

Refugee Operations and Environmental Management



Refugee Operations and Environmental Management: Key Principles

Key Principles *for* Decision- making



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**Refugee Operations
and
Environmental Management**

**Key
Principles**
for
**Decision-
making**



EXECUTIVE SUMMARY

A Time for Action and Taking Decisions

Refugee operations are often typified by the need to make quick decisions — decisions which if not based on the best available information, may risk jeopardising the lives and welfare of large numbers of people, both now and in the future.

Camp sites must be found; shelters must be constructed; access routes may need to be built to enable delivery of food supplies and medication; people must be fed and provided with the basic needs for survival. Many, but by no means all, such decisions are in some way linked with the environment, either directly or indirectly.

One of the most serious implications of environmental degradation for relief and humanitarian organisations is the fact that this might influence the decision of a given country to grant asylum to refugees. Another is that environmental degradation may jeopardise refugee's livelihoods. UNHCR cannot afford for these to happen. It is therefore essential that appropriate actions are taken to prevent such a situation from arising.

Decision-makers must have access to the best available information in order to formulate judgements and evaluate the impact of actions to be taken. In humanitarian relief operations, this is especially important given that the majority of managers dealing with refugee situations are generalists who cannot presume to have in-depth knowledge on specialised subject areas such as the environment.

Refugees and the Environment

This short guide has been prepared to help decision-makers by:

- drawing attention to the links between refugees and the environment; and
- highlighting key issues to enable decision-makers reach conclusions and take appropriate actions on issues



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connected to environmental management during refugee operations.

If decision-makers remain unaware of the links between the environment and human well-being, the environment may be marginalised by inappropriate decisions. Unwitting placement of a camp close to a national park or other area of ecological importance can threaten wildlife resources and destroy a country's natural heritage; careless construction of roads can lead to erosion problems — even human deaths; uncontrolled cutting of trees can result in soil erosion; while increased pressure on local natural resources can easily result in conflicts with local communities. All of these actions have a cost: economic, social and/or environmental.

Key Principles for Decision-Making

The principles put forward in this guide have been drawn from a recent undertaking by UNHCR and partner organisations to extract some of the most pertinent lessons learned from a wide range of refugee situations in Africa and Asia. Among the key principles are that:

- preventing environmental degradation from happening in the first instance is the most effective strategy;
- attaching a monetary value to natural resources can reduce the level of those resources consumed;
- environmental projects need not be complex or costly;
- clear policies are needed on access and user rights to natural resources;
- influencing policies can be as important as defining practice; and
- the roles and responsibilities of actors and stakeholders need to be clearly defined.

By highlighting these and other experiences, this booklet is intended as one more step towards strengthening the ability of decision-makers to make appropriate judgements which will be in the interests of refugees and the local environment.




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Introduction Principles

Human welfare remains the undisputed priority for UNHCR and partner organisations in times of crisis. It has, however, become increasingly evident that environmental concerns too need to be taken into account at such times.

Peoples' lives depend on the quality of the surrounding environment, which may provide food, fresh water, fuel and building materials. 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 feature which may well influence a country's decision to provide asylum to refugees.

Human Welfare and the Environment go Hand in Hand

What can be done to assist and improve the decision-making process and support sustainable environmental management? A first step is for people to understand the links between human welfare and the environment. This is increasingly taking place: more and more people appreciate how these two concerns are related and how an impact on one might affect the other. Environmental issues, no longer seen in isolation, now feature in many international and national debates on human welfare.

What is now required is for people, particularly decision-makers and field staff, to take account of recent experiences of environmental management in refugee situations, to learn from the experience and failures of UNHCR and other organisations, and to be in a better position to

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identify and implement practical solutions at the field level, **before** problems develop or get out of hand.


Learning from Experience: How this Booklet can Help

Drawing from a vast pool of information compiled by UNHCR and partner organisations, with funding from the governments of Japan, the Netherlands and the United States of America, this booklet summarises some of the most prominent findings on environmental management in relief and humanitarian operations, which should be considered by all managers and decision-makers.

A broad range of actions are outlined — actions that may save lives and money, while also benefiting the environment. [Building on these experiences, project managers and donors may avoid common problems and create more favourable conditions for refugees and local communities](#), a situation which would undoubtedly also foster goodwill between refugee-hosting governments and humanitarian organisations.

Using real examples of how environmental considerations can be included in field operations, this booklet should not only provide guidance on the types of environmental activities donor organisations might consider to fund, but should also enable managers and decision-makers to differentiate sound proposals from those likely to result in repetition of past mistakes. Each of the key principles is followed by a short list of priority considerations that can be used to assess the suitability and soundness of a particular project proposal from an environmental perspective.

Readers should remain aware that **this booklet cannot offer a blueprint** which might be applied to all refugee situations. Even armed with this information, decision-makers must still be aware of the need to thoroughly examine the underlying



causes of problems and the needs of people on a case by case basis. Cultural, social, economic and environmental aspects must all be taken into account when considering the guiding principles put forward in this document.

UNHCR is pleased to offer these key principles for environmental management in refugee situations — one more step towards strengthening the ability of field and office personnel to make decisions which will be in the best interests of individual refugees and their families, as well as the surrounding environment.



Refugees may benefit from a wide range of natural resources – wild food and medicinal plants in particular. Care must be taken, however, to ensure that such resources are not over-exploited.
UNHCR/A. Hollmann



Refugees require large amounts of wood for cooking meals and building shelters. This can lead to rapid destruction of natural vegetation in the vicinity of camps.
UNHCR/E. Dagnino

Key Principles

Why Does the Environment Matter?

Human welfare is dependent on the state of the environment. A large proportion of the world's population depends directly on natural resources as a source of wild foods, natural medicines and shelter. Many others make their living from the sale of natural resources, either through direct trade or more refined processing and marketing. Indirectly, the environment provides a wide range of services without which we would not be able to survive — fresh water being an example.

In some way or another, all of our lives are intertwined with, and dependent upon, the continued well-being of the environment. The challenge, however, is to manage the environment and specific resources in a manner which will help guarantee their availability for future generations.

Human behaviour can have profound effects on the environment. This is often highlighted during refugee situations, when large numbers of homeless people have to be catered for. Minimising the impacts on the environment is a major challenge at such times, but a challenge which must be met. [Decisions taken to promote responsible actions geared towards wise environmental management are essential.](#) For this to happen, technical planners, managers, decision-makers and donors must be conscious of the links and interdependencies between economics, political decisions, social welfare and the environment. Inappropriate decisions taken to foster advancements in one of these sectors might have serious negative implications for the environment.

Key Environmental Issues in Refugee Operations

Evidence shows that large-scale dislocation of people, characteristic of many recent refugee crises, can create adverse environmental impacts (see Box 1). The scale and suddenness of refugee flows can rapidly change a situation of relative abundance of local resources to one of acute scarcity.

Box 1. Environmental Impacts Associated with Refugees

The environmental impacts of refugee flows are diverse. Deforestation tends to be the most apparent of these impacts, although it is not the only one.

Soil erosion, loss of wildlife and non-timber products, and loss of biological diversity are other visible impacts. Indoor and outdoor air pollution caused by concentrated use of biomass fuels, the depletion or contamination of aquifers, and an altered pattern of transmission of certain diseases are also environment-related, but tend to be overlooked.

Whatever the issue, the environmental impacts are borne by the refugee and host populations, albeit in varying proportions, depending on the situation. Efforts to assure the well-being of refugees require simultaneous efforts to prevent or mitigate the impacts on the refugees themselves and the hosting population, on whose goodwill the granting of asylum ultimately depends.

Where the hosting environment is already under stress, as it is, for instance, in many arid regions of Africa and Asia, [an influx of refugees can seriously threaten the integrity of local ecosystems and the economic activities dependent upon them.](#)

While deforestation may be a problem in many areas, it is likely that the full range of effects upon both the environment and the well-being of refugees and host communities will be far more diverse and demand a broad approach to planning mitigative activities.



Establishment of a refugee camp can quickly lead to loss of vegetation and additional environmental degradation if not controlled.

UNHCR/A.Hollmann

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Refugee Welfare and the Environment: Integrated Concerns

Environmental impacts of refugee camps and settlements can be diverse. Among the most obvious are the cutting of trees for housing support and fuel. Others such as pollution or the extraction of groundwater resources are far more subtle — at least in the short-term. Changes have also been recorded in terms of impacts on household labour and health. In all cases, the increased pressure on a region's natural resources invariably affects human welfare and the options available for sustainable management of natural resources. [Local people and refugees themselves may be equally affected by inappropriate or excessive use of such natural resources.](#)

Host governments and humanitarian organisations are responsible for assuring the welfare and security of asylum-seekers. [The condition of the environment where those asylum-seekers are settled thus becomes a key factor in enabling them to fulfil this mandate.](#) The main reason for this is the range of direct links between refugees' sustenance and products derived from the local environment. Refugees may depend on firewood and building poles from nearby woodland, water from local aquifers or rivers, or medicinal plants from surrounding lands — natural products and services which help support them during a time of great uncertainties.

It is increasingly accepted that environmental interventions cannot be separated from regular refugee assistance activities. The growing number of projects that seek to counter or compensate for the refugees' impact on local environments is an indication of this inter-relatedness, as well as a useful indicator of how serious these environmental impacts can be.

There are also a variety of indirect linkages between refugee well-being and the state of the local environment.

