



Environment in UNHCR

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FEEDBACK PLEASE

We are always interested in receiving your comments on **Environment in UNHCR**. While primarily focussing on environment-related issues in UNHCR's programmes, we are also interested in receiving articles from other agencies. Thank you.

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Refugee-affected Areas - Tanzania

Environmental degradation is one of the earliest, most visible and enduring impacts of refugee operations. The presence of refugees invariably places additional stress on a region's resources, often straining social and economic relations with local people and authorities. affected areas takes on greater importance, UNHCR is reviewing some of its past experiences in order to learn from these. The following account describes measures taken from 1995 to the present in western Tanzania, showing that much can be achieved with good partners and local co-operation.

(contd on page 2)

As the restoration of refugee-

NEWS TO & FROM THE FIELD

River Conservation, Mangwe Camp, Zambia

Established in 1999, Mwange camp in Zambia's Northern Province hosts almost 22,000 refugees, most of whom come from the Democratic Republic of the Congo.

For a distance of some 2km, the Mwange River, after which the camp is named, forms a natural border between the camp and nearby villages. Deforestation, caused by tree cutting to provide firewood and building materials, combined with the clearance of land for ag-

riculture is resulting in increased soil erosion and silting up of the river. Threats to the river and its environs have been recognised and resulted in initiatives such as a tree planting day and awareness raising campaigns. Apart from a ban imposed on agricultural activities within a radius of 50m of the river, an initiative to rehabilitate the degraded areas on the slopes leading to the river has also started.

To prevent soil erosion caused by seasonal rainfall, CARE International, UNHCR's implementing partner for

(contd on page 2)



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NEWS TO & FROM THE FIELD (CONTD)

natural resources management in this camp, started a project of vetivar grass culture 50m from, and in parallel with, the river. Being a deep-rooted and drought-resistant plant, with strong powers of regeneration, the positive effects of this grass have been reinforced by combining it with horizontally planted rows of banana trees, dramatically enhancing the water retaining capacity. This combination forms a natural double buffer against soil erosion and loss of ground cover.

To avoid soil erosion beyond the buffer, refugees have been advised to grow crops across the direction of the slope rather than in lines up and down the slope, further stabilising the soils through contour planting. A combination of contour planning and strip cropping, whereby vetivar grass is planted in lines between the cultivated crops and along the contour, renders the intervention even more effective.

CARE International is also preparing for a more elaborate awareness-raising campaign about the consequences of soil erosion, loss of ground cover and silting of the river. Through this, refugees as well as local farmers and dwellers will be informed of the need for appropriate conservation and management measures. Further consultations will enable them to complete the work and provide them with the experience required to be able to take over management responsibility for this activity in the future, thereby helping preserve the riverbank and surrounding land in the longer term.

*Machtelt de Vriese
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Areas, Tanzania (contd from page 1)

The protracted presence of refugees in western Tanzania has led to deforestation, scarcity of fuel resources, land degradation, destruction of water resources and encroachment in protected areas. At the peak of the Rwanda refugee crisis, camps in the Kagera region alone consumed about 1,200 tons of firewood each day. Aerial photos of the region taken after the mass return in 1996 showed that some 225km² had been completely deforested and roughly 470km² had been partially deforested. Needless to say, the extensive deforestation led to a shortage of wood in the affected areas and to a stiff competition between refugees and the local population for the remaining resources.

Tree planting

Reforestation, tree planting and natural regeneration therefore became the cornerstones of the UNHCR rehabilitation programme implemented right after the initial clean-up of the camps. In the years that followed, around one million tree seedlings were planted in the

Kagera region alone while some areas were left for natural regeneration. UNHCR spent more than US \$7 million on environment-related activities in western Tanzania between 1995 and 2000. A number of projects was established in all camps and their surrounding areas in order to rehabilitate the areas affected by refugees and to mitigate the impact of refugees and local populations on natural resources, ranging from energy conservation through the introduction of energy saving stoves and new cooking practices, organised provision of firewood, promotion of effective gardening techniques and agroforestry, to supporting local game and forest guards in protected areas, and to environmental education and eco-activities for children.

Today, there is a tree planting programme in all refugee camps in Tanzania. Trees are being planted to compensate for the wood resources consumed by refugees for construction and as fuel. The number of trees planted in Kibondo each year, for example, is around 385,000, which is slightly over the number of trees consumed for various purposes by refugees. Most of the NGO partners are involved in tree planting, allocate 20-60% of the seedlings they have raised to local communities. In Ngara, Norwegian People's Aid gives as many as



Refugee-affected

80% of the seedlings to the Tanzanian communities around the Kitali Hills camp.

In most of the camps, wood saving measures are in place, including organised wood provision where the scarcity of wood resources is most acute. In co-operation with the district office for natural resources, special sites are being allocated for the harvesting of poles for construction to limit uncontrolled tree felling. Shelter construction in most camps is done with mud bricks, saving valuable wood for the roofs only.

Sharing the resources

In 2001, CARE, one of the UNHCR partners working with the environment in Kasulu, set up "village environmental committees" in eight Tanzanian villages surrounding Muyovosi and Mtabila refugee camps. The committee in a village called Mwali, some 10km north of Muyovosi, allocated a proportion of their woodland for refugees who are allowed to cut trees within the agreed boundaries. In exchange, the Mwali village will receive a woodland management plan developed by CARE in co-

operation with the district office of natural resources, which will give the villagers guidelines on how to use their woodland areas in a sustainable manner and how to generate income at the same time.

