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The community seed bank in Tamaphok

Dilli Jimi, Manisha Jimi and Pitambar Shrestha

Purpose and evolution

Located in the eastern hills of Nepal, Tamaphok is one of the sites of a Local Initiatives for Biodiversity, Research and Development (LI-BIRD) project called 'Promoting innovative mechanisms for implementing farmers' rights through fair access to genetic resources and benefit sharing regime in Nepal'. Tamaphok is a geographic area governed by a village development committee, a political administrative unit in Nepal that is further divided into nine wards. A ward contains one or more small villages. The community seed bank was set up as a regional centre for seed conservation and sustainable use of agricultural biodiversity. It also served as a pilot project for implementing farmers' rights and an effective access and benefit-sharing mechanism for the use of genetic resources. From 2007 to 2011, various research, development and capacity-building activities were carried out, such as testing community-based biodiversity management practices, and a community seed bank was established at Mudhe, where a weekly market is held.

Tamaphok is also the name of a small village in the district, located several hours' walking distance from Mudhe over steep mountains. Despite the good intentions of the seed bank project leaders, residents of Tamaphok village found it difficult to deposit and collect seeds and take part in other seed bank activities. To address this situation, in 2010 a number of Tamaphok farmers, who were dedicated to maintaining crop diversity, decided to establish a separate community seed bank in the village. This case study describes that experience.

Awareness-raising activities, such as biodiversity fairs, field visits, village-level workshops, training and interactions facilitated by LI-BIRD helped the Tamaphok group members recognize the value of agricultural biodiversity for current and future seed and food security. As a group, they agreed to identify and document local varieties, associated information and traditional knowledge; to collect and multiply local seed varieties and planting materials and make them available to local communities; and to protect local varieties and preserve the associated traditional knowledge.

Functions and activities

The Tamaphok community seed bank performs multiple functions. Members regularly go on exploratory trips to identify and collect seeds of local varieties of cereals, vegetables and some medicinal plants. During these trips, they also keep their eyes open for new crops and varieties. The community seed bank maintains more than 100 local varieties: rice (16), maize (seven), finger millet (seven), wheat (one), barley (three), buckwheat (two), rapeseed and niger (three), cowpea (three), bean (three), pumpkin (five), cucumber (two), tree tomato (two), chili (six), brinjal or eggplant (two), pea (two), soybean (four), rice bean (four), black gram (three), sesame (two), leafy vegetables (four), spices (six), yam (two) and other vegetables (12).

Seeds are stored and farmers have access to them. Members of the seed bank distribute, grow and collect seeds of all crops and varieties in the seed bank annually. During distribution, the first priority is given to the general members who may choose seeds of their preference. If a member borrows 1kg of seed, he or she must repay 1.5kg. The executive members of the seed bank are responsible for regenerating seeds of the varieties not chosen by general members. Diversity blocks of major crops, such as rice and finger millet, are maintained each year and some vegetables and medicinal plants are grown at the periphery of the community seed bank's land.

Based on lessons learned from LI-BIRD's activities elsewhere in Nepal (see Chapter 34 for details), the seed bank has set up a community biodiversity management fund to generate income as an incentive for conservation. For example, the fund helps members undertake such income-generating activities as raising pigs and goats.

The community seed bank is part of the Biodiversity Conservation and Development Committee (BCDC), a village development committee-level farmers' organization that oversees biodiversity-related activities as part of an overall rural development strategy. The Tamaphok community seed bank receives about 20,000 Nepalese rupees (NPR; about US\$200) annually from the BCDC for the village-level biodiversity fund. In practice, this support has been an effective incentive mechanism for members who take part in regenerating seeds stored in the community seed bank. Members are also involved in collecting monthly savings, generating revenues by growing vegetables on rented land and selling vegetable seedlings.

Awareness-raising activities include the establishment and management of diversity blocks of various crops. Finally, the seed bank's core team maintains records of local crop diversity and traditional knowledge in a community biodiversity register (Plate 15).

