



Integrated Forest Fire Management (IFFM) in Namibia



Satellite imageries of Southern Africa show that more than 100 million hectares of tree, bush and grass savannah are burnt every year. Namibia is a country embedded in the midst of this fire environment. Fire research indicates that the natural fire interval in the forests of Northern Namibia is more than 10 years. This finding is very important because the natural trees of this savannah ecosystem require 5-7 fire-free years before the tree seedlings can survive the next fire. The local population, however, burns between 60 and 85 per cent of their land area each year. As a consequence some valuable forests are lacking regeneration. Some grazing lands degrade due to inappropriate grazing intensity and fire intervals. In order to break the habits of uncontrolled burning a massive fire education campaign was launched. This fire campaign is targeted to all levels of people, politicians, traditional leaders, schoolchildren and their teachers and local farmers.

The *Integrated Forest Fire Management* (IFFM) pilot project in Namibia which covers an area of 1.2 million hectares of forests has shown that the local people can be fully involved in forest fire control activities if properly educated and motivated. The conventional approach to forest fire control (imported from industrialized countries) whereby one develops detection and suppression methodologies, will not work under the sociocultural and economic conditions prevailing in rural southern Africa. Namibia implements the only successful IFFM project in the Southern African Development Community (SADC) and has been able to reduce the annual burning in the pilot area by 40 per cent compared with previous figures in the same area. This has been achieved by organizing a massive forest fire prevention campaign to educate the local population.

The Namibia Forest Fire Prevention Campaign

Background

The Namibia-Finland Forestry Programme (NFFP) and its component on Integrated Forest Fire Management (IFFM) have been operating in Caprivi since April 1996. The NFFP operates within the Directorate of Forestry under the Ministry of Environment and Tourism.

The efforts to reduce unnecessary burning have been carried out through the education of the general public and through the training of people in local communities in prescribed burning of 1,000 km of firebreaks each year. The emphasis was laid on the ability of local people to *use fire as a tool* for land clearing or for improving the grass sward for the purpose of animal grazing or for the production of reeds and thatch for fencing and roofing.

The key element in the success of teaching the local people has been in educating learners in schools about

environmental protection. The programme has involved 84 schools in which 20,000 learners and 700 teachers have been educated about fire. In addition, 17,000 people in rural areas have also received fire education. With the combined effects of education and training, the overall burning has been reduced by more than 40 per cent in East Caprivi.

Fire Drama Play

As a part of the Fire Campaign, a Fire Drama Play has been performed by the Caprivi Drama Group (under the National Theatre of Namibia). This Fire Drama Play has been able to relay the new “fire message” even to illiterate people in rural areas. The Drama Play has also been performed on radio and has been broadcast by the National Broadcasting Corporation (NBC) over the local radio stations.



Fire prevention art

The artists from the *Caprivi Arts and Cultural Association (CACA)* have been producing the educational materials needed for the fire campaign. These activities and the network of CACA handicraft makers, controlling fires in areas where materials for handicrafts grow, have created a linkage between local artists and the National Arts Gallery of Namibia. The fire arts, includes 60 different posters and 24 fire billboards erected along 800 km of the main roads. These campaign materials, produced in local languages, have had a strong impact in educating the rural population and schoolchildren. Six thousand fire posters have been distributed in the regions of Caprivi and Kavango.

Collaboration with countries of the Southern African Development Community (SADC)

Border-crossing fires are a major problem in the Caprivi region of Namibia. Therefore posters and car stickers were distributed to the neighbouring countries of Botswana and Zambia. This initial collaboration should lead to more intensive cooperation between the countries of the SADC region.

Fire booklets and videos

Currently the fire campaign is targeting the households headed by women who often have been deprived of basic education. Many of these women are now engaged in

adult basic and continuing education. The artists working with IFFM have produced special educational material targeted both for schoolchildren as well as for adult learners of whom 68 per cent are women.

Two different fire booklets have been produced: *The Fire Story* (21 pictures in colour) tells a true fire story that took place in a local community. The text produced is bilingual English/Silozi and the booklet has been initially printed in 5,000 copies.

The Fire Cartoon (71 colour pictures) explains possible environmental damages which may be caused by uncontrolled wildfires. The characters in the cartoon are not related to any true story or any living persons, but reflect on how “*once upon a time . . .*” fire was a friend,

and how the fire became an enemy. The text is also bilingual English/Silozi, and this booklet is also printed in 5,000 copies. The story of the cartoon called “*Never Play with Fire*” has also been produced as a radio drama performed by the *Caprivi Drama Group*.

An initial 9,600 copies of these booklets have been donated by the Government of Finland to the Ministry of Basic Education and Culture (MBEC) in Katima Mulilo.

IFFM has also produced a 26-minute video on community-based forest fire management called “*Let us not burn our future*”. The video describes how fire prevention and control work is carried out in local communities in Namibia.

Fire Newsletter

A Fire Newsletter has been keeping the general public abreast with the management efforts in developing community-based forest fire management. The sociocultural adaptation has been carried out together with traditional (tribal) authorities, NGOs and various government agencies.

Campaign results

With the assistance of more than 37,000 people who have participated in the fire campaign since 1996, the fires in East Caprivi have been reduced by more than 40 per cent.

A National Round Table on Fire: addressing the current and future fire problems

In order to address the fire problem at national level the Directorate of Forestry called for a *National Round Table on Fire* in November 1999. In this participatory meeting all national stakeholders who will play a role in the development and implementation of a national fire prevention and management programme discussed the first draft of a long-term strategy. It is clear that under the present socio-economic conditions of the country it will take some time until an ambitious national programme reaches full-scale implementation. Until then the experience gained in the IFFM approach in northern Namibia must be gradually expanded and transferred to other regions inside the country and to its neighbours.



National fire prevention logo

A national fire prevention logo for Namibia was developed in 1996. The aim was to identify national forest fire management efforts with the problem of fire-endangered wildlife. The *Fire Ostrich* became the national symbol since the last ostrich was killed in East Caprivi in 1988. Car stickers, with the *Fire Ostrich* in various sizes, were produced and 6,000 vehicles are presently carrying the sticker with the text: “*Do not Burn our Environment*”.

The Namibia IFFM project is open for cooperation with its neighbouring countries and other regions in the world. Strong ties have been developed with the international community through regular contributions to the United Nations *International Forest Fire News* (IFFN) and close interaction with the *Global Fire Monitoring Center* (GFMC).

Dr. Harrison Ochieng Kojwang
Director of Forestry
Ministry for Environment and Tourism
Republic of Namibia
Private Bag 13346
Windhoek
NAMIBIA

Fax: ++264-61-222830
Tel: ++264-61-248211 (work)
E-mail: kojwang@forestry.met.gov.na