2012-2014

BENEFIT-SHARING FUND PROJECTS

Window 1: Strategic Action Plans (SAPs)
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**Brazil**

**Project title:** Shared management & use of (agro) biodiversity by indigenous & traditional communities from the semi-arid region of Minas in Brazil.

**Main activities:**

- Evaluation & elaboration of adaptation strategies to climate change
- Establishment of shared management of PGRFA
- Development of an (agro)biodiversity legal measures

**Implementing institution:** Alternative Agriculture Centre of North Minas Gerais State

**Related website:** [www.caa.org.br](http://www.caa.org.br)

**Factsheet:** [Brazil]

**OVER 700 PARTICIPANTS, INCLUDING** farmers, indigenous people, researchers and technicians from governmental and non-governmental organizations have directly contributed to determining the thematic axis of this project: agricultural biodiversity, agricultural food systems, food security, the semi-arid ecosystem of Minas Gerais, climate change and farmers’ rights.

Brazil has a vast number of plant varieties that are vital for building the national economy and guaranteeing food security; nevertheless, a number of factors, natural and manmade, have resulted in a disruption of agro-ecosystems, an erosion of biodiversity and the degradation of traditional communities’ food systems.

The Alternative Agriculture Center of Northern Minas Gerais State, a Brazilian NGO, is developing a strategic plan aimed at increasing food security for indigenous and traditional communities of the Minas Gerais region. This region has the highest small farming density...
in the country, and is characterized by rich socio-biodiversity where indigenous and traditional communities still manage and retain a significant range of species and varieties of plants that are used for food, medicine and commercialization. Despite this, they suffer from severe food deprivation and low human development.

This plan will focus on developing strategies to reduce risks to climate change, identifying and exchanging experiences in shared management of (agro) biodiversity resources, integrating practices and knowledge of indigenous and traditional communities with other farmers, NGOs and government institutions, as well as setting up for further integration of the SAP into national policies and programs.

Besides involving statewide and nationwide governmental institutions, the strategy of this project is centered on the involvement of local and federal authorities in a dialogue with existing social networks such as the Semi-Arid Articulation, National Coalition of Agroecology, Savannah Network, National Commission of Indigenous and Traditional Communities, Citizenship Territories, Rural Territories, and others.

The activities of this project will contribute to the development of new strategies for livelihoods in the semi-arid region of Northern Minas Gerais, build resilience in the face of climate change and empower farmers, indigenous and traditional communities to ensure sustainable livelihoods.
**Project title:** Participatory & science-based Strategic Action Plan to strengthen the conservation of plant genetic resources & their enhanced use in adapting to climate change in Mesoamerica.

**Main activities:**

- Monitoring local climate change
- Enhancement of *in-situ & ex situ* PGRFA conservation strategies
- Identification of material with adaptive traits & enhancement of pre-breeding
- Integration of PGRFA in food security & post-disaster response strategies
- Training & capacity building

**Implementing institution:** Bioversity International

**Related website:** [www.bioversityinternational.org](http://www.bioversityinternational.org)

**Factsheet:** [Costa Rica](#)

**THIS PROJECT HAS BEEN DESIGNED AS A** roadmap for strengthening the conservation and use of Mesoamerican native plant genetic resources as a strategic element for climate change adaptation. It combines analysis of scientific evidence (diagnosis of the status of PGRFA in the region) and broad consultation directly involving 70 experts and more than 200 stakeholders, including representatives from national governments, regional government bodies, academia, regional and international agricultural organizations, civil society and donors. The conservation and use of crop
genetic diversity is crucial for the countries of this Region as they are facing major challenges for food security, including loss of unique and irreplaceable crop biodiversity.

Project activities focus on 10 of the most important Mesoamerican crops for local and global food security with potential to generate income. A diagnosis on the status of conservation (ex situ and in situ), use, and relevant policies related to genepools of Zea, Phaseolus, Manihot, Ipomoea, Cucurbita, Amaranthus, Capsicum, Carica, Persea and Tripsacum had already been formulated. Ex situ and in situ analysis has included 384 species (26 cultivated and 358 wild).

