



HELPING FARMERS AND VULNERABLE COMMUNITIES TO ADAPT TO CLIMATE CHANGE AND STRENGTHEN THEIR FOOD SECURITY

Crop genetic resources contain the essential building blocks that are critical to food security. Their availability is a fundamental requirement for achieving further productivity increases and higher nutritional values through plant breeding.

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) is a global agreement in which 148 Member nations and the European Union advance the multilateral agenda for addressing the interlinked challenges of crop diversity preservation, global food security and climate change adaptation.

The present project, signed with the European Union, centred on support for the third funding cycle of the Benefit-sharing Fund (BSF 3), whose portfolio consisted of 22 approved projects targeting 45 developing countries.

The BSF 3 projects focus on helping local communities to adapt to climate change and contribute to food security. BSF 3 featured two thematic Windows: Window 2 projects supported activities ensuring that local crop varieties of importance for food security are preserved, reintroduced, developed and maintained in farmers' fields through on-farm conservation, while Window 3 projects focused on the development and exchange of value added information on plant genetic resources for food and agriculture (PGRFA) through scientific research and studies.



WHAT DID THE PROJECT DO?

BSF 3 enabled the funding and implementation of a number of relatively small and diverse but critical PGRFA interventions, whose funding by major donors individually would not otherwise have been possible. It was centred around strengthening capacities and empowering farmers, researchers and others, safeguarding and using plant genetic diversity for food security and supporting institutions for future action and innovation.

The projects incorporated work with crop wild relatives, landraces, farmer-improved varieties and improved varieties from research institutions, all explored from molecules, alleles and genes, from breeding materials to cultivars, at temporal and spatial scales, from genes to farms and to landscape levels.



KEY FACTS

Contribution

USD 5 665 262

Duration

January 2012 – December 2020

Resource Partners

European Union, Norway, Canada, Italy and Sweden

Partners

Secretariat of the International Treaty on Plant Genetic Resources, UNDP, IFAD, UNEP, the Global Crop Diversity Trust, UNOPS, the World Bank, Oxfam Novib, CATIE

Beneficiaries

Farmers and vulnerable rural farming communities facing the challenges of adapting to climate change and food insecurity, as well as countries with economies in transition

IMPACT

Training and capacity-building was an underlying component of all BSF 3 projects, with special focus on the empowerment of local communities to better conserve and manage local diversity, select and develop improved varieties and diversify production systems. This approach will serve to create a future generation of PGRFA scientists and breeders to support the implementation of the Treaty.

The Multilateral System of Access and Benefit-sharing facilitates access to and use of PGRFA, in turn generating new materials for both the farmers and the system itself. Beyond simply conserving and creating diversity, the BSF helps to strengthen the systems that maintain and create diversity for climate resilient food and agriculture.

ACTIVITIES

- 97 837 farmers, researchers, breeders, gene bank curators, government officials, students and lecturers were directly involved in and benefited from BSF 3 projects. More than 856 700 people are expected to benefit indirectly from the activities implemented.
- 36 770 women were directly involved in and benefited from the implementation of BSF 3 activities, with around 350 000 (30 percent of the total beneficiaries) expected to benefit indirectly from the outcomes of the portfolio implementation.
- 4 000 researchers and breeders involved in participatory breeding programmes, as well as the delivery of integrated packages of information and technologies to produce climate-ready germplasm.
- 5 000 students, at both MSc and PhD level, gained knowledge of participatory methods of plant breeding and community-based management systems of PGFRA.
- 1 300 government officials, policy-makers, extension agents and gene bank staff directly involved in project activities, mainly in consultations, training and capacity-building.
- 65 842 people, including farmers, scientists, breeders, extension agents, government officials and students, involved in training and capacity-building through 670 training events, including workshops, farmer field schools, field days demonstration plots and laboratory work.
- More than 166 farmer field schools established as interactive, bottom-up learning platforms to research and deploy climate-resilient crops.
- 20 706 PGRFA evaluated in laboratories and in farmers' fields, from which 298 new varieties were developed.
- 2 750 plant genetic resources of potato, wheat, maize, cassava and taro collected by BSF partners, before being characterized, evaluated and genotyped jointly by farmers and scientists in order to harness the potential coded into the genes of PGRFA and to develop new, resistant crop varieties with superior agronomic and quality traits.

Project Code

FAO: GCP/GLO/407/EC

ID donor: DCI-FOOD/2011/260-148

Project Title

“Leading the Field for food security and climate change adaptation” of the International Treaty on Plant Genetic Resources for Food and Agriculture

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