

# Environmental Emergencies NEWS



## THE IMPACT OF REFUGEES AND INTERNALLY DISPLACED PERSONS ON LOCAL ENVIRONMENTAL RESOURCES

Issue 5 December 2005

In this issue, the following topics are discussed:

- \* Definitions of refugees and internally displaced persons (IDPs)
- \* Environmental resources impacted on by refugees and IDPs
  - Forests
  - Wildlife
  - Land
  - Water
  - Waste management and sanitation
- \* UN's initiatives in practicing and promoting sound environmental management in refugee situations.

Dear Readers,



Klaus Toepfer

The number of people who have been uprooted by wars and civil uprising has increased dramatically in the past decade. While urgent human needs must take precedence over environmental concerns in times of crisis, the link between human welfare and the environment is becoming more apparent, and the two can no longer be viewed in isolation. We have, therefore, decided to focus this issue on the impacts of refugees and Internally Displaced Persons (IDPs) on the environmental resources of the areas where they settle.

The environmental resources affected by the presence of refugees include forests, land, water and biodiversity through deforestation, soil erosion, loss of wildlife, depletion of biological diversity, contamination of surface water and aquifers, poor sanitation, poor waste disposal, over extraction of ground water and over-cultivation of farmland. This is primarily due to the establishment of unplanned or poorly planned refugee camps. In a refugee situation, excessive damage to the environment,

competition with local communities over scarce resources, or disruption of ecological services are understandably not appreciated by host governments, a reality which may well influence a country's willingness to host refugees.

In this issue, we share with our readers, information about who refugees and IDPs are, their impacts on the environmental resources in host countries and the United Nations' initiatives to promote sound environmental management in refugee and IDPs related operations.

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*Environmental degradation in a refugee Camp  
(Source: UNHCR/A. Hollmann)*

## Who are refugees and Internally Displaced Persons?

A refugee is defined as a “person outside of his or her country of nationality who is unable or unwilling to return because of persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group or political opinion.”<sup>1</sup> On the other hand, internally displaced person (IDP) flees his or her home for the same reasons as a refugee, but remains within his or her own country. Environmental refugees can also be defined as people who have been forced to leave their traditional habitat because of a marked environmental disruption that jeopardize their existence and/or seriously affect the quality of their lives (El-Hinnawi 1985). They include those temporarily displaced because of an environmental stress such as an earthquake, a cyclone or floods, (for example, the floods of March 2000 in Central and Southern Mozambique forcefully displaced up to a million people (Black, 2001)), those permanently displaced because of permanent changes to their habitat, such as dams or lakes and those who are permanently displaced because their original habitat can no longer provide for their basic needs.

There are a number of refugees and displaced people in every country in the world, but today most of them live in the poorer countries of Africa and Asia. After Asia, Africa is home to the second largest number of refugees in the world. By January 2004, Asia had a total of 6,187,800 asylum seekers, refugees and others of concern to UNHCR, while Africa followed with 4,285,100. In that year a total of 17,084,100 asylum seekers, refugees and others of concern to UNHCR were reported in the whole world.<sup>2</sup>

Refugees and IDPs searching for safe haven can burden the ecosystems in their areas and countries of asylum and degrade the environment or complicate environmental decision-making in those areas. They are often forced to settle in resource scarce areas, putting further pressure on environmental resources, and sometimes causing conflicts between them and their host communities over the scarce natural resources. These conflicts can also make the exploitation of natural resources in these areas harder to monitor and control, as environmental abuses proliferate.

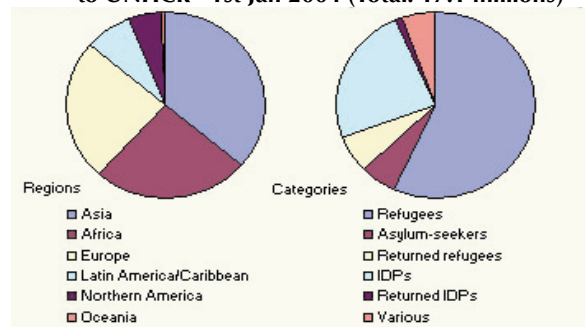
The key resources impacted on by the existence of refugees and IDPs are the forests, land, water and biodiversity through deforestation, soil erosion, loss of wildlife, loss of biological diversity, contamination of surface water and aquifers, poor waste disposal, poor sanitation, over-extraction of ground water and over-cultivation of farmland due to the establishment of refugee camps, among others.

### Environmental resources impacted on by refugees and IDP's

#### Forests

Forests are among the resources that are of great socio-economic importance as a source of timber, fuel and many of the non-wood products such as resources for tourism, bee keeping, habitat for wildlife, protection of water resources and environmental values. A major problem facing forests is deforestation arising from human activities such as those related to agriculture (fires, shifting cultivation, and overgrazing), uncontrolled tree felling to provide building materials, production of honey and beeswax, provision of

### Refugee, Asylum-Seekers and Others of Concern to UNHCR - 1st Jan 2004 (Total: 17.1 millions)



Source: <http://www.unhcr.ch/cgi-bin/texis/vtx/statistics>

energy (firewood), and provision of medicine. Refugees and IDPs often depend on the forest resources for their daily needs such as food and building materials, among others. Forests and non-wood vegetation resources therefore experience more frequent disturbances with greater and possibly permanent impacts such as increased deforestation and other forms of degradation. Deforestation has been the most serious environmental problem imposed by the 2 million Rwandan refugees in the Democratic Republic of Congo (DRC, formerly Zaire) since 1994. The DRC Government estimated that the South Kivu region lost 3,750 hectares of forestland within three weeks of the arrival of the refugees.

