2.2 Enhancing awareness of the value of local biodiversity in Nepal

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Introduction

Enhancing awareness among farming communities is important within a community biodiversity management (CBM) process. Awareness-raising practices increase community participation in managing biodiversity in a systematic way by changing their present mind-set and behaviour. Enhancing awareness is also important for encouraging consumers, development workers, policy-makers and farming communities to make continued use of local crops and varieties, thereby contributing to their conservation (Rijal et al., 2000).

Over the last decade, many CBM practices that involve varying degrees of community participation have been developed in order to sensitize communities on the value of local agrobiodiversity, thus forming a basis for the development of local strategies for the conservation and sustainable utilization of PGR (Sthapit et al., 2008a). In this chapter, we share our experiences of working on CBM with Local Initiatives for Biodiversity, Research and Development (LI-BIRD) in Nepal (Subedi et al., Chapter 1.2). We describe five practices – diversity fairs, rural poetry, rural drama, diversity blocks and diversity kits – that target awareness-raising and contribute to understanding diversity as initial components of a CBM process.

The diversity fair

The diversity fair is a popular practice employed by various organizations to sensitize communities on the value and importance of biodiversity and traditional knowledge (Rijal et al., 2000). The diversity fair has its origin in the Andean countries (Tapia and Rosa, 1993), and since the early 1990s has spread globally as a practice used by organizations engaged in facilitating CBM for conservation and development. In the current volume, Tapia and Carrera (Chapter 2.3) and Dias (Chapter 2.7) share experiences with diversity fairs in Ecuador and Brazil, respectively, in the context of different projects. What both countries shared in common with these projects was their use of the diversity fair as an instrument to raise awareness, and to document and monitor agrobiodiversity, in a process for strengthening communities in their biodiversity management, and as a means of implementing in situ conservation (De Boef and Thijssen, Chapter 1.8).
In Nepal, the diversity fair is a collective process and a competitive event during which farmers collect and display plant parts, seed, fruit samples and traditional food items. The farmers share biodiversity-related information and associated traditional knowledge (ATK) either orally, through illustrations, or through displays in their stalls. This practice fulfills multiple objectives, such as creating awareness; locating diversity and custodians; documenting information on ATK; and exchanging seed/planting materials and knowledge. Within LI-BIRD, we find it is useful to organize diversity fairs in the initial stages of a CBM process.

The organization of the fair begins with the formation or identification of participating farmers. Farming communities set the date and venue, and decide on what activities should be carried out for organizing the fair. During a planning meeting, they set up various subcommittees for defining and distributing roles and responsibilities. Stakeholders and community members join in these subcommittees to ensure their ownership over the process. The subcommittees are responsible for the preparation of stalls; management of food and accommodation; and evaluation of stalls. Each subcommittee has three to five members. In this way, we build an initial basis in social and institutional capital at community level for CBM.

The diversity fair can be considered as a stepping stone to CBM for two reasons: first, because it enables us to begin to develop a local biodiversity database, by documenting the biodiversity displayed by fair participants; and second, because the fair encourages the community to assume responsibility in managing its biodiversity. Farmers, farmers’ groups, students, teachers, researchers and development workers obtain insights into local biodiversity in the community. Documentation is an important goal of the diversity fair since it contributes to enhancing the understanding of the richness of diversity; identifying ATK and custodians; locating valuable plant genetic resources (PGR) and traditional knowledge; and generating inputs that are vital to the development of a CBM plan. Furthermore, a diversity fair enhances social interactions among community members and promotes the exchange of knowledge among and between farmers, and with researchers and conservation professionals. Farmers obtain new seed and planting materials, thus increasing the biodiversity in their home garden, farms and in the village. Dancing and singing competitions between the farmers’ groups can be organized during a diversity fair as a way of promoting the involvement of students, young and elderly people, entertaining participants with songs that bring across the message of the value of local PGR. A food fair may also accompany the diversity fair, facilitating the exchange of recipes, and acknowledging the role of women in their culture and their responsibilities in the preparation of food. The diversity fair provides a good source for assessing the quality of farm-saved and informally exchanged seed, defining in what manner informal seed systems can be enhanced. And finally, the diversity fair offers an easy way for PGR professionals to collect seed of local varieties for gene banks, which may serve for ex situ conservation or for further crop improvement.

**Rural poetry**

Rural poetry, when applied as a CBM practice, is an innovative way of creating awareness of the value of biodiversity, and of documenting traditional knowledge
and information in the form of poems. When LI-BIRD applies this practice in Nepal, we invite a group of local and national poets to participate in the creation of poetry on agrobiodiversity. We first share with them the objectives and the different steps of the practice. The poets then visit different households and discuss many aspects of agrobiodiversity with experienced farmers, both young and elderly, addressing the following topics: agrobiodiversity use and value; extent and distribution; ATK and associated information; food culture; and proverbs, myths and sayings. Directly after these discussions, the group converts the local information that has been gathered into poems, emphasizing the value of conservation and the importance of local PGR. A public announcement is made inviting community members to participate and listen to the poems. The poets read their work to a wide audience of community members. They document, enrich and return the information provided by the community in the form of melodious poems and songs. Community members pay great attention while participating in such events as the poems and songs represent their words, feelings, culture and reality.

