question is: "Are we accomplishing sustainable forestry development"?

But before I start I feel it may be important to make a few simple practical points:

- \* Firstly, speaking on behalf of both the Directorate of Forestry and the international donor organisations, especially FINNIDA, let me emphasise that we are here to exchange our views with you and those who have different experiences. We need consultative processes and participatory inter-sectoral co-operation as we are formulating new and better forestry sector development programmes.
- \* Secondly, to be realistic, this paper will not have the ambitions to cover all development objectives and details of various forestry projects on a few pages.

Some of the ongoing projects will be presented separately, some are in an early project identification stage, and some may unfortunately otherwise be just unmentioned. The priority will be given to national and regional projects as the numerous grass-root level projects would require more time for an appropriate presentation.

- \* Thirdly, I will not discuss the potential for forest industry development in Namibia (as mentioned in the tentative meeting programme). However, when we consider a holistic view on people, environment and forest resources, there are truly certain potentials and emerging opportunities of multiple-use and forest-based industrial activities in Namibia. Some related activities are presented in papers from other Directorates. These dimensions and numerous linkages with other sectors of the economy, particularly the land-based activities, may be discussed during workshop sessions.

## 2. SUSTAINABILITY IN FORESTRY

In order to define the three first words of this topic, i.e.: "Sustainable Forest Development", I will quote the objective of the guiding Statement of Forest Principles from Rio Earth Summit 1992:

*"Forestry issues should be examined in a holistic and balanced manner within the overall context of environment and development, taking into consideration the multiple functions and uses of forests, including traditional uses, and the likely economic and social stress when these uses are constrained or restricted, as well as the potential for development that sustainable forest management can offer".*

This shows clearly, that sustainability in forestry is linked to the entire range of general development issues and opportunities on other sectors. On the other hand, sustainable forest development has present and future dimensions and aspects, i.e. the production capacity of the forest today and the ability to meet future needs of the people. In the quest for immediate socio-economic growth it is important to guard for long-term perspectives ensuring the diversity of forest produce and services, but also considering ecological, cultural and spiritual effects.

The basis for sustainability in forest development is proper land stewardship and management. Integrated approaches are needed for changing the existing trends of land degradation, desertification, and misuse of forest produce towards a future sustainable development. The best knowledge available should be used to ensure that forest growth and forest utilisation are balanced over time. The required actions are many and complex. Finally it all comes down to people, NGOs, institutions, and enterprises and the sufficient interactions between all of them.

Still today the wooded areas of especially the former Owamboland and of other parts of northern Namibia are decreasing. The seriousness and the speed of such degradation

and deforestation is however not fully known, neither are the effects on the environment, social structure and economy known. At the same time the population has grown rapidly. The result has been that poor people continue to exploit soils, forests and wildlife for survival. This causes poverty and food insecurity.

International development co-operation is effective only when it is derived from the recipient's own needs, strategies and priorities. The consultative process in which all the interest groups take part should be co-ordinated by the recipient country itself. When the support to a development project is withdrawn, the people and the community should be motivated and self-reliant to continue with the activities.

### 3. NAMIBIAN FORESTRY AND CHALLENGES FOR SUSTAINABLE DEVELOPMENT

#### Forest resources

In Namibia, we can distinguish 15 vegetation types, of which two are classified as woodlands, eight as savannahs and five as deserts. The woodlands and savannahs are crucial for sustaining the environmental conditions and resources for rural people's living and development. The wooded areas are not heavily stocked, but they are rich in tree species and savannah bushes. The area of woodlands is about 20 %, of wooded savannahs about 64 %, and of deserts about 16 % respectively of the total land area.

The basic resource data and information about the woody land areas and the biomass is to a very large extent missing in Namibia. As the total biomass volume and the annual increment has not been assessed, the allowable annual depletion can not be estimated. The acquisition of timely, reliable and accurate data on forests and forest ecosystem is inevitable for proper decision-making, public understanding, and sustainable management of resources.

#### Land use and forest management

Traditional land use and multipurpose-based indigenous resource management and utilisation of communal areas are under severe stress. Land and tree tenure questions should be defined specifically with views to the establishment of forest reserves, people's rights to communal lands, private farms on communal lands, and private commercial farmlands.