This project’s framework will benefit farming communities by increasing their capacity to adapt to climate changes, diversify agricultural systems and dietary patterns through increased use of PGRFA diversity, and also substantially increase the capacity of decision makers in Mesoamerican countries to respond to food security challenges. The results and underlying principles of this SAP will be integrated in national policies and programs of the target countries in keeping with the commitment of the Council of Ministers of Agriculture of the Agricultural Council of Central America (CAC) in August 2013, which announced the unanimous support for this SAP, and recognized its notable contribution in providing Mesoamerican countries with access to the genetic resources needed to face the challenges of changing climate.
Democratic People’s Republic of Korea

Project title: Resources Management to Adapt to Climate Change in the Democratic People’s Republic of Korea

Main activities:

- Strengthen national capacity for PGRFA management & adaptation to climate change
- Raising awareness on the importance of PGRFA for food security & adaptation
- Conduct surveys on climate change, agro-ecological conditions & crop genetic resources management
- Promote & improve breeding programs through conventional & modern breeding techniques

Implementing institution: Academy of Agricultural Sciences

Factsheet: [Democratic People’s Republic of Korea](#)
RISING TEMPERATURES, DECLINING rainfall and frequent sandstorms in the Democratic People's Republic of Korea (DPRK) have been damaging agricultural production and changing the agro-ecosystems. In efforts to adapt to climate change, the DPRK government has placed utmost priority on developing new varieties of key food crops through better utilization and improved management.

This BSF project aims at developing 11 specific strategies for conservation and utilization of rice, maize, wheat, barley and potato, which account for the largest proportion of people's food consumption in the country and are indispensable for food security. These plans, through the involvement of national decision makers, foreign partners from the Deutsche Gesellschaft Fuer Internationale Zusammenarbeit (GIZ), scientists and farmers, aim at improving the management of crop genetic resources nationwide and effectively utilizing the PGRFA to adapt crop production to changing agro-climatic conditions, diversifying crop cultivation and guaranteeing sustainable growth in agricultural production.

Currently, direct beneficiaries, including farmers and governmental officials, have shared in training and discussions on global climate change trends and crop genetic resources management. The first Non-‐standing Committee for the National Crop Genetic Resources Management to Adapt to Climate Change has been established.

Through this project, Korean experts have participated in a South-North knowledge exchange in Germany, which included visits to research institutes, farms and governmental departments. This was organized by the GIZ with support from the UNFCCC Secretariat and 17 German research institutions.

This project has already directly benefited 1200 farmers, researchers, students and governmental officials, and is expected to involve a wide range of stakeholders in the development of national strategies for climate change adaptation for DPRK's agro-ecosystems.
Project title: Community-based Biodiversity Management for Climate Change Resilience (CBM for Resilience Project).

Main activities:

- Identify suitable CBM practices to enhance the adaptive capacity of farming communities in 12 countries
- Integrate CBM practices into national, regional & global PGRFA frameworks
- Establish strategic partnerships, networking & information exchange among farming communities & key partners
- Enhancement of community awareness on conservation & diversity of PGRFA
- Organization of multi-stakeholder workshops to identify priorities, targets & milestones for operationalization of CBM in global/regional & national frameworks & programmes

Implementing institution: Local Initiatives for Biodiversity, Research and Development

Related website: www.libird.org
Factsheet: Nepal

COMMUNITY RESILIENCE IS AT THE CORE of the proposed Strategic Action Plan that LI-BIRD, a Nepalese NGO, is developing in cooperation with partners from 12 countries in Africa, Asia and Latin America under the aegis of this BSF project.

The CBM for Resilience Project aims to contribute to strategic plans promoting the use of the Community Based Methodology as a strategy for strengthening on-farm management of plant genetic resources and building resilience through community-oriented processes involving 26 grassroots’ organizations associated with resource poor and vulnerable farmers.

LI-BIRD and its partners are conducting participatory diagnoses of climate threats affecting 26 sample sites and are conducting trials to test the best adaptive options available from a bottom up perspective. At each site, partners are focusing on two or three crops within an integrated system of trees, livestock, natural resource bases and water bodies, and are incorporating traditional knowledge and community practices into social systems. The project envisages cooperation between grassroots organizations, NGOs, and scientific and educational institutions in order to ensure evidence-based results and the inclusion of on-farm experiences into the SAP. These organizations work in association with universities that are hosting postgraduate programs relevant to the topic of PGRFA and climate change.

These activities are setting priorities, targets and milestones for the integration of community-based biodiversity management into strategic plans and programs at national, regional and global levels, using grassroots based and scientific processes. The plans are expected to be scaled out to other projects and sites and further integrated into institutional and policy frameworks.

Each country has been able to enhance the capacity of a new generation of scientists by providing support to graduate students and increasing the agro-biodiversity conservation workforce. The activities implemented so far have enhanced the knowledge base of scientists, practitioners and farming communities on agro-biodiversity conservation and reinforced their participation in conserving such diversity.