Underground water reserves are easily polluted by inadequate sanitation, a situation which can result in illness and spread of disease. If firewood becomes scarce, refugees may need to go further to collect wood — journeys which may expose women and children, in particular, to other hazards. If farmland is over-cultivated then crop yields may decline and nutritional levels decrease, particularly in refugee settlements that are partly self-reliant for food (see Box 2).

Box 2. Links between the Environment and Refugee Welfare

Sudanese refugees in Kakuma camp, north-western Kenya, live under a regime of strict control imposed by the local Turkana people. According to the traditional Turkana resource ownership system, refugees are not allowed to gather firewood in the area, even if it is dead.

A firewood supply programme meets less than 40 per cent of the energy demands of the camp, so the refugees must purchase wood and charcoal to make up the shortfall. This has a major impact on the spending power of the refugees, especially poorer families and unaccompanied minors, who use up to 35 per cent of their meagre cash income for fuel. This has a knock-on effect as it reduces the funds available for purchasing essential food supplements such as milk, meat, vegetables and sugar. One result has been malnutrition among certain sectors of the population, especially males aged from 15 to 20 years, with a high prevalence of anaemia. Besides the obvious health impact, this has necessitated a large-scale and costly school-based feeding programme.

Environmental concerns are consequently relevant to all agencies with a mandate to ensure the well-being of refugees and asylum-seekers. Such concerns should form an integral part of humanitarian assistance — UNHCR's core mandate of asylum protection could be undermined if environmental concerns are overlooked or not adequately addressed.



The presence of large numbers of refugees puts pressure on limited water resources and can cause refugees to use contaminated water.
UNHCR/C. Sattlberger

Key Principles

What are the Most Important Environmental Principles to Consider?

UNHCR Environmental Guidelines

UNHCR's *Environmental Guidelines* (1996) outline four major criteria which need to be considered when addressing environmental concerns in refugee operations:

1. Integrated approach

Environmental planning is crucial at all phases of refugee operations. Ensuring that environmental concerns are integrated with planning and activities in other sectors is essential to the overall welfare and safety of refugees. It can also have a major impact on the environment, as certain potentially harmful activities might be avoided or overcome by careful planning and co-ordination, particularly during the early phases of operations.

2. Prevention before cure

Taking action to minimise potential problems is a key policy promoted by UNHCR in its field operations. Effective planning can contribute greatly to reducing environmental degradation as well as the costs — human and financial — of site rehabilitation.

Meeting the various needs of refugees is of fundamental importance to preserving the local environment. Unless adequate supplies of food, building materials and fuel are provided, refugees will be forced to search for these essentials themselves. This can lead to localised degradation and conflicts with local communities over access to natural resources.

3. Cost-effectiveness

Refugee assistance is costly and, with limited resources at its disposal, UNHCR must always strive to maximise the efficiency of its assistance programmes. Rather than being a supplement, like most forms of development assistance, refugee assistance has to replicate a support system — unless refugees are allowed by host governments to gain access to land or otherwise integrate into the host country's economy.



Many refugees welcome the opportunity of becoming involved with environment-related projects, for example, kitchen gardens, seedling nurseries and natural resource protection.
UNHCR/S. Errington

4. Local participation

Involving refugees and local communities with the development and management of environmental activities is fundamental to managing natural resources in a sustainable manner. Activities such as reforestation, agroforestry, controlled grazing of livestock, or the promotion of fuel-efficient stoves must have support from refugees and local people if they are to succeed in the long term.

Refugee community leaders should be encouraged to create awareness and a sense of responsibility for protecting the surrounding environment. Actions such as this help instil respect for local traditions such as taboos on hunting or cutting of trees, or entry to sacred forests and other culturally important sites. Such initiatives can go a long way to protecting the local environment and to confining the extent of refugee impacts on the local environment, as well as to reducing potential conflicts over natural resources.

Building on Experience

UNHCR feels that the principles outlined in its *Environmental Guidelines* are of utmost concern at all stages of a refugee operation: they should be clearly understood and the need to apply these principles well appreciated by all decision-makers.

The following sections expand upon a selection of key lessons learned in the implementation of environmental strategies in refugee situations. The focus is broadly on matters of policy, institutional relations, co-ordination and finance — essential principles (summarised in checklist format in Table 1) which should be borne in mind when designing and implementing environmental activities in refugee programmes. Some attention is also given to technical issues related, for example, to energy conservation and natural

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resource management. A short list of key points and specific actions is provided though which donor organisations, in particular, as well as government agencies and other organisations might intervene in ongoing or new, planned developments.

Table 1. Checklist of Key Environmental Principles in Refugee Operations.

Action to consider	Yes/No
Have preventative actions been foreseen in the project proposal or intended continuation of activities?	
Are the envisaged environmental activities simple and will they respond to identified needs in a meaningful manner?	
Is the level of funding required in keeping with the scale of intended interventions? Are proposed activities likely to be cost-effective?	
Are environmental activities other than stoves and tree planting being considered?	
Will suggested interventions add value to environmental assets?	
Have user and access rights been addressed with relation to environmental management?	
Have responsibilities for co-ordination and implementation been addressed and clarified?	
Have the needs and means of influencing environment-related policies been identified?	
Are the roles of development and relief assistance organisations clear?	
Are there other identifiable actions which should be highlighted to help safeguard the local environment?	

Principle 1

Prevention is Better than Cure

- The over-riding environmental principle in refugee programmes is 'Prevention Before Cure'.

Refugee assistance operations have largely dealt with environmental pressures in a reactive way, the first priority being given to security, food, health and shelter for displaced people.

Yet experience suggests that treating environmental impacts as an add-on, something to be tackled at a later stage, has been one reason why refugee operations are so costly for both the international community and host countries. This is mainly because timely and deliberate environment-protecting measures can cost far less (and help refugees more) than the crisis-type response which has predominated so far.

Two examples from Kagera, Tanzania, illustrate the importance and benefits which can be gained from addressing environmental considerations at the earliest possible moment (see Box 3).

Far from being abstract and impractical, these examples show that early and well targeted environmental interventions may be among the most efficient forms of assistance. UNHCR's *Environmental Guidelines* emphasise precisely the cost-effectiveness of preventive approaches to environmental interventions. Considering the scale of per capita financial assistance involved, this approach is fundamentally important.

Box 3. Siting of Refugee Settlements

Emboldened by the inability of authorities to police game reserves in Kagera, Tanzania, Rwandan refugees and local people encroached upon the reserves' wildlife resources. Poaching for the refugee market brought an abrupt end to revenue from private hunting ventures, formerly averaging US\$100,000 per year in local and central government payments, and up to 10 times this amount through indirect expenditures on tourism.

In 1996, US\$1.9 million was provided to rehabilitate Tanzania's game reserves. The following year, another US\$750,000 was made available to further restore those reserves most affected by refugee encroachment. The need for such assistance resulted in part from the location of camps too close to a valuable ecological and economic resource. Of course the camp establishment phase was a time of great pressure on limited emergency resources and there was a multitude of conflicting demands placed on all those involved. Nevertheless, had environmental arguments prevailed in siting the camps, or in their subsequent relocation, rehabilitation would have been largely unnecessary and hunting (and related) revenues would have continued to flow in.



Practical Implications

Prevention before cure may be accepted as a working principle. But what does it mean in operational terms?

- ✓ **The emergency phase is the critical moment at which environmental degradation may be confined or limited.**

Environmental concerns are often not a priority at the outset of an emergency when saving lives must take precedence. But, environmental problems created at this stage continue into other phases of refugee assistance, and typically become more serious and costly to redress. Problems, costs and conflicts related to natural resource degradation are likely to be reduced significantly if environmental issues are addressed from the outset. Otherwise, efforts to promote good local relations will be less effective, refugee welfare will be jeopardised, and eventual repair will be costly. Efforts should therefore be made to address this as soon as local situations permit.

- ✓ **Site selection and site planning are fundamental issues.**

There are many constraints governing selection of camp sites. Some basic environmental principles which should be taken into consideration relate to the size of settlements, and their distance from sensitive areas and from each other. Internal planning decisions such as plot sizes and orientation of roadways are also important. Although the pressure to meet basic human needs can be intense during

- ◀ *Site selection and camp layout require particular attention. Unless preventive measures are initiated from the outset, local wood resources may become depleted and ground cover eliminated. Such activities can lead to soil run-off, erosion and sedimentation of water sources.*
UNHCR/A. Hollmann

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an emergency operation, it is essential that environmental concerns are taken into account. Failure to do so will invariably result in environmental degradation and subsequent losses in terms of local welfare.

The Best Option

- ✓ **Integrating refugees with local communities is preferred over camp development.**

Temporary integration of refugees into local communities can help create a manageable situation of social check-and-balance, even where a refugee influx leads to drastic population increases and where this influx may be close to ecologically sensitive areas.

Local communities can exert greater control over the activities of refugees if the latter are more sparsely distributed. At the same time, any damaging activities are likely to be less concentrated if the refugee population is thinly spread. Furthermore, local integration brings with it a notion of security and access to natural resources, both of which are likely to contribute to more appropriate environmental management on the part of the refugees.