The future potentials and development of villages, communities and the entire society, as well as the sustainability of forest management, nature conservation, environmental protection, wildlife, and biodiversity are all to a great extent dependant on land tenure conditions.

There is an urgent need to prepare regional development strategies and appropriate forest management guidelines and standards for different categories of woodlands and vegetation types in Namibia. In the analysis of these issues and problems, and in the solving of conflicts, specific attention should be given to people's right to utilisation

and management of resources, and interactions and interdependencies between various sectors and economic activities.

### Forest products and utilisation

Traditionally forests and woodland provided land for shifting cultivation and free access to grazing areas. Trees and shrubs are important sources of fodder, fuel wood, building materials, fencing poles, shelter as well as raw material for carving and industrial small scale enterprises. Forests can also provide a multitude of other products and services, such as medicinal supplies, fruits, honey, berries, and other food material.

In addition to wood and non-wood forest produce, the woody vegetation contributes to the protection of dryland watersheds, ensuring groundwater formation and stabilising the soil from wind and water erosion. They also provide the habitat for a variety of plants and animals.

### Environmental conservation and protection

The environmental functions of forests include the prevention of soil erosion, regulation of water balance and flooding, modification of local climate, landscape diversity, and provision of recreational services. Forests offer a habitat for numerous plant and animal species, and their diversity is an essential factor in maintaining the ecological balance. The cultural values of forests should neither be neglected.

Complicated land tenure issues, uncontrolled tree cutting, bush encroachment and burning of forest land are leading to increasing land degradation and fears of desertification. Reduction of biological activities, degradation and pollution of the physical environment causes increasing hazards for human settlement and life. It is of utmost importance to take a truly inter-sectoral approach in supporting rural development and capacity building.

### Population and Rural Development

In Namibia still more than 60 % of the population live in rural areas. The population pressure and the limited availability of forest resources in northern parts of the country are seriously threatening the environment, including the wooded areas. To obtain basic needs for survival people have used forest resources. Large areas of forests have also been cleared or burned for agricultural purposes and encroached for grazing purposes.

There are a variety of integrated agriculture, forestry, environment and tourism initiatives and production systems, which could be tested and may show appropriate in the prevailing conditions. Collaboration between local actors and players, public awareness raising, and extension services are needed for documentation of indigenous skills and experiences, and for changing of attitudes towards sustainable participatory development.

Many of the problems related to population and rural development are socially related such as lack of skilled manpower, poverty, unemployment, traditional land use systems, habits, cultural beliefs and minimal local co-operation.

#### Institutional and organisational framework

The organisational framework is improving, but at the same time it must be noted, that the availability of skilled Namibian forestry professional staff is still very limited. The development of the operational capacities of the regional and local offices are therefore slow. The Directorate of Forestry is facing institutional and organisational challenges, which must be addressed to ensure the implementation of successful forestry development programmes.

It is obvious that very important prerequisites are development of the policy and legislative framework, employment of qualified personnel, and improvement of physical and material resources available. The training of Namibian foresters should be intensified based on a long-term human resources development plan. Capacity-building programmes for regional and local resource management should be initiated and implemented.

#### 4. FORESTRY DEVELOPMENT OBJECTIVES AND STRATEGIES

The relationship between forestry and socio-economic development is evident and dynamic with main characteristics related to the change from traditional rural societies through pre- and post-industrialised societies to further ecologically oriented modern communication societies.

The recognised nature of forestry to be an important "development agent" of rural socio-economic growth with multi-sectoral influences across the society set the basic premises and overall development targets. Forestry development programmes must simultaneously with forestry improvement and production targets be focused on research, environment, employment situation, public involvement, training and public awareness raising activities.

In Namibia, the overall principle to management and utilisation of natural resources and ecosystems have been stated in the Constitution. In this respect development activities shall aim at

*" maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefits of all Namibians both present and future".*

In order to address the various development challenges, the government of Namibia co-operate with international donors to ensuring the long-term development of human and physical resources needed to formulate policies, strategies and appropriate forestry activities.

The outlines of organised forestry in Namibia was initially drawn up in April 1990 during a FINNIDA mission to Namibia. Subsequently, a joint forestry project identification mission was carried out by the governments of Finland and Namibia during October-November 1990.

The Directorate of Forestry was officially established on 1st of November 1990. Initially, the provision of appropriate technical assistance for key posts to plan, strengthen, and manage the Namibian forestry sector has been essential.

