Why safeguard and use agricultural biodiversity?

Bottlenecks in the food supply chain as well as poor access to information and agricultural services are putting agriculture under increasing stress. As a result, smallholder farmers and their communities are facing recurring agricultural crises and food insecurity.

One of the responses to deal with the stress has been to intensify the use of natural resources upon which agriculture depends and increase the commercialization of food production. In many parts of the world, this response has led to a reduction of the range of crops and crop varieties cultivated in agricultural systems. To strengthen and (re)build resilience in agriculture through the safeguarding and sustainable use of agrobiodiversity has become a priority.

An integrated approach: resilient seed systems

Effective seed systems are crucial for enhancing resilience given that seeds are the base of sustainable agriculture and food production. In order to make good quality seeds available, accessible and affordable, researchers and international development practitioners have started to look into the extent to which seed systems are resilient.

By adopting conservation strategies farmers contribute to the sustainable use of biodiversity at the local level. However, the challenge is not to maintain the status quo of a particular system, but to make it more amenable to deal with stresses and shocks of different nature. To achieve this a much better understanding is required of the processes that make seed systems operate effectively or not, especially in what concern individual and collective decision-making capacity of farmers. This can be done by increasing the access to useful knowledge and information, creating opportunities to learn about (new) crops and crop varieties that fit local agricultural conditions, building new or expanding existing relationships to exchange seeds and related knowledge, and through participation in community and higher level decision-making processes related to seeds.

From a research and development point of view, it requires a holistic, dynamic and participatory approach that supports farmers to understand and implement the principles of a resilient seed system, fosters collective action and catalyses innovation.

Staff of Bioversity International developed a novel toolbox that encompasses eight methodological steps to promote the safeguarding and sustainable use of agrobiodiversity in farming systems that are facing change and increase seed system resilience. The participatory action research methodology includes the use of climate and crop modeling tools that are increasingly used to predict the adaptive capacity of a given crop to expected changes in climate. All eight steps together contribute to the design of a practical seed system intervention in a particular agro-ecological context.

How can professionals contribute to achieve resilient seed systems?

If you are interested to strengthen the use of plant genetic resources and develop a seed system that increases the access to and control over planting material by smallholder farmers, you may want to consider joining...
this international course. The training programme is designed for research, education and/or development professionals with an interest in agriculture, agrobiodiversity, seeds and food security. The training will strengthen professional activities such as the development and management of research and development projects, the design and delivery of educational programs, and the elaboration and implementation of awareness raising and policy advocacy activities. Applicants should be fluent in English, have a bachelor’s degree and at least three years professional experience in a relevant field.

The training is experience-based and task-oriented. Bringing your own knowledge and experience, you are a resource person for the training. Senior experts from partner organisations introduce topics, after which you and your peers work in small groups using your own case studies. The training includes field work in LI-BIRD project sites. The course concludes with a design exercise to use the new knowledge and skills gained for the design of a strategic action plan.

What can you expect to be delivered? The overall objective of the training programme is to enhance your capability to apply knowledge and skills in the conservation and sustainable use of plant and genetic resources for food and agriculture (PGRFA). At the end of the course you will be able to identify opportunities in your local context to integrate resilient seed systems and food security in implementation strategies. The programme pays special attention to participatory approaches and places resilient seed systems into relevant local, national and international policy contexts.

The training focuses on the following topics:

- conceptual framework of resilient seed systems (principles, components and practices)
- designing a successful intervention for resilient seed systems and food security
- selection of appropriate germplasm that suits local changing conditions
- mechanisms and procedures for acquiring (new) planting material
- participatory plant breeding and climate change adaptation
- linking ex-situ conservation (seeds conserved in a genebank) with on-farm management of PGRFA (through a community seed bank, seed fairs, diversity blocks)
- managing PGRFA in dynamic landscapes

- community empowerment and enhancing resilience
- supportive policies and laws: a global outlook on successful mechanisms and initiatives

The organising committee reserves the right to change the program if necessary.

Partners
The training programme is organised by the Centre for Development Innovation, Wageningen UR, Local Initiatives for Biodiversity, Research and Development (LI-BIRD), Nepal (LI-BIRD www.libird.org ) and Bioversity International www.bioversityinternational.org ).

Further practical information
Application, the procedure is:
1) Apply at the website of Wageningen Centre for Development Innovation www.wur.eu/cdi. You will receive a confirmation and more information within a week. Early application is recommended as some procedures to finalise subscription (f.e. funding, visa) can take some time.
2) Wageningen Centre for Development Innovation is unable to assist you in obtaining financial support, however if you want to apply for a OKP Fellowship, Wageningen Centre for Development Innovation will provide you with the full instructions and the web address for registration in ATLAS. ATLAS is the online application form for an OKP Fellowship. You can check the eligibility at www.nuffic.nl/okp. A limited number of scholarships is available. As this application process takes time and requires several documents, we recommend that you start as soon as possible.

- Accommodation: Nepal. For prices, see the cost estimate on our website. For prices, see the cost estimate on our website. OKP Fellowships include travel and full board and lodging.
- Fee includes all course related costs (materials, excursions, administration).
- Participants will be awarded with a Certificate of attendance. The programme of the course might be changed to incorporate new insights.