Protected areas

In many places in western Tanzania, UNHCR had to compromise its own environmental guidelines of 12-15km between camps and protected areas because the districts, especially Ngara and Kibondo, are pock-marked with game and forest reserves. Some 72% of the Kibondo district is covered by reserves, which often border the refugee camps, with the obvious result of human encroachment into the protected areas, in the form of cultivation, tree felling and poaching. UNHCR has therefore established co-operation with the Tanzanian game and forest reserve authorities to control the illegal activities.

Between 1995 and 1997, UNHCR spent US\$726,000 on the demarcation, regeneration and anti-poaching activities in the Burigi game reserve in the Biharamulo district where the refugees had

been hunting during the mass influx from Rwanda in 1994 and 1995. Some UNHCR partners, such as GTZ, provided logistical equipment for surveillance operations in the Burigi game reserve.

In Kibondo and Kasulu, UNHCR was involved in the demarcation of the game reserve boundaries of Buyendo, Moyovosi and Lugufu reaching south to the Malagarasi river (a total of 114km). Two game posts were constructed in the Moyovosi reserve to improve the tracking abilities of the game wardens, and the district natural resources authorities in Kibondo, Kasulu and Kigoma have been provided with vehicles and motorcycles.

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Ask any school teacher and they will tell you that their days are already busy with teaching curriculum subjects. Making room for additional subject matter, such as Environmental Education (EE)

2003 - UN International Year of Water

In proclaiming 2003 as the International Year of Freshwater, the UN General Assembly encourages all member states, the UN system and other actors to take advantage of this occasion to increase awareness of the importance of fresh water and to promote action at the local, national, regional and international levels.

Water is one of the essential elements in UNHCR's assistance programme. With this in mind, several initiatives will be undertaken to:

- Create awareness of the value of fresh water;

- improve and ensure the provision of minimum levels of service in the water and sanitation sectors; and
- highlight the role which UNHCR and its partners have played in providing clean water in refugee operations.

In order for UNHCR to develop a coherent programme for this event, we would appreciate your input. If you have any suggestions or feedback, please send these to the Chief of EESS, Mr. Abdualrauf Farooqi (farooqi@unhcr.org). Thank you.

Can Environmental Education be fun?

can therefore be problematic. Also, integrating EE into existing curricula places limitations on how and when EE can be taught.

In response to this, UNHCR in collaboration with UNESCO is developing an EE project that is designed to be taught outside regular school hours and attended voluntarily by school students. The project is in the process of developing a range of materials and activities that both raise environmental awareness and are fun – for both the students and teachers.

Our Approach

The project began in the Congolese (DRC) refugee camp of Mwange, Zambia, in 2001. Having established a project development Task Force, consisting of refugee teachers, environmental workers and implementing partner representatives, the Task Force started to identify those issues and concerns of highest priority to the

community. These, in turn, served as the basis for the development of draft materials (written in French). Pupil books and teacher guides covering three environmental themes – water, environmental health and the conservation of trees and vegetation – were prepared during the first half of 2002. These materials were pre-trialled during two workshops, held in Mwange in August, where suggested modifications were made. The materials have since been revised and prepared for printing in anticipation of the trialling of the materials – planned for February to May 2003.

In addition to pre-trialling the pupil books and teacher guides, two environmental games (one based on the game of Monopoly, and the other on Snakes and Ladders) were also trialled. These have now been finalised and editions in both French and English should be available from UNHCR in early 2003. An Eco-club magazine has also been developed, featuring additional materials including, word games, comic strips, 12 songs (in French, Kiswahili and Lingala), and factual information sheets. These will also be trialled in

Mwange in 2003.

Next steps

In 2003, pupil books and teacher guides, along with the Eco-club magazine will be piloted. An evaluation of these materials will contribute to their possible revision prior to their finalisation (planned for September 2003). Materials covering additional environmental themes will also be developed during 2003.

To learn more about these products – which are expected to find wide application – or about environmental education in general, please contact Chris Taylor (Chris.Taylor@unesco.unon.org) or Machtelt de Vriese (devriese@unhcr.org).

...AND FINALLY

A pilot project to develop an **improved management system for refugee operations in ecologically sensitive areas** has been concluded between UNHCR and WWF International. Drawing on experiences from Africa and Asia, the report recognises the need for improved data gathering and analysis, as well as a strengthening of management capacity of protected area personnel to counteract the impact of refugees on protected areas.

In preparation for the hopeful return of Eritrean refugees from camps in eastern Sudan, a recent UNHCR-led mission examined the options and needs for the **rehabilitation of refugee affected areas**, with specific attention being given to needs in the health, sanitation, water and education sectors, as well as environmental management. Funds (US\$11.5 million) are now being sought to implement the 17 priority projects identified by the mission.

UNHCR, in collaboration with the Southern Alliance for Indigenous Resources, a Zimbabwe-based organisation, undertook an exploratory mission to introduce **permaculture** to selected settlements in Zambia. Preliminary findings highlighted many opportunities for improved envi-

ronmental management, and agriculture in particular, in and around the settlements, providing the basis for new projects for 2003.

As part of the **FRAME Project**, a UNHCR/IRD workshop in Kampala, Uganda, recently reviewed the outcome of more than 18 months work, examining the scale of environmental change in selected settlements in northern Uganda. The work also documents the chemical/physical properties of soils, and identified the availability and land use patterns in settlements, helping determine issues such as carrying capacity. This approach, together with other tools being developed under FRAME is expected to find broader application in the coming year.

...and finally, on a personal note, as the Editor of **Environment in UNHCR** and Senior Technical Co-ordinator (Environment) leaves in December, David would like to thank the many colleagues in the field and HQ with whom he has worked for their warm friendship, support and hard work. The past few years have been a great experience and if a single wish could be made it would be that the excellent initiatives that you have helped begin will continue to find the support they, and you, deserve. Thank you for everything.