In 1991 FINNIDA prepared a comprehensive Forestry Development Programme for Namibia intended to form the necessary core projects for forestry sector development. However, due to several reasons as very ambitious targets, lack of Namibian forestry staff, deepening economic difficulties in Finland and world-wide, the continued preparation of the identified 8 key development issues, 24 project ideas, and the implementation of the prepared 6 main project documents as such became unrealistic.

Based on the overall forestry development target, a draft forestry sector policy framework (1992) has been prepared by the Directorate of Forestry with major objectives as follows:

- *Environmental stability and restoration of forests and the ecological balance*
- *Conservation of natural heritage and preservation of forests*
- *Development of integrated and efficient land use planning and land tenure systems*
- *Increasing wooded areas and improving the quantity and quality of wood in the forests*
- *Introduction of proper forest management, sustainable forest utilisation and efficient forest protection*
- *Development of professional skills and knowledge*
- *Provision of guidelines and control measures of forest resources development*
- *Address cross-sectoral needs and forestry-related activities*
- *Encouraging community involvement and participation of people in forestry activities*

## 5. ONGOING FORESTRY DEVELOPMENT PROGRAMMES

In the following I will give a brief overview of forestry sector development support projects, which are jointly being implemented between the Republic of Namibia and various supporting countries of the international community.

### Institutional Strengthening of the Namibian Forestry Sector, Phase I 1991-93, Phase II 1994-96 (FINNIDA)

As one of the very first development co-operation projects, the project "Institutional Strengthening of the Namibian forestry sector" started officially on February 1st 1991 with support from the government of Finland. The second phase of this project

commenced 1st of January 1994, and it will be ongoing until the end of 1996. A continuation is expected.

The immediate objectives are to assist Namibia in establishing the forestry organisation, to improve the capacity of strategic planning and to give technical assistance and logistical support in the improvement of activities of the Directorate of Forestry.

#### Assistance to Forestry Legislation (FAO)

The Food and Agricultural Organisation is providing assistance to the review and drafting of forest legislation for Namibia to reflect today's needs and realities. This project has recently started and is assumed to last for about one year.

#### Improvement and Strengthening of Forestry Colleges in the SADC Region, Namibia National Project AAA.5.9, Phase I 1989-92, Phase II 1993-96 (FINNIDA)

The government of Finland provides development support for this programme, which is implemented through Finnish Training Partners (FTP) International Ltd. The main emphasis are on developing physical and human resources at the Ogongo Agricultural College, as well as further training and education of Namibian forestry professionals. The continuation of this project is committed to the end of the year 1999.

#### Forestry Research and Development Project 1994 -1997 (ODA)

The government of the United Kingdom provides technical assistance and other financial support for increasing the capability of the Namibian forestry sector to carry out research on trees and forests which is appropriate to the population living in the communal areas. One principal target is to establish and develop a National Forestry Research Centre in Okahandja.

Development support is also channelled towards identifying roles for using beekeeping to improve the livelihood of rural people in both communal and commercial areas of Namibia and to initiate extension services.

#### Other research development projects (CIDA, AIDAB, the Netherlands, etc.)

In the context of research activities the government of Canada is providing technical assistance, equipment, training and additional research funds for the development of the National Tree Seed Centre during a six-year period (1992-1998).

The government of Australia is providing support to the establishment of Tree Species Field Trials of both Australian and indigenous origins. This project may develop into covering development of nursery technology and providing opportunities for professional training of Namibian staff.

The government of the Netherlands, and partly IBIS-Denmark and FINNIDA provided

support to a recent comprehensive base line survey of traditional land use and indigenous agro-silvipastoral management systems in the former Owamboland.

Forest Cover Reconnaissance Mapping Project, Phase I 1993-1994, Phase II 1995-1996 (BITS/Sweden)

BITS of Sweden is providing development support to this project. The overall project objectives are to provide vegetation maps and baseline data for future woody biomass resource assessment, to establish the database for creation of GIS-capabilities, and to increase the skill of Namibian personnel in natural resource and environmental assessment and mapping. The first phase of the project is completed and the second phase is about to start up.

