Project title
Strategic Partnership with Farmer Innovators for Adaptation and Management of Plant Genetic Resources to Climate Change

Overall objective: Strengthen the capacity of smallholder farmers, in particular women and indigenous people, and their communities to manage cereals diversity on-farm for food security and sustainable livelihoods in climate vulnerable regions of Bhutan, Cambodia, Lao PDR, the Philippines and Vietnam

Crops addressed: Rice (Oryza), maize (Zea), barley (Hordeum), wheat (Triticum et al.) finger millet (Eleusine) sorghum (Sorghum)

Main activities
- Map cereals’ diversity status, food security status and community coping strategies related to cereals’ management
- Mainstream participatory plant breeding of cereals in national research and extension systems
- Elaboration of national response frameworks to climate change
- Support the development of national action plans for implementation of Global Plan of Action and Farmers’ Rights
- Training and capacity building
- Develop comprehensive national strategies and action plan for ex situ and in situ conservation and sustainable use of cereals diversity in Asia

Implementing institution
Southeast Asia Regional Initiatives for Community Empowerment (SEARICE)

Related website
www.searice.org.ph
BHUTAN, CAMBODIA, LAOS, VIETNAM AND the PHILIPPINES are all important centers of diversity of staple crops such as rice, maize, barley, wheat, finger millet and sorghum. Despite this fact, these countries are among the poorest in the world with a large part of their populations suffering from severe food deprivation. Even though these five countries have programs to increase cereals productions, food insecurity persists and farmers, who are the main food producers, are the most affected.

Plant genetic resource management plays a vital role for farmers’ empowerment in these countries and is also an important tool for ensuring food security, local seed systems, adaptation to climate change challenges and the enhancement of livelihoods. Through this BSF project, SEARICE aims to strengthen the capacity of smallholder farmers, in particular women and indigenous communities, to manage on-farm diversity of cereals. Furthermore, this SAP envisages supporting the development of comprehensive national strategies for *ex situ* and *in situ* conservation of cereals in Asia, and the building of national response frameworks to the climate change challenges from a PGRFA perspective.

The project complements existing SEARICE programs to mainstream participatory plant breeding and on-farm conservation of food crops within national research and extension systems. They are envisaged to have the potential to be scaled up across agro-ecological zones and be replicated in other areas, ensuring maximum positive impact and the best use of knowledge and financial resources.

In Vietnam alone, 83 promising lines of rice have been selected and 33 stable lines released. Farmers produced 63 successful crosses in addition to the 29 crosses from partners’ research institutions, and another 10 crosses from farmers’ seed clubs. An estimated 50,000 farmers will ultimately benefit from, *inter alia*, training and capacity building in management of cereals diversity on-farm, plant breeding, on-farm conservation and local seed production.