Governance and management

The Tamaphok community seed bank is managed by an executive committee made up of nine members (six women and three men). The executive

committee has overall responsibility for seed collection, storage, cleaning, drying, distribution and regeneration of the seeds in the community seed bank. The bank has 92 members (from 76 of the 140 households in the village) organized into five groups including two women's groups. Initially, the executive committee was led by a man, but, in 2012, the leadership role was handed over to a woman to acknowledge the key role women play in the seed bank. In Tamaphok village, most residents are from the Yakkha ethnic group, which might contribute to the strong sense of unity and cooperation among them and their effective implementation of collective activities.

External support

Although the financial and material support provided by LI-BIRD was small, the knowledge it provided to the seed bank members was more important. So far, the Tamaphok community seed bank has received NPR 50,000 (about US\$500) from LI-BIRD to build a temporary seed-storage structure. In addition, the District Agriculture Development Office, an extension agency, has provided 300 plastic jars of different sizes for storing seeds. Compared with the support provided to other community seed banks in Nepal and elsewhere, this is very modest. However, because the community is strong and cohesive, it has been able to establish and operate the community seed bank with this limited outside support.

In terms of knowledge gained by the community, a series of interrelated activities was organized by the Tamaphok Village Development Committee. A diversity fair, the community biodiversity register, setting up the diversity block, exposure visits, on-site and off-site training and informal interactions among farmers have all been instrumental in emphasizing the value of managing agricultural biodiversity among the seed bank members.

Benefits of the community seed bank

Although the Tamaphok community seed bank has only been operating for a short time and its 'to do' list is long, its members have already observed some benefits of having the seed bank in the community. Other than collecting and saving seeds from their own crops and trading with close neighbours, Tamaphok farmers previously had no other options for obtaining seeds and planting material. The community seed bank has decreased both social and physical distances, while greatly enhancing the knowledge associated with the seeds farmers are now using (i.e. source and quality). For example, the seed bank has recovered a traditional early-maturing, white-grained finger millet variety, Seta kodo. It has also introduced a new rice variety, Pathibhara, which is becoming very popular among the farmers because of its milling properties and palatability and the fact that it does well even when planted later than normal.

The community-based biodiversity management fund has created an incentive for members. They no longer have to go to a distant commercial

bank for a small loan. Some members have increased their income by raising pigs obtained using funds from the community-based biodiversity management fund and from the monthly savings plan.

In addition, seed bank members have participated in training sessions, visits and workshops, taking advantage of these new opportunities to learn and share knowledge and ideas. This has led to greater curiosity about seeds and a change in the farmers' customary practice of keeping traditional knowledge 'secret', particularly that related to medicinal plants. The more open attitude is a welcome change and allows the farmers to make better use of their local genetic resources.

Looking ahead

The Tamaphok community seed bank believes in the saying 'small is beautiful'. It does not have ambitious plans that require large amounts of resources and great effort. Its members are confident that they can maintain the bank at its present level without external support. Currently, it generates income by selling vegetables grown in a rented plot and earns interest on loans made from monthly savings and the community-based biodiversity management fund. Members do not expect remuneration for the time they spend collecting seeds and working in the seed bank. They would like to become a legal entity and have plans to be registered as a farmer group with the District Agriculture Development Office. This would expand their interactions with other groups and, perhaps, also their resource base. An urgent need is for a permanent structure to store seeds safely and serve the community more reliably.

Acknowledgements

The authors would like to acknowledge the financial support provided by the International Development Research Center, Canada, through the project 'Promoting innovative mechanisms for ensuring farmers' rights through implementing access to and benefit sharing regime in Nepal' and The Development Fund, Norway, through 'Community-based biodiversity management South Asia Program' for establishing and strengthening the community seed bank at Tamaphok, Sankhuwasabha in Nepal.