Upgrading of Satellite Image and Land Data Computer Facilities, 1993-1995 (IBIS/Denmark)

IBIS of Denmark is providing development support to the national centre for remote sensing at the Directorate of Forestry. The overall objective is to develop and maintain an inter-ministerial centre of expertise for the compilation, analysis, and dissemination of information on land resources using remote sensing and geographical information technology, and to provide related training to Namibian personnel.

Forestry Support for Okavango 1994-1996 (Lux-development)

This project, funded by the government of Luxembourg, aims at strengthening the regional forestry office in Rundu in managing the natural forests of Okavango, establishing appropriate plantations and develop a regional forest policy in Okavango. The project will also supplement the Directorate of Forestry in developing Hamoye into a regional research centre.

Afforestation project using ex-combatants (Namibia)

This project is initiated and funded by the government of Namibia, and aiming at assisting in combating deforestation in northern Namibia. The project also aims at addressing the present unemployment situation of Ex-combatants and the process of integrating them into civilian life in the communities in which they live.

Other forestry sector development efforts

A complete consolidation of other forestry development projects and activities would give us a long listing. Some has been completed, and some are still ongoing and some may further develop into larger projects. However, in the following are mentioned some ongoing forestry development efforts:

- Institutional and logistical support by German volunteer services in four forestry districts
- Development of community-based forest management
- Mopane shrubland management, Omusati region



- Sand dune stabilisation in Walvis Bay
- AGS Onankali tree nursery and plant project
- DAPP Tree Planting Project
- Iiheke-Yanakele Demonstration Plantation, Oshana region
- Northern Green Namibia Project

## 6. EMERGING FORESTRY DEVELOPMENT OPPORTUNITIES

To achieve set objectives, the strategy for development will seek partnership and participatory approach. Forestry practices in Namibia are in very early stages, and implementable practically-oriented activities are needed as much as scientific research information and knowledge of modern forest operations and environmental conservation.

It is the priority of the Directorate of Forestry to develop such a planning framework and regional strategies, that the ongoing development projects would all concert in harmony the implementation of sustainable development. As some specific future actions the National Development Plan of Namibia emphasises e.g.:

- *promotion of community participation and joint forest management*
- *development of an appropriate system of incentives*
- *revision of policy and legislative framework*
- *protection and management of communal forests*
- *harmonisation of policies and strategies with related ministries and institutions*
- *support to agro-forestry, social and farm forestry*
- *provision of funding, staffing and training for the Directorate*

In the following I briefly present some upcoming projects in order to give a view of future needs and possible areas of co-operation with the forestry sector:

### National Forest Inventory, 1995-1996 (FINNIDA)

The immediate development objectives of this project are to provide information on the standing stock, its annual increment and removal, to enable operational woody biomass monitoring systems, to estimate the sustainable annual utilisation of the biomass, and to train national staff in forest inventory and planning systems.

An important expectation of this project is that the inventory data generated thereof will provide basis for a rational and sustainable management of Namibia's forests. Furthermore, the experience gained by project personnel will be channelled into a future Management Planning Unit of the Directorate of Forestry.

### East Caprivi Forest Fire Control Pilot Project, 1995-1996 (FINNIDA)

The immediate objectives of this project are to increase the awareness of fire management, reduce uncontrolled field fires in the whole region, to enable sustainable

management of the state forest in East Caprivi, to train national staff and initiate a fire control organisation and general forest fire control strategies. The gained experience will be integrated with similar development initiatives and extended to other parts of selected regions of Namibia.

#### Development of a SADC Regional Forest and Wildlife Fire Management Programme (t.b.a.)

The review mission regarding this project proposal visited Namibia in late February this year. The mission collected relevant information which would be used to establish national level forest fire management strategies, and developing fire management projects in the SADC countries.

#### Support for forestry in Namibia (WB)

A draft project proposal on a capacity building programme for the Directorate of Forestry was prepared during a visit to Namibia in the beginning of February this year by the task manager for southern Africa region.

The proposed support would be directed towards capacity building projects in three regions, i.e. the South, Tsumkwe district and Caprivi region. The projects would enable outlined strategies for

- management and protection of indigenous vegetation through partnership with local communities,
- human resource development through formal training,
- forestry extension and promotion of tree planting to improve the people's immediate living environment.

#### Support to forestry and environmental development in former Owamboland (DANCED)

The first reconnaissance visit of this inter-sectoral mission was implemented in the middle of February this year. During May 1995 the following project identification and project preparation mission will take place.