If the “Best Option” is not Available

- ✓ **If local, dispersed integration is not an option and camp-based settlement is necessary, the following guiding principles are offered:**

- **Settlement size:** Where refugees depend on local natural resources, camp populations below 20,000 are most environmentally sustainable. Large concentrations of refugees in rural or remote areas tend to have more severe environmental implications than dispersed settlements with the same total population. The exploita-

tion of natural resources by refugees is more difficult to control when the refugee population outnumbers that of nearby communities. Local authorities are often unable to cope with increased demands for surveillance.

- **Settlement siting:** Serious environmental damage can be reduced where camps are located at least 15km from protected areas or zones of ecological significance. Like others, refugees exploit natural resources, particularly wood and animal products, if they are readily accessible. This poses a threat to biodiversity and ecological integrity, especially when the areas in question are wildlife corridors, host particularly rare plant or animal species, or are part of an ecosystem supplying vital services, such as a water catchment zone. Such exploitation can also undermine the income-generating potential of protected areas in terms of royalties, hunting revenues, visitor fees, or the services which they provide. Rehabilitation of such protected areas is time-consuming, costly and, in some cases, biologically impossible.

- **Settlement spacing:** Widely spaced camps result in less environmental damage than camps close to each other. In time, concentric rings of exploitation tend to develop around refugee camps, as local people and refugees extract and harvest a variety of natural products for use and sale within camps. If camps are sited close to one another, the zones of exploitation will invariably overlap, the result being doubled pressure on the land, which is not conducive to encouraging natural regeneration. Where possible, camps should be located at least one day's walk from each other.

- **Housing density:** Small plots limit the opportunity for refugee tree planting and lead to a greater imbalance between demand and supply for natural resources

from within the settlement limits. Sound environmental management in refugee settlements is more likely where family plots are large — 400m² and above. The larger the plot, the greater the area for which the refugee family is able to take some management responsibility and over which it can exert control. Tree planting and protection of existing vegetation may take place **only** on household plots. Thus the larger the plot allocated to a family, the greater the area drawn under some form of assured management.

• **Site clearance:** As much woody vegetation as possible should be maintained during site establishment. Leaving and protecting ground cover reduces erosion, controls dust or mud, provides wood products for refugees and offers shade or a windbreak. It may not always be necessary to destroy vegetation in order to meet the requirements of rigorous planning specifications or disease vector control. Camp areas should never be clear-felled.

• **Alignment of roads:** To avoid water erosion, roads within and around camps and settlements should be aligned **across** slopes, and not up and down. Bare ground and areas of concrete increase run-off of rainfall, a feature which may result in gully formation and soil erosion. Gullies represent a physical threat to people and livestock. Preventing the spread of gullies and repairing the physical degradation is an expensive undertaking, much of which can be avoided by careful planning.

• **Housing configuration:** One of the most effective energy-saving measures which might be applied is to pool household cooking resources: individuals or couples cooking alone should be discouraged from an energy-saving point of view. Clustered housing arrangements, where groups of refugee shelters face

each other across a small central area, are more likely to promote shared cooking between two or three households than are lines of shelters facing the same way. This practise can have a positive impact on the local environment.

KEY POINTS: PREVENTION BEFORE CURE

- Identify actions for immediate implementation which could reduce future environmental problems and economic outlay.
- Identify actions which are likely to have a serious negative impact on the local environment and determine what, if anything, can be done to minimise or confine such damage. Closely monitor such elements.
- Limit the extent of physical change to intended areas for settlements or camps.
- Key issues such as camp siting, size, spacing, housing density and arrangements, and development of infrastructure should be carefully planned with environmental concerns and considerations taken into account to the extent possible.

POINTS OF INTERVENTION

- Engage with government agencies and key organisations in discussions regarding site selection, spacing and intended population density.
- Engage in support activities during camp establishment, design and construction.
- Local institutions, organisations and communities should be contacted and informed of intentions regarding camp siting. Valuable environmental information might be gained from working with local planners and organisations.

Principle 2

Key Principles

Environment Programmes Need Not be Complex

- ✓ Environment programmes can be designed using simple techniques and practices.

Environmental programmes are often perceived as being complex undertakings. Some projects and activities may have technical components, but this is not always the case. Increasingly, donors and managers favour projects based on simple techniques and practices that take account of avail-



Establishment of tree nurseries is a frequent development in refugee operations. Refugees should be encouraged to participate in the development and management of nurseries.
UNHCR/W. Stone

able information, human resources and funds. The merits of such simple project activities need to be further highlighted and supported.

Host governments and project managers in particular need to appreciate the non-technical aspects of environmental support programmes. This is especially important in a refugee context where, by ignoring or avoiding environmental considerations for fear of their being too technical, decision-makers risk making judgements which may have serious social, economic and environmental consequences.

It is also important to choose non-technical options given the lack of environmental specialists in most emergency teams and the fact that this may be an unfamiliar issue to many non-specialist staff.

✓ **Simple environmental activities can be initiated almost immediately in a refugee emergency, regardless of the situation, pending development of a more comprehensive response strategy.**

Standard emergency phase activities can include:

- tree marking (painting rings around a selection of species and ages) to discourage cutting of certain trees;
- appointment of guards to direct and control tree cutting;
- awareness-raising among refugee populations of the environmental rules and regulations of the host country, through placement of signs and posters, as well as organised meetings;
- clear designation of sites from where construction materials may be collected; and
- establishment (or strengthening) of environmental co-ordination forums with government agencies, other organisations, local communities and refugees.

✓ **Simple data gathering processes should be initiated as early as possible to determine baseline environmental data which can be highly beneficial for later planning and monitoring.**

Local institutions capable of carrying out required surveys should be identified. Among the most common data required are:

- the location of legally gazetted areas such as forest reserves, game reserves and national parks;
- other ecologically sensitive sites — non-gazetted areas identified by government and community leaders as being important — such as water catchment zones and sacred forests;
- location and extent of nearby woodlands, forests and plantations;
- basic land-use patterns of agriculture and local settlements; and
- main freshwater features such as rivers, lakes and swamps.

✓ **Make use of existing information and experienced personnel.**

Much of the information required may already exist with appropriate national or local institutions: these should be consulted at the earliest opportunity. Similarly, experienced personnel should be sought from host government agencies, university faculties and existing national and international organisations. Time-consuming, detailed surveys that present surplus information should be avoided. Resulting information must be presented in a simple and unambiguous manner.

***KEY POINTS: ENVIRONMENTAL PROGRAMMES
NEED NOT BE COMPLEX***

- Ensure that suggested environmental activities and project goals are feasible given current conditions, time and resources available.
- Determine the extent to which implemented projects will benefit local communities and refugees.
- Ensure that refugees and local people are involved with project design, implementation and management.
- Involve local institutions with project design and management. Maximum advantage should be taken to use existing information and locally available skills.

POINTS OF INTERVENTION

- Project planning and implementation.
- Baseline data collection, analysis and monitoring.
- Support of locally appropriate awareness activities.
- Local surveys such as land-use, vegetation cover, settlement patterns.
- Promotion of, and participation in, environmental co-ordination groups.

Principle 3

Key Principles Environment Programmes Need Not Be Costly

Certain projects or activities require considerable funding over a number of years. Regular, continued support is essential in such cases if the goals are to be achieved.

However, not all projects require the same investment. In the short-term, small-scale demonstration projects that introduce simple and locally (social and environmental) appropriate approaches should be encouraged. Such projects are often inexpensive, generally do not require sustained funding and have the added advantage of bringing immediate benefits to the stakeholders. Demonstration projects should not, however, be seen as a replacement for longer, more intensive, activities which require sustained funding over a number of years. Their primary role is to catalyse local action to safeguard the environment and improve local well-being; demonstrate alternative, more sustainable, practices of resource use and management; stimulate co-operation between refugees, local communities and local authorities; and reduce conflicts over natural resources.

✓ **Cost-effectiveness should be a key aspect of all environmental activities in refugee situations.**

Expenditure needs to be kept as low as possible and returns maximised. In this context it is worth noting that many environmental activities are cost-free: changes in policy may be the only requirement. In other activities, where external funds are being sought, it makes sound economic and developmental sense to attempt to apply cost-recovery concepts.

✓ **Defining environmental problems is vital to develop cost-effective responses.**

Environmental problems need to be carefully defined in order to develop appropriate and effective responses. If, for example, the main problem is clearly related to an aspect of natural resource degradation, the responses should focus specifically on that sector. Other issues that might seem at first to be environmental, however, can have as much to do with easing tensions, responding to local requests and balancing levels of services as they do with measured impacts on natural resources. In this case, the recommended response should be much broader, introducing environmental activities alongside various locally designed development and support projects.

✓ **Some environmental projects may have long-term objectives and impacts: funding must be secured to ensure that objectives can be reached during the intended span of the project.**

While the total cost of environmental programmes may be relatively low if activities are appropriately targeted, multi-year funding commitments from donors are nevertheless desirable. They may entail the progressive establishment and strengthening of community-based management structures or capacity-building in local and government institutions. They may also involve the establishment of trees and other vegetation with long growing cycles. Such activities demand funding over a period of years.

✓ **Dedicated budgets may need to be set aside for certain activities, for example research and monitoring.**

Project budgets, no matter the scale, should include an allocation for the establishment and operation of basic

research and monitoring systems. If this is not foreseen, such systems are likely to be inconsistent and incomplete. Research and monitoring activities can be implemented by a dedicated environment agency and progressively handed over to local institutions.

