PROMOTING AGROBIODIVERSITY AND THE TRANSMISSION OF LOCAL KNOWLEDGE

Agrobiodiversity comprises the various biological resources that human societies use for agriculture, food production and livelihoods. Many poor rural communities have a wealth of knowledge about such resources. Taken together, agrobiodiversity and the associated local knowledge represent valuable assets for food security, nutrition, health care, managing workloads and advancing sustainable rural livelihoods. However, they are largely neglected and, most recently, are being severely undermined by crises such as HIV/AIDS. Tackling this paradox is critical for rural development in a context of HIV/AIDS, requiring innovative responses in policies, projects and practices.

The death of women and men in their economic prime is accompanied by the loss of not only their labour capacity but also their agricultural skills and knowledge base. Many are dying before they have time to share this essential knowledge with their children, thereby reducing the range of livelihood options for the next generation. The stress of HIV/AIDS on the social capital within communities thus erodes the customary mechanisms for the transmission of knowledge between households and communities.

At the same time, the agrobiodiversity and local knowledge are fundamental in providing rural people with means to address their agricultural and food needs and to support an integral and sustainable approach to livelihoods. They represent local resources capable of supporting the rural poor to address their most pressing nutrition, food security and agricultural needs in view of the HIV/AIDS pandemic. Households under labour pressures and impoverishment, such as those affected by HIV/AIDS, are more reliant on their indigenous farming practices, which are readily available to cope with the situation, tend to be less expensive and are more trusted.

FAO is promoting several activities to mobilize agrobiodiversity and the associated indigenous knowledge. These activities foster grassroots responses to food insecurity, malnutrition and labour stresses in the context of HIV/AIDS. The strategic components consist of:

- traditional, neglected and under-utilised crops
- agricultural diversification
- home gardens
- wild food plants
- medicinal plants
- community seed systems

Developing these agrobiodiversity components and the related indigenous knowledge can empower rural communities to address not only the impacts of HIV/AIDS, but also a series of food, nutrition, agroecological and livelihood challenges. These resources can provide every household with broader options to plan agriculture according to their specific conditions and most urgent needs. In essence, this is an overdue strategy for advancing smallholder agriculture and rural development.

Promoting traditional, neglected and under-utilized crops

Traditional, neglected and under-utilized crops represent a rich diversity of cultivated plants that are notably disregarded in the agricultural development agenda. Their neglect also owes to gender and cultural prejudices. However, their use constitutes a practical means to enhance agriculture, food security and livelihoods among smallholder farmers, especially in a context of marginalization and vulnerability. These crops are particularly useful to cope with the impact of HIV/AIDS, as they can contribute to: strengthening food security systems; improving the nutritional quality of diets; designing agricultural practices that respond to labour shortages; increasing the economic and environmental viability of farming systems; and expanding income-generating options.

Promoting agricultural diversification

Agricultural diversification represents an optimal strategy for poor, vulnerable and AIDS-affected households. It consists in the diversification of agricultural systems and practices. This serves to better harmonize the different agroecological, food, nutrition, livelihood and gender aspects that concur in the agricultural systems of smallholder farmers. In the context of HIV/AIDS, it broadens household options for food production and nutrition, expands income-generating sources, supports low-input agriculture and helps people to cope with labour shortages.

Promoting home gardens

Home gardens are agricultural spaces that typically contain wide plant diversity, including crops with excellent micronutrient properties, which is critical for households affected by AIDS or with children. They can represent a nearly continuous supply of food and nutrition, serving another critical function as a food safety net. Moreover, they can contribute to "labour responsive" strategies in the context of HIV/AIDS, as home gardens tend to yield favourable labour/production and labour/nutrition ratios. In addition, since they are usually located close to the homestead, home gardens can accommodate women's food production and household responsibilities.

Promoting wild food plants

Wild food plants are particularly important among rural people who dwell in arid and semi-arid ecosystems, where these plants can play a critical role in food security and nutrition, especially during seasonal food shortages. They are especially relevant to HIV/AIDS-affected households in three key needs: (i) providing inexpensive and versatile sources of food; (ii) improving nutrition; and (iii) coping with labour constraints, since collecting them usually requires low labour and can be conducted by children and elderly people.

Promoting medicinal plants

Although new drugs for a wide range of HIV/AIDS-related health problems are rapidly developing, the poor in the developing world often cannot access them because of global economic and trade inequalities. It is therefore urgent to incorporate every instrument available to address the health care needs of the rural poor. In this regard, the use of herbal treatments and supporting the role of traditional healers in public health care responses are valuable actions. For poor rural people, medicinal plants represent affordable and locally available resources to address many diseases and health problems, such as those related to HIV/AIDS.