Since the CBM sites of this project are all already embedded within existing research and development programs implemented by LI-BIRD, the results and knowledge generated by this project are likely to be scaled out and replicated across countries.
Project title: Strategic Partnership with Farmer Innovators for Adaptation & Management of Plant Genetic Resources to Climate Change

Main activities:

- Map cereals’ diversity status, food security status & community coping strategies related to cereals’ management
- Mainstream participatory plant breeding of cereals in national research & extension systems
- Elaboration of national response frameworks to climate change
- Support the development of national action plans for implementation of Global Plan of Action & Farmers’ Rights
- Training & capacity building

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

Related website: www.searice.org.ph

Factsheet: Philippines
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 & local seed production.
Project title: Development of a Strategy for Building the Resilience of Pastoral Communities to Climate Change in Two Ecosystems of Sudan

Main activities:

- Establish baseline data & assessment of the vulnerability level of target communities
- Research & documentation of the characteristics of *Sorghum Vulgare* & other range plants
- Strengthen capacities of relevant stakeholders & build networks & partnerships in the pastoral sector

Implementing institution: Rangel and Pasture Administration of Ministry of Livestock, Fisheries and Rangelands

Related website: [www.rangepasture.org](http://www.rangepasture.org)

Factsheet: Sudan
SUDAN IS ENDOWED WITH A RICH GENETIC resource pool of forage plant genetic resources that constitutes a valuable heritage for mankind and contributes to the income and subsistence of a large sector of the population, which is either pastoralist (nomads) or agro-pastoralist. As much as 80% of the population lives in rural areas and relies mainly on agriculture for their livelihood.

The overall objective of this BSF project is to develop a strategy for the conservation and sustainable use of forage genetic resources in the semi-arid, low rainfall Sudanese savannah in order to help agro-pastoralist communities cope with food shortages produced by climate shocks.

The project has, thus far, succeeded in identifying key stakeholders, including the Agricultural Research Corporation, pastoralist unions and meteorological authorities at the federal, state and local levels. Initiatives contributing to capacity building of policy makers, technical staff and local community members have been implemented through capacity building and awareness raising workshops.

A number of technical studies and reports have already been done about this on-going BSF project, focusing particularly on the role of the diversity of natural forage plants in pastoral livelihoods, the role of traditional knowledge in supporting livelihoods, the characteristics of forage sorghum, and the impact of climate change on FPGRs and food security.

This SAP will be incorporated within the national programs to achieve sustainable conservation of forage plant genetic resources and be included as an essential element for longer-term development plans.

This project will also provide the basis for the development of plans directed at improving the livelihoods of pastoral communities in the country, while networking will facilitate the exchange of views and experiences, and contribute to the application of SAP principles in areas with similar environmental and social conditions.

Close to 20,000 households in Butana and Kordofan states are expected to benefit from these BSF project activities, including through the development of skills & knowledge on the proper use & management of forage resources, which are crucial for guaranteeing sustainable livelihoods.
**Project title:** Promotion of the recognition of Globally Important Agricultural Heritage Systems (GIAHS)

**Main activities:**

- Development & incorporation of an integrated PGRFA management strategy in the Gafsa oasis
- Revitalization of agricultural practices & local institutions responsible for the maintenance of the diversity in the oasis
- Training & capacity building of local & national actors in the sustainable management of Gafsa’s agro-biodiversity

**Implementing institution:** Association for the Safeguard of Médina of Gafsa

**Related website:** [www.giahs.org](http://www.giahs.org)

**Factsheet:** Tunisia
THE HISTORIC GAFSA OASIS IS A BIODIVERSITY laboratory that has been included by FAO in the Globally Important Agricultural Heritage System (GIAHS) that currently consists of six world pilot sites. This particularly oasis is also the focal point of this BSF project.

Throughout the world, generations of farmers have created, shaped and maintained unique agricultural systems and landscapes that have sustainably supported human livelihoods for centuries, but are currently subject to deterioration and erosion.

Several workshops have been organized for local and national administration offices, research institutions, NGOs and farmers to ensure the sustainable management and conservation of the historic site of the GAFSA oasis, including, in particular, PGRFA. This is an important entry point for the development of legal, technical and practical measures for the promotion of the dynamic conservation of the Oasis at local and national levels.

It is envisaged that the enabling environment created through this project will facilitate the adoption by national level authorities of these measures as a framework for action in the forthcoming months.

*The BSF projects activities of the Association for Safeguarding the Gasfa Medina are geared towards the development of a national strategy for the conservation & sustainable management of agro-biodiversity of the GIAHS in Tunisia.*