The priority areas of concern are urban development issues, sustainable forest management issues, biological diversity, and integrated coastal zone management. Special emphasis will be given to environmental projects and programmes that complement e.g. land reform, rural development and investment support to small scale business. Forestry is only one of the possible areas of integrated development support.

#### Consultancy to Assess the Potential of Community Forestry in the Caprivi Region (UNDP)

The objectives of this study are to investigate the potential of community forestry in selected rural communities of Eastern Caprivi and determine the degree to which community forestry is a viable option for forest land tenure and management. Based on

the results project proposals and project documents will be prepared.

### Government of Namibia

While discussing development projects it is easy to fall in the trap of describing only foreign development aid. We must remember the important day-to-day management of the Directorate and all the national funding. To mention a few, the following may be listed:

- Formulating a human resources development plan
- Review of policy and drafting of management guidelines
- Development of strategies for tree seedling production and support to tree planting
- Initiating of studies to promote industrial activities, e.g. privatisation of sawmills
- Improvement of forestry offices, facilities, and Namibian know-how

## 7. CONCLUDING REMARKS

The means to achieve the objectives of sustainable forestry development can partly be examined based on the presented overview of existing development projects and emerging project proposals.

The answer to the question: "Are we implementing sustainable forestry development?", however, can hardly yet be found. We need a more long term perspective, a much more integrated and co-ordinated approach, infinite and well concerted joint efforts of all sectors and interest groups, especially on the "grass-root level" and from people's point of view.

Some major shortcomings during the initial years of the Directorate of Forestry have been the thin forestry organisation, the lack of trained Namibian foresters, the expatriate-concentrated and project-based approach to development strategies, and limited problem analysis done. As we also could see based on ongoing development projects, there is far too little involvement of specialists and officers from the other Directorates. I would be happy to welcome this participation.

It is a matter of greatest urgency that we tackle and overcome identified problems, taking actions through co-operation. As I mentioned in the beginning of this presentation, the issue of sustainable forest development was at the forefront of discussions at UNCED Earth Summit Meeting in Rio 1992, and the authoritative statement of principles for a global consensus on the management, conservation and development of all types of forests, and of combating deforestation in developing countries were adopted.

Some of the future development areas for the Directorate of Forestry are to conserve and sustain forests of all types through, e.g.:

- *more integrated forest ecosystem management*

- *education and training of skilled staff*
- *scientific research of forests and biodiversity*
- *assisting communities in forest resource management*
- *improving inventory and management planning of all forest areas*
- *measuring and monitoring changes in forests*
- *developing institutions that can attract private investments in forestry*
- *promoting establishment of tree nurseries and reforestation of degraded lands*
- *promoting agro-forestry, social and farm forestry*

The important common goals for all partners in development are co-ordination and collaboration of activities, which should include:

- *policy harmonisation between bilateral donors, multilateral agencies and Namibia*
- *co-ordination of field action plans at all levels*
- *establishment of research and information networks*
- *promote participatory approaches and public involvement*
- *improved cost-effectiveness of projects/programmes*

In improving the quality and sustainability of various projects, the key words are: (i) *objectives oriented*, (ii) *target group oriented*, and (iii) *participatory development approach*.

It is important to define for whom we are trying to achieve development. We should know *how much, how well, by when and where* we are concentrating our joint efforts, local knowledge and professional experiences aiming at set objectives. The design of an appropriate project includes definitions, formulation and specification of all these issues and factors. Additionally, the project gives us the basic implementation structure for the planned undertaking with a given budget and specified period of time.

As we also know, a development project usually has one principal immediate objective. In order to make sure that the objectives of various development projects are not conflicting, and that we are all working together in the same direction, the projects should be seen in a larger logical framework, which would operate for instance within several different development sectors. Therefore, we should prepare a *comprehensive programme framework*. This will help to clarify priorities and responsibilities and thereby to improve management of development aid.

The framework of development support programmes can be seen as a set of separate projects, where the programme outputs constitute the immediate objectives of each project or services directed towards the attainment of specific objectives. The advantages of this is that balanced long-term development strategies addressing actual issues and needs can be followed. The sustainability is accordingly the extent to which partner organisations or institutions will continue to pursue the objective after the supportive project assistance is completed.