

# Communities combatting desertification: livelihoods reborn

## Editorial

**D**esertification, better defined as land degradation, is of major and continuing concern to communities living in dry regions. It is the cause as well as the effect of poverty and endangers the welfare and livelihoods of future generations.

In 1993, the United Nations launched the 'Convention to Combat Desertification' (CCD) (p6). Most signatories to this convention are now formulating 'National Action Programmes' (NAPs) to deal with the problem in their own countries and some have reached the stage of implementation. The Convention sets out to address land degradation and its socioeconomic dimension - poverty - in an integrated and embedded way. It emphasises a "bottom-up" approach that sees civil society participating fully in decision-making and in doing so has raised hopes that concerted action will be possible.

Under the terms of the Convention, community-based organisations and NGOs are supposed to elaborate Local Area Development Programmes. These will subsequently form the basis of action plans at the national and regional level. Experiences with the formulation of NAPs indicate that some countries such as Argentina, for example, (Merega p7) have made an important break-through as far as the participation of people's organisations and NGOs are concerned. However, there are many countries where the lack of peoples' participation and the absence of planned integrated and concerted action and funding for such activities are major constraints. At the same time, unaffordable and non-sustainable technologies such as chemical fertiliser and large dams are still being recommended as solutions (Soccal p20).

This issue of the ILEIA Newsletter focuses on community action to combat desertification and on participatory methodologies to support communities in their efforts to devise effective ways of regaining their livelihood. What did we learn from the articles?

### Causes of desertification

It is generally acknowledged that the causes of desertification are mainly human in origin. To combat desertification effectively, we need to understand these causes and underlying socioeconomic and cultural processes (Kessler p26). The articles offer significant insights.

Agarwal and Narain (p11) and Freudenberger (p8) point to colonial intervention. Foreign powers ignored traditional

indigenous resource management, established the western concept of market agriculture, reoriented education and research and centralised state power. In the process community lands were expropriated and forests decimated. Most post-colonial government elites continued to operate with these foreign concepts and policies as they pursue the global 'development' dream. - In the relatively fertile central region of Senegal, export-oriented groundnut monoculture has largely replaced traditional land-use practices. Forest, livestock and cropping are no longer mutually supportive. Pastoralism is increasingly difficult as the rangelands needed for transmigration in dry years are being taken over by sedentary farmers who have the support of government policies. At the same time traditional decision making, land tenure and management often lack the flexibility to adapt to new needs.

- In India, traditional water harvesting systems - once the backbone of Indian agriculture - have been replaced by deep wells. Rural communities and tribal people in particular have lost access to forest resources as most forests have been cut down and the monocultures of market-orientated agriculture have become common practice.

Such changes have resulted in the ecological degradation and poverty of local communities, important push factors stimulating a steady stream of outmigration. As Muhia (p16) stresses, combating desertification is more than a technical issue; it has fundamental political and cultural implications.

### Opportunities recognised

Among the positive developments mentioned is the growing recognition of the need for cheap, ecologically sound technologies adapted to local conditions such as applying organic fertiliser and rock phosphate (p24) and using local materials to build water harvesting structures (Lopez and Bunch p22; Soccal p20). Traditional resource management strategies, such as those for rangeland management (Freudenberger p8), for example, are being re-valued because economically and ecologically they often prove more sustainable than conventional practices. Some governments have accepted policies that empower communities to manage their own natural resources (eg Joint Forest Management, p30). In addition, they increasingly disseminate technologies developed by NGOs and POs (Soccal p20) and enhance massive investment in watershed development (Agarwal and Narain p11).

There is growing awareness of the economic potential of ecologically-sound management and communities are starting to adapt their land use practices. Development workers, researchers and policy makers can strengthen such initiatives and create conditions favourable to local, natural resource management and farmer innovation. This may mean that professionals will have to reassess their conventional role. However, as Lopez and Bunch (p22) make clear, researchers who support farmer innovators need not be afraid of losing their jobs. They are needed for the tasks farmers are unable to do themselves.

### Communities recreate livelihoods

The contributors to this Newsletter describe successful community-led action where farmers have regained control over their natural resources and been able to recreate livelihoods.

- When Pulaar pastoralists in Northern Senegal became aware of the way their natural resource base was being degraded, they started to protect it against outsiders and those misusing it in their own community. This resulted in the conservation and regeneration of natural vegetation on which they depend for their livelihood (Freudenberger p8).