***KEY POINTS: ENVIRONMENT PROGRAMMES
NEED NOT BE EXPENSIVE***

- Projects which demonstrate immediate, visible and lasting impacts should be favoured. This should not preclude community or agency capacity building assistance, which is often a slow process, but one which usually brings dividends in the long term.
- Small-scale projects should be encouraged where these are likely to bring immediate benefits to stakeholders.
- Each project proposal should contain a basic cost-benefit justification.
- Consideration should be given to non-quantifiable benefits which might arise as a result of implemented project activities.
- All project proposals should have detailed timeframes and budgets. Projects should ideally demonstrate how intended activities will be integrated with ongoing activities and how support might be scaled down in time.

POINTS OF INTERVENTION

- Early intervention in project design and costings.
- Monitoring effectiveness of projects.
- Training programmes for refugees and local people to encourage their participation and involvement in projects.
- Inclusion of local institutions and authorities in project development and implementation.

Principle 4

Key Principles Environmental Management is More than Providing Stoves and Planting Trees

Planting trees and promoting energy-efficient stoves are two of the most common environmental support practices adopted in refugee situations. One of the reasons for this is because environmental programmes in refugee operations are often seen as straightforward supply and demand activities. The supply of wood is increased through tree planting and its rate of consumption reduced by promoting improved cooking stoves. Under pressure to offer simple



*Fuel-efficient stoves, made from clay or metal, use less wood than traditional three stone fires and thereby help reduce pressure on the environment surrounding camps.
UNHCR/C. Sattlberger*

indicators of progress to managers and donors, there can be a tendency to over-emphasise the utility of stove promotion and tree planting. Both result in visible and often high profile assets — stoves and trees are easy to count — but they can raise more questions than they answer about ownership and overall cost-effectiveness.

The suitability of tree planting and the promotion of energy efficient stoves must therefore be examined for each situation. Other options also need to be considered. The following sections outline some of the most important considerations which can and should be implemented as part of routine project activities.

Energy Programmes

✓ **Improved stoves do not result in fuel-savings unless the conditions under which they are used are conducive to economy.**

The promotion of energy-efficient cooking stoves is a useful component of some environmental programmes. At the same time, however, the potential of such stoves should not be over-estimated and promotion should be at a scale commensurate with the likely impact.

The promotion of energy scarcity, or at least the avoidance of a situation of abundance, is a pre-condition for effective use of technologies intended to lead to fuel-efficiency. The intentions of any energy-saving programme must be clearly presented to refugees and their participation invited.

Under the right conditions, and if properly used, improved stoves offer the potential for refugees to save 20-30 per cent of the energy used in cooking with traditional open fire systems. An approach that promotes low cost, user-built stoves (mud-stoves, in many cases) is preferable.

Production of pre-fabricated stoves (made of clay or metal) can be more costly, but this may be useful as a skills development and income-generating activity.

- ✓ **A narrow focus on technological solutions should be avoided, and the breadth of possible adaptations to cooking systems more widely explored and appreciated.**

A more effective strategy might be a broader intervention that addresses the whole range of energy-saving opportunities that exist for refugees, not only their cooking devices.

- ✓ **The right cooking techniques can save substantial quantities of energy.**

Refugee families can implement a wide variety of such energy-saving practices when cooking: the quantity of fuel thus saved far exceeds what an improved stove alone can offer. Such practices include the splitting and drying of firewood, careful control of the fire and its air supply, gentle simmering, prompt extinguishing of the fire, pre-soaking of hard foods, and using lids on pots.

- ✓ **Promotion of familiar fuels and cooking systems should take priority over unfamiliar items**

The types of stoves being promoted should be designed around the main fuel(s) used and the cooking styles employed. A choice of locally-produced models should be offered. Stoves and other cooking devices which use familiar and convenient fuels and which can be manufactured on site are generally cheaper and are more likely to be adopted and used in an energy-efficient manner. This generally implies woodfuels and woodfuel appliances.

KEY POINTS: ENERGY PROGRAMMES

- Energy-saving activities must not only focus on stoves and other devices.
- Energy-saving concepts and principles must be clearly communicated to refugees.
- All such principles and concepts must be culturally and socially appropriate to the end users.
- Parallel efforts should be set in place to ensure that energy is not freely available to the refugees – otherwise there is little incentive for energy-saving proposals to be adopted.

POINTS OF INTERVENTION

- Evaluation of needs and opportunities regarding fuel availability and likely demand; problem analysis and rectification in an appropriate manner.
- Gender appropriate awareness programmes on energy-saving techniques and practices.
- Provision, in return for labour or some other environment-supporting service, of appropriate stoves, cooking materials, seedlings or other incentives.

Natural Resource Management Programmes

- ✓ **Natural resource management programmes must be appropriate to local conditions and meet identified social and ecological needs.**

Tree nurseries and the establishment of plantations are common activities in a relief setting. While natural resource management includes forestry and traditional tree planting activities, the scope of such programmes is much greater and should be explored further.

Donor organisations, government authorities and other institutions should be encouraged to support more sustainable and effective practices such as natural regeneration and the promotion of sustainable tree cutting practices. Stakeholders should be encouraged to plant and jointly manage a variety of multipurpose trees and crops within and adjacent to the camps.

- ✓ **Tree planting has certain limitations in refugee situations but, given favourable circumstances, this can be an activity well worth supporting.**

The use of salaried refugee labour to establish nurseries or plantations is limited to the period for which funds are available. When project funds are used up, there is usually no way to continue paying salaries. This system has many inherent flaws, including low survival rates of seedlings in nurseries and plantations (on account of drought, weeds, livestock pressure and fire), uncertainty about harvesting rights, and a general lack of interest in voluntary participation in environmental activities.

Tree planting should not, however, be abandoned. Planting within camps, particularly on household plots, normally achieves high survival rates and is of immediate social

benefit. Seedling production to supply such programmes should be decentralised to local community groups and refugees as early as possible. Host governments and emergency-oriented donors may favour large, high profile, centralised tree nurseries using hired labour, but these are unsustainable, engender lack of ownership on the part of seedling recipients, and generally lead to poor survival rates after planting out. Decentralisation to individuals and organisations within the refugee and local community, each with modest output targets, can achieve a satisfactory balance between meeting production targets cost-effectively and promoting better survival rates by adding value to the raising and protection of trees. Furthermore, small-scale, private tree nurseries develop skills that can de-mystify the process of growing trees.

✓ **Local communities must be consulted prior to environmental rehabilitation plans being prepared.**

Protection and rehabilitation should aim to restore the capacity of the local community to derive a sustainable livelihood from their natural resource base. Often, if agriculture is the basis of that livelihood, sustainability refers to the use of agricultural practices that do not degrade the soil and nutrient supplies in the long term. Integrated agroforestry practices, using trees within agricultural fields, are much more likely to contribute to long-term ecological sustainability and livelihood security than are plantations.

While plantations may help respond to host governments' concerns that tree cover has been damaged, by providing new trees, this may be inappropriate for several reasons. If previously uncultivated land is opened up by refugees there is a chance, particularly where the supply of land is short, that it will continue to be cultivated by locals after repatriation. Restoration of previous levels of tree cover may conflict with local aims for expanded cultivation.

Similarly, plantations require land that locals may prefer to use for agriculture.

- ✓ **Refugees and local people should be involved in prioritising interventions and managing sustainable natural resource management programmes. Usufruct rights are key to the success of any such programme.**

Whenever trees are to be planted or protected as part of an environmental mitigation or rehabilitation strategy, it is imperative that the ownership rights of the trees' eventual users are clearly established at the outset.

The most cost-effective way to address deforestation outside refugee settlements and on land not under private ownership is normally to promote regeneration and managed harvesting — rather than new planting. This is likely to make a much more significant contribution than tree planting, even on a massive scale.

- ✓ **Management and protection must be a high priority on any natural resource management programme. Flexibility will be needed to enable appropriate management systems to develop in respective situations.**

Strict monitoring and protection is essential. This includes regulating the harvest of wood, grasses, wild foods and animals, perhaps zoning different areas for use on a rotational basis, and the strategic designation of 'no cutting zones' to be used as genetic banks for eventual regeneration. Particularly sensitive ecological zones might need to be closed off from any access.

Simple protection techniques include tree marking (showing which trees must not be cut), signs with appropriate pictures or messages in local languages, public awareness-raising programmes, and forest guards.



KEY POINTS: NATURAL RESOURCE MANAGEMENT

- Access and benefit sharing issues should be clarified at the outset for all refugees.
- Small-scale, localised planting around households is likely to be more successful than salaried employment of workers in plantations.
- Seedling production should ideally be contracted out so that refugees or local people have a greater stake in its management.
- Ensure that refugees and local people are involved with natural resource protection and management programmes through, for example, on-site work, forest users groups, environmental round-tables and land-use planning.

POINTS OF INTERVENTION

- Policy and management interventions regarding access and usufruct rights for refugee populations.
- Support to natural regeneration programmes, with the support of local communities in particular.
- Small-scale demonstration projects which adhere to the governing principles outlined in UNHCR's *Environmental Guidelines* (1996).