The refugees use most of the wood from the forests as fuel. Surveys in Western Tanzania found that refugees used an average of 2.8 kilograms of wood per person per day, whereas local host communities used just 1.7 kilograms per person per day. This was partly due to the fact that, refugees were found to rarely put out fires between meals due to the lack of matches and that dried food rations took longer to cook than fresh foods.



Refugee Camp - Deforestation of indigenous palm tree hills in Guinea  
Source: <http://www.grid.unep.ch/guinea/photos/photo6.html>

#### Wildlife

Refugees and IDPs influx in an area may cause a lot of disturbance on the natural equilibrium between the existing host communities and flora and fauna. The presence of large numbers of refugees and IDPs near protected areas generates direct and strong perturbation of the wildlife. Agricultural activities of refugees sometimes encroach into the protected areas, which is also a threat on wildlife habitat, a threat to the survival of some wildlife species, especially the great apes. Refugees and IDPs arriving in an alien situation also face hunger, fatigue and grief. Their first concern is therefore to look after themselves, most often to find shelter and food that in most cases involve poaching and hunting of wild animals.

<sup>1</sup> International definition of refugee contained in the 1951 United Nations Convention relating to the status of refugees and its 1967 protocol.

<sup>2</sup> UNHCR-Basic facts-<http://www.unhcr.ch/cgi-bin/texis/vtx/basics>



Overharvesting of trees for wood fuel by refugees in Kenya.  
Source: UNHCR.

### Poaching in Virunga National Park

Virunga National Park contains within its 790,000 hectares the greatest diversity of habitats of any park in Africa: from steppes, savannas and lava plains, swamps, lowland forests to volcanoes and the unique giant herbs and snowfields of Ruwenzori over 5,000m high. It was made a World Heritage in Danger in 1994 because of invasion by large numbers of war refugees and subsequent massive poaching, deforestation and degradation.

All large herbivores in the Virunga National Park were extensively poached following the arrival of the refugees in 1994, a situation further exacerbated by the armed militia in the refugee camps. In 1990, hippos numbered about 10,000; in March 1995, fewer than 4,000 were left. At the time it was inscribed, most of the staff were unpaid, lacked appropriate surveillance equipment and were limited in means of patrolling the 650 km-long boundaries. Thus protective soldiering also turned to poaching.

Gorillas in the park also faced similar problems due to invasion of their habitats by refugees and IDPs <http://whc.unesco.org>).

UNEP's Great Apes Survival Project (GRASP) has just completed a project in the Virunga National Park to demarcate part of the park at the Mikeno Sub Sector from the surrounding farmland to prevent illegal invasion by the settlers. For more information, visit the GRASP site at: <http://www.unep.org/grasp>



Gorillas in the DRC's Virunga National Park.  
Photo by Rene Nijenhuis, April 2004.

### Land

Land degradation is a condition that normally occurs mainly due to factors such as inappropriate cultivation techniques, growing population, growing energy requirements (wood based energy), overstocking and insecure land tenure. Influx of refugees and internally displaced persons is also an additional

factor to land degradation especially where proper planning for the refugees is not executed. Soil erosion is commonly observed in and around refugee camps due to destruction of vegetation cover and unsuitable cultivation techniques. For instance, soil erosion is serious in and around refugee camps for example in Karago in Tanzania as well as the Goma and Bukavu camps of the Democratic Republic of Congo (DRC). Absence of terracing and proper drainage channels on these steep alluvial soils as well as near total destruction of vegetation by refugees encourages soil erosion and vulnerability to mudslides. The livestock, which refugees often use for sustenance, also have great impacts on ecosystems, trampling on soil, grass and small trees and over-grazing the land. Many refugee camps are now surrounded by vast stretches of barren land no longer capable of supporting life. Surveys from Tanzania showed that the influx of Rwandan refugees in 1994 in the country with 500,000 heads of cattle led to overgrazing and consequent soil erosion in the affected areas.<sup>3</sup>



Land degradation in Karago refugee camp in Tanzania.  
Photo by Laurent Nicole/James Kamara

### Water

Influx of refugees and displaced persons often causes a lot of degradation of the water resources in their places of asylum. Water shortages are prevalent in areas where large numbers of refugees share limited supply of water with the local population.

The main threats to fresh water include: the direct pollution of watercourses by wastewater and waste thrown into the river, laundry washed directly in the flowing river, pollution by infiltration from latrines, and the depletion of protective forests within catchment areas causing soil compaction and accelerated water runoff, leading to excessive sediment load in the watercourses. Moreover, large concentrations of refugees and IDPs produce a lot of human waste and other waste materials, which can contaminate water in the vicinity.