- Communities in dryland India, after becoming aware of the potential of watershed management to raise income and rebuild communities, have started to redefine rural development (Agarwal and Narain p11). Farmers in Rajasthan, India, finally felt 'free from poverty' when conditions improved enough to allow them to return from the city to take up farming again (Shree Padre p14).

- Tribal communities in Gujarat, India, supported by BAIF, started to re-value their degraded forest land after achieving profitable, stable and sustainable livelihoods from growing fruit, fodder and fuel-wood trees (Mahajan p18).

- In Kenya, communities supported by KENGO are becoming more aware of their traditional cultural roots and values. This motivates them to regenerate the natural resource base which now provides them with sustainable livelihoods (Muhia p16).

### Preconditions for regeneration

There are important preconditions for community-led regeneration of the natural resource base as the articles in this Newsletter show.

- Muhia (p16) refers to the importance of reviving traditional African values of respect for nature in order to motivate communities to regenerate their environ-

ment. However, he admits that without economic benefits motivation cannot be sustained.

- Affordable 'win-win' technologies that provide acceptable, competitive economic benefits and have positive effects on the environment should be available. Water harvesting is one such win-win technology. Information on indigenous and scientific win-win technologies must be accessible.
- Social unity and equity, strengthened by (traditional) social values and democracy are crucial to enhancing community action and peoples' participation. The benefits of regeneration should be shared and not reserved for the rich and powerful.
- Effective village institutions are needed to ensure full participation in decision making, coordinated community action, conflict resolution and access to governmental support.
- Legal frameworks and policies are needed that support the right of the local community to manage resources equally and that support participatory farmer innovation and the development of locally affordable solutions derived from indigenous and scientific knowledge.

### Water and soil management

Although water management is crucial in combating desertification, soil management is equally important. This is particularly so where soils are poor and eroded, their organic content neglected and soil nutrients are exported without any compensation from external inputs of organic or chemical fertilisers (negative nutrient balance). All these factors undermine soil fertility. This situation is common in West Africa and scientists indicate that if no serious attention is paid to soil fertility management it will be impossible to halt land degradation and declining productivity and the poverty and communal disruption it brings. To break this vicious circle an international "Soil Fertility Initiative" has been launched which aims to facilitate the formulation of NAPs for Integrated Soil Fertility Management. Burkina Faso is one of the first countries that formulated - in a participative way - a national strategy to re-capitalise its soils (p24). Such strategies should be an integrated part of NAPs to combat desertification.

At farmer level further differentiation is needed to adapt soil fertility management to the specific local conditions. Resource Guides on participatory learning and soil fertility management (Defoer et al. p25; FARM p26) can be helpful tools in designing farmer-specific strategies.

### Balancing market and subsistence

Like the Soil Fertility Initiative, most (inter) national programmes to improve agriculture focus on developing market agriculture. It is assumed that this is the way to increase surplus production and raise the



Deforestation or making way for the camels

standard of living. *However, is it not time to officially admit that, in many economically marginal and ecologically vulnerable regions eg. in Africa, market agriculture based on external inputs is neither economically profitable nor ecologically sustainable and is often at odds with local culture* (Zone III, Breman p24). This may be the case even where investments in recapitalisation of soil fertility are being subsidised as in Burkina Faso. This also would mean admitting that agriculture in these regions should be based on the locally available resources, diversity and prevention of resource depletion - in other words, the basic foundation of traditional subsistence-oriented agriculture. This does not exclude new strategies for raising production and income. Selective production for market, labour migration or eco-tourism can be considered but only after a careful analysis has been made of what is ecologically affordable, culturally acceptable and economically feasible. The articles by Freudenberger (p8), Agarwal and Narain (p11), Shree Padre (p14) and Muhia (p16) provide examples of communities that are successfully building their future on their own traditional wisdom

and experience in natural resource management. When external inputs become increasingly expensive and inefficient the need for this approach becomes even more apparent.

### Concerted action needed

There are many organisations active in the broad field of combating desertification and stimulating rural development. An important aspect of NAPs should be the coordination of activities. Participatory environmental analysis and planning tools such as SEAN (Strategic Environmental Analysis) (Kessler p26) can help to reach a deeper understanding of the local economic and environmental situation. At the same time it can facilitate the development of strategies to reduce poverty, improve human welfare and regenerate the natural resource base and coordinate concerted action. In doing so, desertification can be combated in an effective and sustainable way.