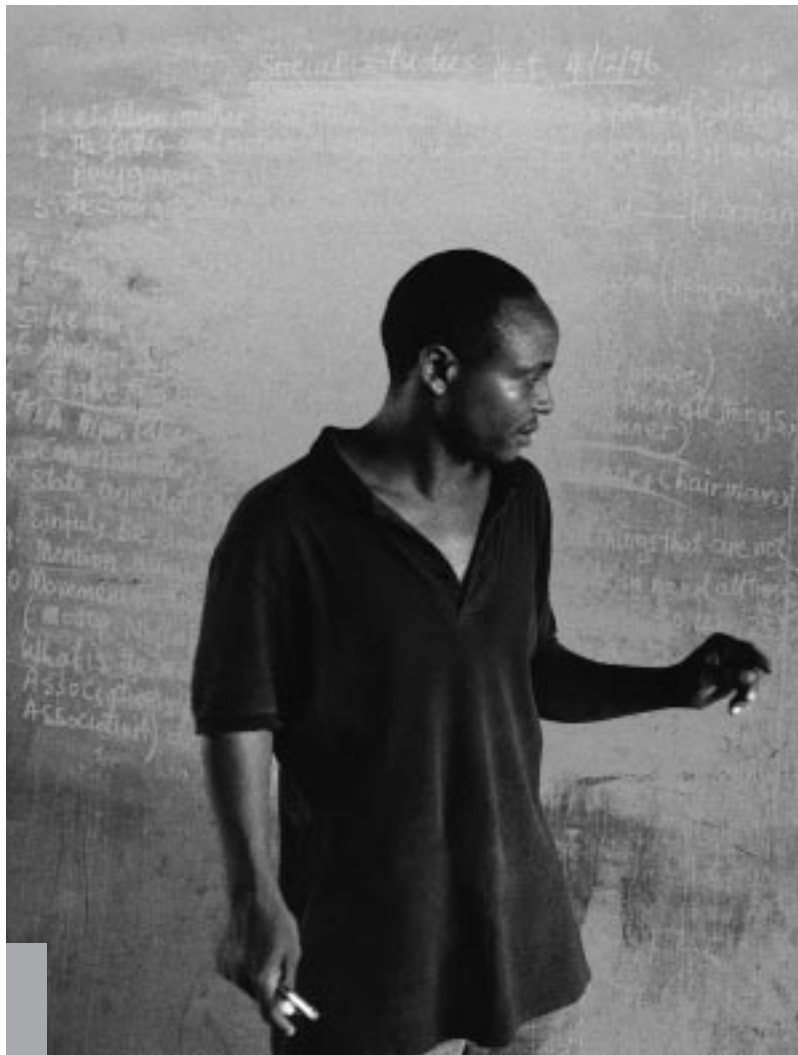
◀ *Regular meetings between refugees, community representatives and implementing partners are essential to guarantee the smooth running of environmental projects.*
UNHCR/N. Worrall

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Environmental Education

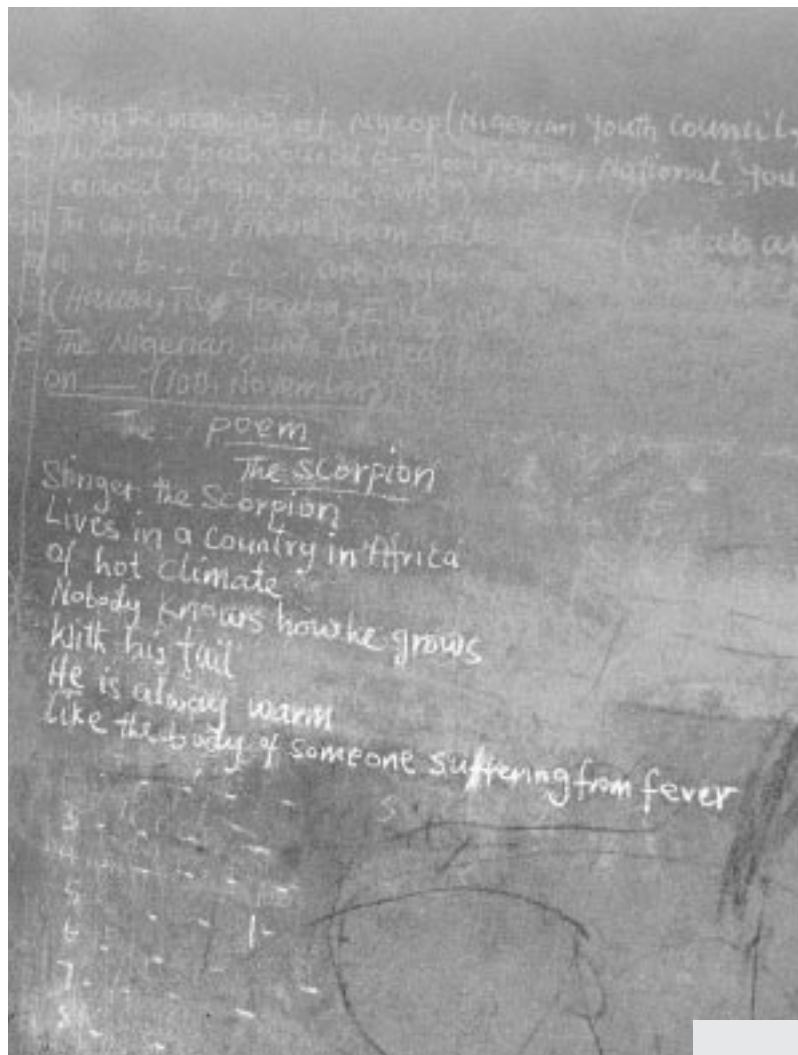
- ✓ **Environmental education programmes should relate to ongoing and planned environmental activities.**

Environmental education activities can be introduced as a refugee programme develops to reinforce the environmental themes contained in other project components.



There should be strong and practical linkages between any environmental programmes and formal and non-formal environmental education. Education typically has long-term impacts and should be supplemented with short-term public information messages on environmental protection. It is advisable to ensure a mix of education and incentives for environmentally-sound behaviour.

- ✓ *Integrating lessons on the environment with normal school programmes is an important part of UNHCR's awareness raising programmes.*
UNHCR/S. Errington



✓ **Multiple entry points are available for non-formal environmental awareness raising.**

Non-formal environmental education can be channelled through health programmes, adult literacy classes, video parlours, religious services, notice boards, drama and poetry festivals, competitions, etc. Networks of community services and health mobilisers can be particularly effective in passing on appropriate environmental messages, given appropriate training.

✓ **Formal and non-formal approaches should be harmonised for better results.**

Non-formal education can be most effective in schools if a 'whole school approach' to environmental education is adopted, so as to use co-curricular activities that reach all pupils and teachers, as well as features of the school landscape. Schools must not operate as islands of knowledge in communities: they must be given to communities and the communities must be brought into the schools, for example, through camp/settlement environmental working groups.

KEY POINTS: ENVIRONMENTAL EDUCATION

- Environmental education and awareness raising should be integral components of all environment-related support activities.
- Gender and cultural issues must be taken into account in all education activities.
- Suitable entry points should be determined for each education programme.
- Environmental education should build upon existing ecologically sustainable knowledge and skills.

POINTS OF INTERVENTION

- Support to, and implementation of, formal and/or non-formal environmental education activities.
- Exchange visits for teachers and trainers to benefit from experiences in other situations

Data Analysis and Monitoring

- ✓ **Collection of baseline environmental data should be undertaken from the earliest possible moment, and should be repeated at regular intervals.**

Up-to-date information on the local environment, as well as the manner and scale of interactions between refugees and the host environment, is essential to guide, monitor and evaluate environmental interventions. Key information normally relates to refugee wood consumption, rates of tree cutting, types of cooking systems and their efficiencies, and the effect of diet on energy demand.

Local and national agencies responsible for environmental monitoring should be contacted in the first instance. In view of the importance of this activity, a dedicated unit for research and monitoring may be justified.

- ✓ **The choice of measurement and monitoring tools will vary from one situation to another, but standard units should be employed to facilitate data storage and comparison.**

Remotely sensed data is a valuable environmental monitoring tool to complement ground observations and existing thematic maps in refugee situations. This can include aerial photography, aerial video or satellite imagery. Aerial video may be a useful monitoring tool for small areas. Recent aerial photos may be available from host governments or may need to be commissioned as part of environmental monitoring activities. Satellite images, which are especially useful for retroactive analysis and broader-scale impact assessments, may need to be commissioned. Standard measurements should be practised in all such activities.

- ✓ **Relevant data should be stored in a centralised database and interpreted to suit the needs of decision-makers, planners, implementing partners, other institutions and local communities.**

Geographical information system technology has an increasing number of appropriate applications. The ability to generate new information and produce simple maps at low cost can make a valuable, practical contribution to field-based data collection and environmental monitoring. Advantage should be taken of UNHCR's central, and in some cases national, database on environment-related information in relief operations.

KEY POINTS: DATA ANALYSIS AND MONITORING

- Monitoring, evaluation and reporting should be an integral component of all environment-related activities.
- Remote sensing is a powerful tool which may assist planning and monitoring.
- National and local institutions should be involved with, and made responsible for, remote sensing wherever possible.

POINTS OF INTERVENTION

- Support to research, monitoring and evaluation programmes, with appropriate feedback and communication mechanisms.
- Involvement of national authorities and institutions with remote sensing and monitoring activities.
- Support to sectoral training programme intended to strengthen local personnel skills and institutional capacities for data analysis and monitoring.

Principle 5

Interventions Should Add Value to Environmental Assets and Practices

- ✓ **Refugees should be aware that environmental assets are not available on a free-for-all basis.**

The hand-out mentality, pervasive in refugee operations, stems from the tradition of donors providing basic needs — food, water and health care in particular — to asylum-seekers, free of charge. However, a host country's natural resources can be better protected if refugees understand at the outset that resources such as wood have some sort of value, and that they should be used frugally.