MEDICINAL PLANTS AND HIV/AIDS

Medicinal plants provide affordable means to address a wide range of health concerns related to HIV/AIDS, including:

- herbal treatments to heal sexually transmitted diseases, thereby reducing the risks of HIV infection;
- herbal treatments to support immune strength and sustain an overall well-being, thereby serving to slow the progression of HIV infection and to mitigate the potential impact of opportunistic diseases;
- herbal treatments to arrest the loss of appetite, which is a frequent problem in AIDS patients and causes a downward cycle of malnutrition, weakness and sickness; and
- herbal treatments to address a number of HIV/AIDS-associated and opportunistic diseases, such as respiratory infections, diarrhoeal diseases and skin problems.

PROMOTING COMMUNITY SEED SYSTEMS

"Seed security" means that farmers have access to sufficient amounts of seed to conduct their farming practices, with full regard to the diversity of seed resources that they need to manage agroecological conditions, ensure food security and maintain their food habits. Poverty and marginalization have expanded seed insecurity, and HIV/AIDS further undermines seed security because of labour and cash shortages. Seed insecurity results in food insecurity. Building community seed systems represents a useful strategy to enhance seed security at the community level, providing tangible benefits to the most vulnerable and marginalized households. Community seed systems comprise a wide range of initiatives, such as rural seed fairs, community seed banks, participatory crop breeding, on-farm seed production and improving traditional seed storage facilities. The building of community seed systems requires the integration between formal seed systems and farmer seed practices, with the concerted action of crop scientists, farmers and rural development practitioners.

RECORDING AND SHARING KNOWLEDGE

By recording and sharing indigenous knowledge and agrobiodiversity, rural people will improve their capacity to sustain secure livelihoods and mitigate the impacts of HIV/AIDS. In July 2003, FAO, in collaboration with the Government of Netherlands, initiated a project in Ethiopia, Kenya and Zambia entitled "Agrobiodiversity and indigenous knowledge for the mitigation of HIV/AIDS". The purpose of the project is to develop field level methodologies that enable communities to record and share knowledge with a view to improving their nutrition, easing their workloads, gaining medicinal relief and securing more sustainable livelihoods. The methodologies will assist communities and households in:

- establishing Community Knowledge Networks for developing the local knowledge base about agrobiodiversity and natural resource management. Alliances with traditional healers and other relevant rural people will be established to mobilize the use of indigenous knowledge in rural livelihoods. Systems will also be established for recording and reinforcing the mechanisms for transmitting local knowledge.
- conserving, multiplying, improving and facilitating the exchanging of planting materials through initiatives such as participatory plant breeding, on-farm seed multiplication, seed storage systems and seed fairs, all implemented at the community level and fostering the cooperation across communities.
- creating support groups for vulnerable households, in particular those headed by orphans and widows, to act as a basis for developing their agricultural skills, sharing information and enhancing social cohesion and cooperation.

LinKS - UNDERSTANDING HOW RURAL MEN AND WOMEN USE AND MANAGE AGROBIODIVERSITY

The LinKS Project is a regional effort in southern Africa aimed at raising awareness about how rural men and women use and manage agrobiodiversity. It explores the linkages between local knowledge systems, gender roles and relationships, food provision, and the conservation and management of agrobiodiversity.

The project seeks to help development practitioners recognize that farmers have knowledge, practices and skills that are often highly valuable for sustainable agriculture and ecosystem management. This project, launched in 1998, is funded by the Government of Norway and executed by FAO in Mozambique, Swaziland and United Republic of Tanzania. The LinKS project has identified three key activity areas: capacity building and training; research; and communication and advocacy.

Capacity building and training. *Each medium-term research activity starts with a training workshop in gender analysis, participatory methods for the research team to make sure that the researchers are able to apply the necessary tools and provide precise research data. LinKS supports the development of post-graduate training materials for universities on participatory approaches to local knowledge, gender and biodiversity management for food security. A training manual has been developed on the basis of project experiences.*

Research. *By supporting research activities, LinKS has been able to explain and highlight the important role of local knowledge, especially in the context of biodiversity management and conservation, and increase the visibility of rural men and women's knowledge. The project has developed a research strategy that provides researchers with a framework on ethics and research design, as well as important questions to ask when exploring the gender dimension of managing resources. Research activities are implemented by multidisciplinary teams that follow a participatory action research approach, in which regular meetings and workshops are held with the rural communities and other stakeholders.*

Communication and advocacy. *LinKS supports research institutions and NGOs to develop reports and case studies. Lessons learned, video films, newsletters and leaflets have been prepared and disseminated to different target groups. Researchers, policy makers and development workers have participated in workshops and seminars on promoting local knowledge and biodiversity. LinKS has also organized community-to-community visits, where rural communities, extension workers or researchers have the opportunity to learn from each other and exchange their experiences. Moreover, LinKS has identified NGOs and institutions that have a specific interest in local knowledge and is building a platform to facilitate a more intensive way of exchanging experiences.*

USEFUL REFERENCES

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LinKS Project
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