In the Former Yugoslav Republic of Macedonia, due to inadequate consideration of environmental criteria during the campsite selection process, of the eight refugee camps that were constructed, a total of five were located within the protected area of Rasce Spring. The pressure put on water sources affected people and the environment downstream. The spring outputs about 6,000 litres of water per second, of which 2,700 litres per second is used as drinking water for the 500,000 inhabitants of Skopje. Further, pit latrines were initially used to manage human waste, and were only replaced with sealed tanks two weeks after the peak refugee period. Thus serious concerns were raised over the potential impacts of these camps and pit latrines on the quality of drinking water from the Rasce Spring.

<sup>3</sup> Pasakett, CJ (1998). Refugees and land use: the need for change in a growing problem.



Wastes from a refugee camp dumped on forest roadside in the Former Yugoslavia. Photo by: Paul Okwaro (1994)

### Waste management and sanitation

Environmentally safe disposal of human, medical and solid wastes is a significant problem in most refugee camps. In Kibumba camp, in the Goma region of the DRC, excavation of pit latrines was difficult, due to the underlying volcanic rock. Also, there was no feasible and cost effective way to deal with pit latrines once they were filled with human waste. Due to such problems, defecation sites were designated so they could be effectively managed. For example, Kibumba had a defecation area covering about 6000m<sup>2</sup>, which unfortunately overlapped the buffer zones of Virunga National Park. Indeed, the disposal of waste remained problematic with solid, human and medical waste continually dumped in the Virunga National Park.

In most refugee camps, other wastes include; dry cell batteries, metal scrap from construction activities, tins and packaging, plastic and latrine slabs. There is also a marked absence of waste treatment facilities.

In Khan Eshieh camp in Syria, there is shortage of proper sanitation facilities. Wells, which were dug without official permission, have dried up due to lack of rain and constant overexploitation of ground water by refugees. Many refugees there now buy water from mobile tankers operating in the area, but the water is not safe for human consumption. In addition to this problem the camp also lacks sewerage system and only has pit latrines whose proximity to water wells pose a major health hazard for camp residents as well as for neighboring villages.<sup>4</sup>

<sup>4</sup> UNRWA (2002)-Khan Eshieh refugee camp (<http://www.un.org/unrwa/refugees/syria/khaneshieh.html>)

### UN's initiatives in practising and promoting sound environmental management in refugee situations.

The United Nations High Commission for Refugees (UNHCR) is the main UN agency responsible for the management of refugee and IDP situations, helping to protect and safeguard their rights. With regard to refugee settlements, UNHCR has issued guidelines that focus on the settlement size, siting, spacing, housing density, site clearance, alignment of roads, and housing configuration. The guidelines help to create a manageable situation of refugees.

Further, UNEP is involved in the management of refugee situations by focusing on the effects of refugee and IDP settlements and flows on the natural environment. In many respects, this overlaps with core areas of UNHCR expertise. Therefore, in responding to the common concerns, UNEP in co-operation with UNHCR has done extensive work in the following areas:

- \* Combating deforestation, soil erosion and desertification, pollution and depletion of freshwater resources;
- \* Development of environmental guidelines and other information materials to provide a cohesive framework for action at the field and policy levels in refugee-affected countries; and,
- \* Environmental education and training, including the implementation of indicators for gender and environment-sensitive management practices for refugee-affected scenarios, field projects, post conflict environmental impact assessment and awareness raising.

Examples of activities undertaken by UNEP in collaboration with UNHCR and other agencies include the assessment of the environmental impacts of refugees in Guinea. In July 1999, at the request of the government of Guinea, the Secretary-General of the UN asked UNEP to look into the environmental impacts of the refugee situation in Guinea. On this basis, UNEP in cooperation with UNHCR, UN Human Settlements Programme (Habitat), UNDP and the World Bank made an assessment of the impacts of refugees on the environment in Guinea and prepared the assessment report. Also, activities undertaken by UNEP in cooperation with other agencies include an environmental impact assessment and institutional capacities for environmental management and protection in the Balkans in 2000 which provided a series of recommendations to address the environment in the reconstruction process and in collaboration with UNHCR an assessment of environmental impacts of refugees and IDPs in Tanzania in 2003. Currently, UNEP is carrying out an environmental assessment of refugee and IDP impacts in Liberia and developing training materials.

#### Selected articles related to refugees and IDPs

- Basic facts  
<http://www.unhcr.ch/cgi-bin/texis/vtx/basics>
- Refugee magazine issue 127: The Environment - A critical time, July 2002  
<http://www.unhcr.ch/cgi-bin/texis/vtx/publ/opendoc.pdf?tbl=PUBL&id=3d3fecb24>
- Post-Conflict Environmental Assessment – Former Yugoslav Republic of Macedonia (FYROM), UNEP  
<http://enrin.grida.no/htmls/macedon/reports/postcon/eng/report.htm>
- Environmental impact of refugees in Guinea, UNEP  
<http://www.grid.unep.ch/guinea/report.html>
- World heritage: <http://whc.unesco.org/en/list/63>

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