Commercial value can be added to a resource to better ensure sustainable exploitation. Trade in natural products such as honey, gums, natural medicines or animal feed can, for example, be regularised. Opportunities may arise to encourage such trade if it does not already exist. Close monitoring is essential for such activities to ensure that natural resources are not over-exploited for monetary gains, and that benefits derived from controlled usage are fairly shared among responsible stakeholders.

- ✓ **External assistance will most likely be required to determine the value (economic or otherwise) of some natural resources.**

The value of certain resources may be difficult to determine. Nonetheless, it is important that this is accomplished in order to promote sustainability and the rational use of funds. Various participatory approaches, such as rapid rural assessments, can be used to determine the values which



people apply to resources. For more detailed inventories, the assistance of resource economists may be required to determine over what time period and at what rate of return environmental pay-offs should be realistically expected.

✓ **It is vital that natural products are not undervalued, but are traded at something approaching the true cost of their production and worth.**

It is sensible to ensure that all taxes, levies and licence fees due are paid in full by traders. This is the responsibility of the local government and can play an important role in boosting local revenue collection as well as encouraging more sustainable use of natural resources.

Adding value to natural resources does not only mean that their economic value must be enhanced. It has broader implications for the overall manner in which environmental programmes are operated, suggesting that the give-away mentality be contested in order that some commitment — economic or otherwise — is made by the refugee community in return for the use of environmental assets. This implies that any environmental commodity, tree seedlings, cooking stoves, firewood or the like, should not be provided without some substantive commitment in return (see Box 4).

◀ *Adding economic value to natural resources can help ensure sustainable exploitation of resources such as fuelwood and building materials.*
UNHCR/C. Sattlberger

Box 4. Adding Value to Environmental Goods and Services: A Wood-for-Work Approach

Fuelwood is one of the most heavily used natural resources in refugee situations. Increased demands on local resources by the concentration of large numbers of refugees, lead to wood shortages and eventual scarcity. As a result, refugees and some locals may be forced to walk longer distances: the search for wood rapidly changes from the environmentally benign collection of dead wood to cutting live trees.

Supplying fuelwood from more remote surplus areas and its distribution to refugees is often seen as the most logical environmental response. Yet the approach has proven costly as well as relatively ineffective in some locations as, having obtained the minimum quantity of fuelwood required, refugees may continue to collect wood either for additional consumption or to trade for other goods. Despite provision of fuelwood, at a cost of US\$1.2 million, to the Kagera camps in western Tanzania, no significant changes were recorded in the pattern of deforestation, and the consumption of fuelwood by the refugee population remained well above normal (pre-refugee) levels.

Instead of an organised, free supply of fuelwood to refugees, environmental objectives can be achieved more efficiently if, for instance, wood supplied is exchanged for refugees' contribution for environmental activities — fuelwood for environmental work. Such an approach has been used, with some success, in the Dadaab camps in eastern Kenya under a project implemented by GTZ. Rather than going against economic fundamentals by making a scarce item such as firewood available free of charge, sound interventions can build on field observations about people's responses and their great ability to cope with shortages. 'Fuelwood commoditising' arrangements (as in Dadaab) promise to reach set environmental objectives at a much lower cost than the simple 'trucking-and-distributing' approach, without negative impacts on refugee welfare.

- ✓ **Attaching a monetary value to resources can reduce resource consumption and thus enhance their protection, but this needs to be closely monitored.**

Assigning a cash value to resources may, for example, strengthen the resolve of local people to protect resources from over-exploitation. However, it can also place a financial burden on the refugee community that some of its members may find difficult to bear. Refugees might find their nutritional status affected by an inability to procure sufficient firewood for cooking. Monitoring household coping strategies is an important part of any commercialisation strategy in order to highlight cases where refugee well-being may be adversely affected.

KEY POINTS: ADDING VALUE TO ENVIRONMENTAL ASSETS

- Identify activities that can be taken to enhance the value attached by refugees and/or local people to particular environmental assets, either economically or in some other way.
- Free distribution of goods or products should be discouraged. If this is necessary, plans should be initiated to progressively withdraw external support.
- Commercialisation of natural resources can be damaging if not properly regulated.

POINTS OF INTERVENTION

- Conduct economic evaluations of available and most widely used natural resources.
- Identify and establish local and socially appropriate incentives which might contribute to the sustainable use of natural resources.
- Together with local authorities and institutions, establish a mechanism such as a revolving fund to re-invest income gained from the sustainable use of natural resources into environmental management programmes.

Principle 6

Key Principles Access Rights and Benefit Sharing are Fundamental to Sound Environmental Management

- ✓ **Community and refugee involvement in project activities is a prerequisite for sustainable environmental management.**

The level and extent of refugee and local participation in environment-related activities is partly dependent on the nature of incentives offered to individuals, as well as the benefits likely to accrue from such participation. This means more than just their involvement as paid labourers — a practice which may actually threaten sustainability and undermine the potential for voluntary participation in the longer term.

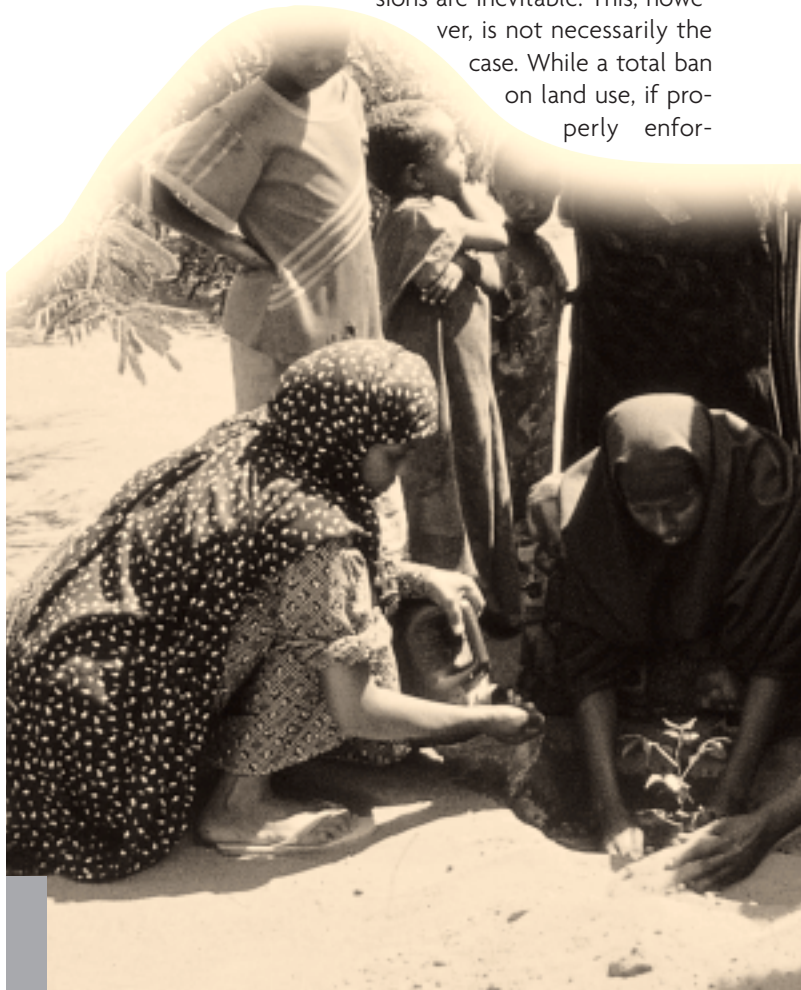
Effective and sustainable environmental management, as well as successful rehabilitation, requires an understanding of the incentives and motivations for refugees or local communities to become involved in such activities. Such incentives revolve primarily around access or usufruct rights. If a refugee family is given responsibility for managing a patch of fruit trees, for example, they will naturally be more inclined to protect the trees so that they can benefit from the harvest. When user rights are not made clear, people generally have little interest in managing natural resources.

- ✓ **Clear policies must be established on access and user rights.**

Access to land and other resources are fundamental issues in refugee situations. Little care will be given to assets

established or maintained under ill-defined ownership or responsibility. Government policy towards land is often the key to the success of refugee participation in sound natural resource management. Decisiveness and clarity is essential. An ambiguous government policy or inconsistent application of laws relating to refugees' rights over local land is likely to be more environmentally damaging than the adoption of a clear stance, even if that stance allows for full access and exploitation.