Rural drama

Drama is a popular way of creating attention regarding any specific issue of public concern. In preparation for the rural drama event, we discuss relevant topics with a group of artists. Such topics include the importance of local biodiversity, the problems faced by the community, or possible harm from the loss of valuable local crops and varieties. After a few days of rehearsal by the artists, we make a public announcement inviting community members to a common meeting place within the community. The artists then present a theme-based play. In this manner, community members feel and internalize the importance of biodiversity in their daily life and they can better imagine the consequences should such a valuable biodiversity be lost. Following the drama, the organizers facilitate a short discussion, during which they ask few short questions to the audience to summarize the key messages and lessons of the drama.

The diversity block

The diversity block is a non-replicated experimental plot of farmers’ varieties that is established and managed by the farmers’ groups under their own management conditions. The plot size of the diversity block depends on the type of crop, availability of land, management capacity of the farmers’ group and the amount of seed they want to produce. Diversity blocks are further discussed in this volume by Kendall and Gras in France (Chapter 1.7), Tapia and Carrera in Ecuador (Chapter 2.3) and Dias et al. in Brazil (Chapter 2.5).

In Nepal, we use the diversity block in our CBM activities for several goals, including the following: to test consistency in naming farmers’ varieties; to evaluate the varietal performance and collect characterization data; to identify suitable parents for participatory plant breeding; to regenerate seed collected at community seed banks; and to meet the seed demands of local varieties. Besides these, we use the diversity block to create awareness among community members on the value of biodiversity. The diversity block is deliberately established near roads or public places. We erect
signs in each plot, to encourage community members to stop and see the differences between the varieties.

While working with local PGR, it did not surprise us that we found the same name being used for different varieties and numerous names being used for the same variety. We find such situations in farmers’ varietal nomenclature systems both within and among communities. Therefore, during the maturity stages of the crops, we invite knowledgeable and experienced farmers to differentiate between the varieties; and we document this knowledge for enhancing the community’s, as well as the researchers’, understanding. The seed produced in diversity blocks (only possible for selfing and vegetatively propagated crops) is kept safely either in the community seed bank or is stored by farmers’ groups and distributed in diversity kits over the subsequent year.

The diversity kit

The diversity kit is a set of small quantities of seed of different crops and varieties that is made available to the farmers for informal research and development (Sthapit et al., 2008a). The basic idea of the diversity kit is to deploy the diversity, giving priority to neglected, underutilized, rare and unique crop varieties and species, increasing community access to seed and knowledge, and promoting biodiversity conservation through use. The diversity kit practice is a process which involves the following steps: identification and selection of varieties favoured by farmers through a diversity fair; identification of crops and varieties on the verge of disappearing; selection of varieties from community seed banks and community biodiversity registers, or inventories of biodiversity; establishment of diversity blocks; the production of quality seed of selected varieties; the development of information sheets for each variety containing varietal characteristics as well as the methods of cultivation and use; and finally, the packaging and distribution of seed to farming households in the community. Canci et al. (Chapter 1.5) provide a more elaborate description of how the diversity kit in Brazil is embedded within a larger framework of CBM. The diversity kit as a CBM practice enhances the informal exchange of seed and information among farmers. In Nepal, we have promoted the broader use of home garden species through the diversity kit, resulting in an increase in dietary diversity and better income of target families from homestead production. The diversity kit is very useful in a CBM process since it is easy to implement, requires few resources, and takes little time, but can be very effective in building a firm basis in awareness and social organization for CBM.

Conclusion

Community awareness of biodiversity forms an important stepping-stone to a process in which the community will assume collective responsibility for managing its biodiversity in a sustainable manner. CBM practices that aim to enhance awareness are essential for exposing farming communities to biodiversity, and for inspiring them to participate in the conservation and management of PGR in a collective manner. Based on our work and experiences in Nepal, we have compared the practices that are currently being used for contributing to awareness-raising. We demonstrate that practices for enhancing awareness, when embedded in a CBM process, can be
effective in contributing to the conservation and use of PGR. Depending upon the availability of time and resources and the interest of the community, various types of awareness-raising practices can be employed. The art of facilitating an effective CBM process lies with the conservation or development organizations, which are responsible for tailoring the appropriate combination and sequence of these CBM awareness-raising practices to meet the needs of the community.

The documentation part of any awareness-raising activity has to be very strong and must be efficiently managed. The information collected is used as the basis for developing a CBM plan, thus moving away from the components on awareness and understanding, towards outlining a process with key steps aiming towards the institutionalization of biodiversity management in the community. Feedback from the awareness-raising practices must be collected from participants during the CBM process to monitor the effectiveness of the practices in achieving their goals. Apart from community members, it is important that local government bodies, researchers, extension workers and policy-makers participate in these practices, and in their continuous monitoring; their contribution is essential for maintaining long-term collaboration, for sustaining the CBM process and for influencing policy-making.