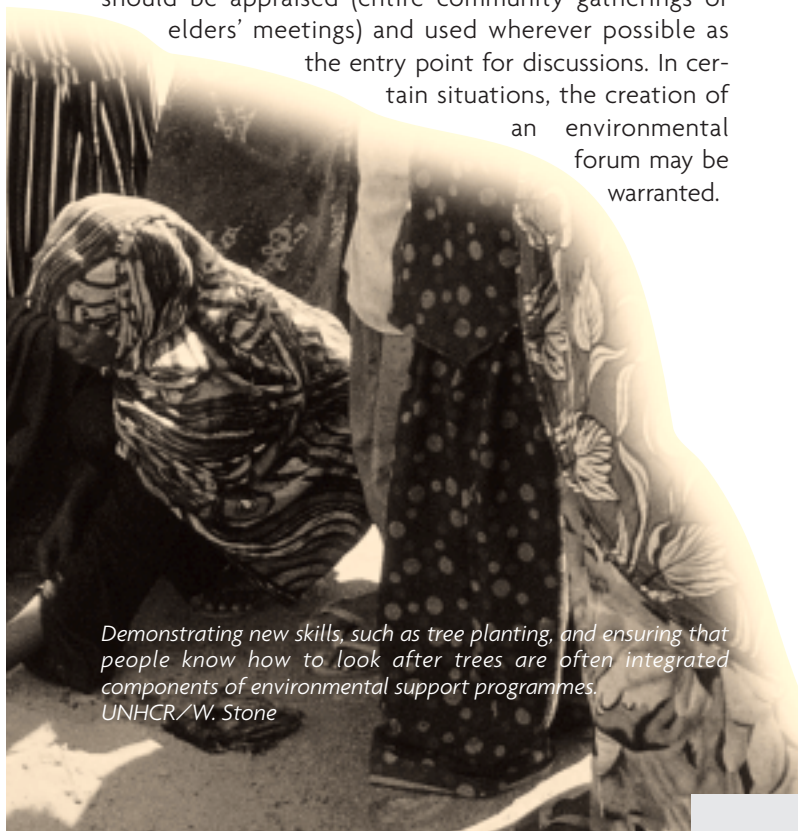
Asylum-providing governments have long assumed that if refugees are allowed access to local land — for example, for cultivation or grazing — negative environmental repercussions are inevitable. This, however, is not necessarily the case. While a total ban on land use, if properly enforced,



ced, may protect the environment, such bans are rarely workable without concerted local support. Thus local resource utilisation will generally continue, but in a legal vacuum. Such a ban on refugee user rights that is weakly enforced is a very poor environmental option. In this situation, refugees are neither legally allowed to use local land, nor physically barred from doing so, resulting in unsustainable exploitation.

✓ **Good communications are essential to ensure that all actors and stakeholders are aware of local policies and regulations.**

It is essential that host governments not only make a clear policy statement on refugee access and user rights to land or other resources, but follow this through with whatever enforcement may be required – especially if a containment option is adopted. Locally appropriate forms of meetings should be appraised (entire community gatherings or elders’ meetings) and used wherever possible as the entry point for discussions. In certain situations, the creation of an environmental forum may be warranted.



*Demonstrating new skills, such as tree planting, and ensuring that people know how to look after trees are often integrated components of environmental support programmes.
UNHCR/W. Stone*

KEY POINTS: ACCESS RIGHTS AND BENEFIT SHARING

- Projects should include measures to empower =beneficiaries with a sense of participation, ownership and responsibility towards environmental assets.
- Develop a clear policy on access to, and use of, natural resources by refugees. Any subsequent changes should be communicated to refugee leaders and local communities.
- Gender issues must be taken into account when considering and developing strategies related to access and benefit sharing.
- The role of outside institutions must be made clear to all stakeholders: if local organisations are involved, there should be a clearly defined phase-out programme of their activities.

POINTS OF INTERVENTION

- Government authorities, in particular, must provide an unambiguous statement to refugee leaders regarding their rights to, and use of, natural resources.
- Establishment of, and participation in, community discussion groups.
- Development and introduction of appropriate incentives to encourage sustainable environmental management practices.
- Training and outreach support programmes in related sectors.

Principle 7

Co-ordination and Implementation are Vital but Separate Environmental Roles

Some environmental programmes may demand technical expertise, often for a short, fixed period. At the same time, there is a clear need for a parallel co-ordinating role in order that policy and practice are monitored, and disparate approaches avoided. Separation of these roles acknowledges not only the difference in expertise required, but also the potential conflicts of interest that could arise if one agency had an all-encompassing mandate. A two-tiered system offers objectivity and accountability.

✓ **Implementation and co-ordination are two distinct but important roles.**

Co-ordination and policy formulation are generally the responsibility of the host government authorities, in conjunction with UNHCR. Together, they can establish forums for dialogue and co-ordination at which all stakeholders are represented. Such forums may already exist in local government, in which case a process of identification and institutional strengthening may be needed. In such situations, the general role of the co-ordinator would be to:

- oversee implementing partners;
- provide guidance on policy direction; and
- ensure harmonious working relationships and non-contradictory implementation strategies.

- ✓ **There are clear environmental, social and political benefits to be gained from appointing a lead agency to implement environmental initiatives across several refugee settlements.**

Relations with host communities and the government can be significantly improved through the appointment of a lead agency responsible for implementing environmental activities.

The relationship between non-governmental organisations and UNHCR is also likely to be more harmonious if one organisation has a clear mandate to handle environmental matters and provide environmental advice. This process can reduce inter-agency rivalry and duplication, as there is no competition for the same funds for similar activities, and, ultimately, can have a real impact in reducing the rate of environmental degradation. The lead agency can progressively hand over responsibility of a number of activities to camp management and community services agencies.

- ✓ **Where possible, and according to their capacity, local organisations should be identified to manage implementation.**

New structures should be created only where those existing are incapable of addressing environmental concerns. Any support for local organisations must include appropriate capacity-building measures. Institutional strengthening, if developed slowly and steadily, will be a long-term benefit to the region, and should greatly increase the chances of sustainability of any environmental initiatives.

KEY POINTS: CO-ORDINATION AND IMPLEMENTATION

- Proposed activities should fit within existing institutional structures and correspond to existing environmental policies within which organisations are working.
- Clear responsibilities and reporting lines must be established for those responsible for project implementation as well as policy direction and oversight.
- Responsibility for implementing environmental activities should normally be assigned to a qualified lead agency.
- Local organisations should be involved with project implementation. Responsibility for environmental management, in particular, should be increasingly devolved to such groups.

POINTS OF INTERVENTION

- Appointment of a lead environmental co-ordinating group with clear definition of individual roles and responsibilities; organisation of work programme.
- Inclusion of development-oriented partners with implementation plans.
- Identification of a technical support agency: capacity building for local institutions to guarantee their responsibility and effectiveness in programme management and co-ordination.



Refugee women, often accompanied by their children, may be forced to walk long distances to collect firewood.
UNHCR/L. Taylor

Principle 8

Influencing Policy can be as Important as Defining Practice

- ✓ Influencing policies that govern control of natural resources may in some cases be a more cost-effective measure for protecting the environment than direct implementation of field activities.

The most significant environmental impacts during refugee operations are possibly those resulting from policy decisions relating to, among other things, camp siting, layout, size and population density (see **Prevention before Cure**). If agencies can influence these and other decisions at the policy level, through a combination of local, national and international lobbying and advocacy, achievements can be far more significant than if agencies confine themselves to implementation of remedial programmes.

- ✓ Lessons should be drawn from previous experiences.

UNHCR and its partners have worked with refugees throughout the world and have amassed considerable knowledge and experience on the most cost-effective and efficient ways to handle refugee situations. Some host governments might lack such an institutional memory or a capacity to catalogue lessons learned, often having no experience (or no recent experience) of a refugee influx. If UNHCR and its partners were to respond in an essentially reactive way, there would be little scope for applying the lessons learned elsewhere. Effective environmental activities therefore tend to encompass macro-level policy and advocacy work as well as field-level technical interventions.

- ✓ **Key policy issues relate to camp siting, size of and distance between camps, housing density, refugee diet and distributed items. Independently, or combined, these will have an impact on the local environment.**

Some of these issues have been dealt with in previous sections. The remainder are addressed below.

Refugee Diet

The type of foodstuffs provided to refugees can dramatically affect energy consumption, and hence peoples' demands on the local environment. Certain foods, particularly unmilled cereals, beans and some types of lentils, can be very slow-cooking. In addition to the cost and nutritional and cultural suitability of the refugee ration, it is desirable, for environmental reasons, to assess the fuel required to cook it. According to the joint UNHCR/World Food Programme Memorandum of Understanding, this should be a pre-requisite for food supply. If particular items in the food basket are found to require high amounts of energy, different courses of action should be pursued if environmental impacts are to be mitigated. It may be possible to reject certain food donations on the basis of age and their consequent energy demands for cooking. It is also possible to mill maize prior to distribution.

Distributed Items

Distribution of non-food items to refugees would rarely be the responsibility of an environmental agency. Yet the choice of these items has significant environmental implications, especially through indirect impacts on fuel consumption. Large cooking pots with lids, for example, allow more energy-efficient food preparation than small pots without lids. From an environmental point of view, lids should be considered an integral part of kitchen sets.

The use of lids saves 10-20 per cent of the energy used in cooking. Larger pots, of approximately 10 litres, facilitate shared or bulk cooking and are thus also environmentally preferable. There is an energy saving of up to 45 per cent associated with four people cooking together instead of two, for example, and such economies may not be possible if only small pots are offered. Bulk cooking can also reduce overall water requirements. Provision of blankets or warm clothing can reduce the need for refugees to keep fires burning at night for warmth.



Clear policies and guidelines are required for issues governing access to, and use of, land and other resources.
UNHCR/A. Hollmann

KEY POINTS: INFLUENCING POLICY

- Identify and address pertinent policy issues that will, or may, influence or constrain environment-supporting activities.
- Previous experiences should be taken into account when planning new interventions.
- There is a clear need for a policy governing the distribution of goods and services where these may have direct impacts on the environment.

POINTS OF INTERVENTION

- Early inclusion of policy-makers in all discussions and decisions related to project development and implementation; clear identification of roles and responsibilities.
- Consideration of possible environmental and social impacts of policies adopted by partner organisations, ideally outlined in specific sectoral guidelines.

Principle 9

Relief and Development Assistance Should be Compatible

- ✓ **Environmental requirements and initiatives must not be seen apart from other concerns or activities.**

Environmental interventions must not be viewed in isolation. It is important that these are considered as a component of broader efforts designed to minimise negative, and maximise positive, impacts on the refugees and host communities.

The impacts of refugees cannot be isolated from the local economy, despite frequent efforts made in that direction. Similarly, refugee assistance should not be separated from development assistance. A new road serving refugee settlements, for example, is both a form of refugee assistance and development expenditure. Details provided in Box 5 show how integrated planning of refugee support infrastructure can ensure greater local benefit when the refugees depart.

Box 5. Siting of Refugee Camps for Environmental and Other Benefits

Many, if not most, organised refugee settlements have been deliberately located far from local population centres — in part for political and security reasons, but also to minimise the perceived risk of environmental and other damage.

Following the return of Rwandan refugees from the Ngara camps (Tanzania) and the camps' dismantling in 1996-1997, it became easier to judge the relative pros and cons of the initial siting. The relative remoteness of the camps, seen at first as an unqualified plus, turned out to have serious disadvantages as some of the infrastructure provided for the refugees, and newly opened-up arable land, were not easily reached by the local population.

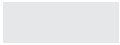
Although environmental goals could be well served by locating refugees far from centres of local population, such an approach may not be optimal on balance. People can create assets, not only deplete them. In any case it is not just the number of people or even the carrying capacity of the host environment that determines the extent of environmental damage, but also the arrangements put in place. Isolation does not guarantee environmental soundness. It guarantees only that the hosting community will be deprived of other, non-environmental, benefits.

✓ **Integration of refugee and local activities is a legitimate objective. But, relief and development approaches are not always compatible.**

If refugee- and community-oriented environmental programmes are to be run concurrently in the same area, the approaches of relief and development organisations must be well co-ordinated so that their goals remain compatible. Where refugees are receiving large-scale external support, donors and development agencies may seek to intervene

with community-based investments that service local inhabitants of the refugee-hosting area.

Existing implementing organisations may find it difficult to adapt from relief-type work to competent development interventions. A decision must be reached on how refugee and local programmes are to be internally structured and operated. It is possible that misconceptions may arise of the types of projects being proposed, in particular leading to an expectation of free hand-outs on the part of local communities expected to participate in more sustainable resource management.



KEY POINTS: HARMONISING RELIEF AND DEVELOPMENT SUPPORT

- Opportunities for environmental support through relief and development approaches should be closely examined and maximum efforts made to avoid contradictions and confusion on the part of beneficiaries from within and outside the refugee community.
- Provisions should be made to include appropriate development organisations at an early stage with a view to making the transition to long-term development activities smoother.
- Intentions and responsibilities of respective organisations need to be clearly communicated to all stakeholders.

POINTS OF INTERVENTION

- Identification of appropriate development-oriented agency.
- Assignment of clear roles and activities between co-operating agencies.

Principle 10

Protect the Environment to Safeguard Asylum

Measures taken to safeguard the environment during refugee operations can benefit the local environment and people's livelihoods.

Equally important, such measures are likely to foster goodwill on the part of host governments to guarantee asylum to refugees, both now and in the future. It is therefore essential that maximum efforts are made to guarantee the institution of asylum and that environmental degradation does not begin to constitute a threat to a country's willingness to accept refugees.

- ✓ **Demonstrating care for the environment can help persuade governments to continue to accept refugees.**

Environmental damage, or perceived degradation, can be a factor in governments' refusing asylum to refugees. Governments and communities are likely to be more open to hosting refugees if measures are in place to minimise environmental degradation, to prevent local communities from bearing the costs of the refugee's presence, and to undertake rehabilitation in keeping with the expressed needs of local communities and relevant national agencies.

- ✓ **Safeguarding the local environment during refugee operations is important for the continued welfare of local communities.**

Host governments will be concerned for the needs of their own people. In developing countries, in particular, many

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people depend directly on environmental goods and services for their livelihood. Any disruption to the availability of such goods or services – for example, increased demands on limited natural resources following the arrival of refugees – undermines the well-being of local communities. Maximum efforts therefore need to be taken not to alter the already delicate balance and, where this is not possible, to ensure that adequate compensations are made to affected communities in order to avoid social problems and foster good relationships between local people, refugees, government agencies and relief organisations.



Uncontrolled felling of trees by refugees can lead to conflicts with local communities and government agencies, perhaps even to the extent of undermining the institution of asylum.
UNHCR/T. Bølstad

- ✓ **The links between the environment and human well-being need to be constantly highlighted through appropriate awareness raising programmes.**

Raising people's awareness of the links between their local environment and social and economic well-being should be a fundamental component of all refugee operations. The results of UNHCR's and other agencies' environmental management/support programmes should be clearly communicated to all stakeholders – decision makers, government agencies, refugees and local communities. Highlighting the successes and examining the failures of environment-related activities during refugee operations is an essential part of sound management programmes.

- ✓ **External assistance is often required for environmental management in refugee operations. This should help guarantee the support of host governments and local communities in accepting refugees.**

Neither refugee-hosting governments nor local communities should be expected to pay for environmental rehabilitation or the replacement of lost goods or services following the arrival of refugees. International support must be forthcoming to ensure that the livelihood of local communities, in particular, is not jeopardised by environmental degradation resulting from the presence of refugees. The people and governments of refugee-hosting countries will most likely be receptive to this support.

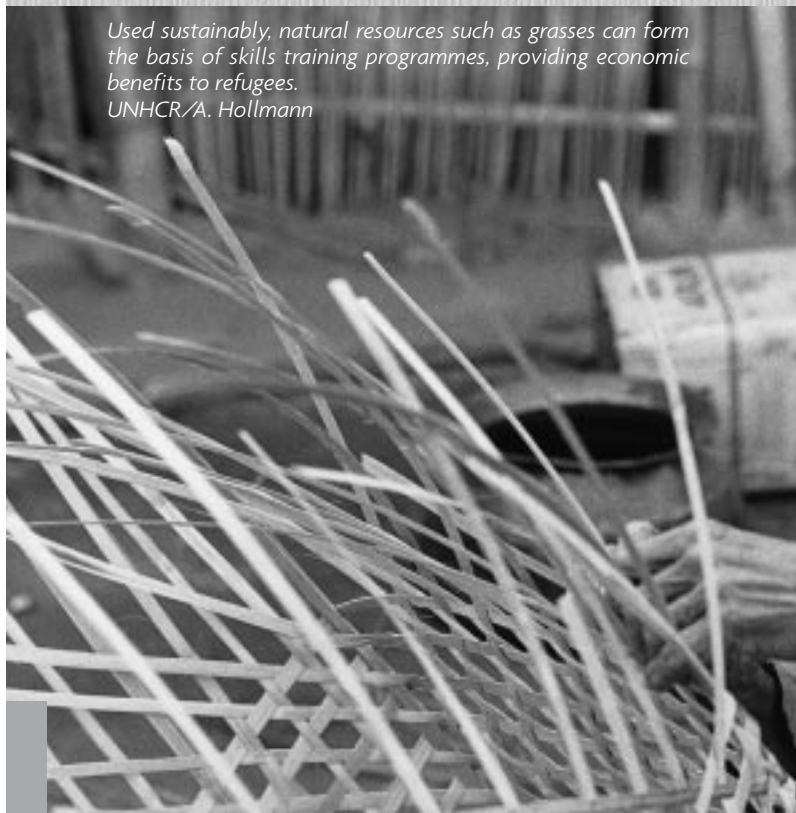
- ✓ **Local capacity-building exercises should be one component of relief organisation's support to host governments.**

The needs of responsible national organisations (government and non-governmental) in terms of environmental management should be identified at the earliest possible moment. Capacity building will not only benefit the refugee community, but will contribute to the host government's long-term institutional development.

**KEY POINTS: SAVE THE ENVIRONMENT TO
SAFEGUARD ASYLUM**

- Future granting of asylum may be jeopardised if refugee hosting countries alone bear the costs of environmental degradation following the arrival and settlement of refugees.
- Environmental concerns should be an integrated component of refugee assistance programmes.
- The links between the state of the environment and human well-being should be clearly communicated to relief organisations, government authorities, donor institutions, development agencies, non-governmental organisations, local communities and refugee populations through environmental awareness programmes.
- Capacity-building should be foreseen for local or national agencies responsible for environmental management.

Used sustainably, natural resources such as grasses can form the basis of skills training programmes, providing economic benefits to refugees.
UNHCR/A. Hollmann



POINTS OF INTERVENTION

- Environmental issues should be an integrated part of relief organisations' operations from the outset of their work.
- Meetings and dialogue with local agencies responsible for environmental management as well as local communities to determine their needs, both during and following the presence of refugees.
- Dialogue with host governments and local authorities to help them understand the efforts that UNHCR and its partners are taking towards environmental protection.



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** As of 1 May 1999, following restructuring, environmental activities have merged with technical support functions in water, sanitation, shelter, community-related infrastructure and activities related to camps and settlements. The new section bears the title of Engineering and Environmental Services Section (EESS).*



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