



The International Treaty
ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE



<http://www.planttreaty.org>

Third Project cycle of the Benefit-sharing Fund

Window 3

Co-development and transfer of technologies projects



Benefit-sharing Fund

3rd project cycle: 22 projects approved in March 2015 targeting 44 developing countries

- 21% in Africa
- 23% in Near East
- 21% in GRULAC
- 18% in Asia
- 16% in SWP
- 2 in ERG

Total Funds : 11,000,000 USD (main donor: Norway, European Union, Italy)

12 Window 3 projects approved

- 8 % in Africa
- 25 % in Near East
- 17 % in GRULAC
- 42 % in Asia
- 8 % in SWP



CALL FOR PROPOSALS OF THE BENEFIT-SHARING FUND: 2014 Window 2: Immediate Action Projects

GUATEMALA

HONDURAS
NICARAGUA
COSTA RICA

Uso sostenible de la agrobiodiversidad de maíz, frijol y especies subutilizadas en comunidades indígenas de Centroamérica: Una estrategia para la seguridad alimentaria y adaptación climática.

Asociación de Organizaciones de los Cuchumatanes (ASOCUCH)

Maíz, Frijol, Yuca, Camote, Cucurbitáceas

CUBA

La diversidad de recursos forrajeros para atenuar el efecto del cambio climático en los sistemas ganaderos en Cuba (FITORED)

ESTACIÓN EXPERIMENTAL DE PASTOS Y FORRAJES "INDIO HATUEY"

Andropogon gayanus, Canavalia ensiformis, Trypsacum laxum, Brachiaria spp., Panicum maximum Tithonia diversifolia, Pennisetum purpureum, Leucaena spp., Vigna sp., y Centrosema sp.

UGANDA

Strengthening Seed Delivery System for Dryland Cereals and Legumes in Drought-prone Areas of Uganda

NATIONAL SEMI ARID RESOURCES RESEARCH INSTITUTE (NASARRI)

Sorghum, finger millet, pearl millet, cowpeas, pigeonpeas, and groundnuts

PERU

BHUTAN
NEPAL

Biodiverse and Nutritious Potato Improvement across Peru, Nepal and Bhutan

INTERNATIONAL POTATO CENTER (CIP)

Potato

TURKEY

ISLAMIC REPUBLIC OF IRAN
ISLAMIC REPUBLIC OF AFGHANISTAN

Improving food security by enhancing wheat production and its resilience to climate change through maintaining the diversity of currently grown landraces

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT)

Wheat

KENYA

TANZANIA
UGANDA

Promoting open source seed systems for beans, forage legumes, millet and sorghum for climate change adaptation in Kenya, Tanzania and Uganda

NATIONAL GENE BANK OF KENYA

Beans, forage legumes, millet and sorghum

ZIMBABWE

MALAWI
ZAMBIA

Policies and practices to facilitate the implementation of developed Strategic Action Plans for Plant Genetic Resources conservation and use for the improvement of food and nutrition security under changing climatic conditions

Community Technology Development Trust

Sorghum, pearl millet, cowpeas, finger millet and pigeon peas

ALBANIA

Strengthening on-farm conservation and utilization of PGRFA to support farmers' adaptation to climate change and improved livelihoods in Albania

AGRICULTURAL UNIVERSITY OF TIRANA

Beans, wheat, maize, medicago, apple

ZIMBABWE

Community based conservation, utilization and management of climate adapted Sorghum, Pearl-Millet, Cowpea and Bambaranuts in Matebeleland South Province of Zimbabwe

Practical Action

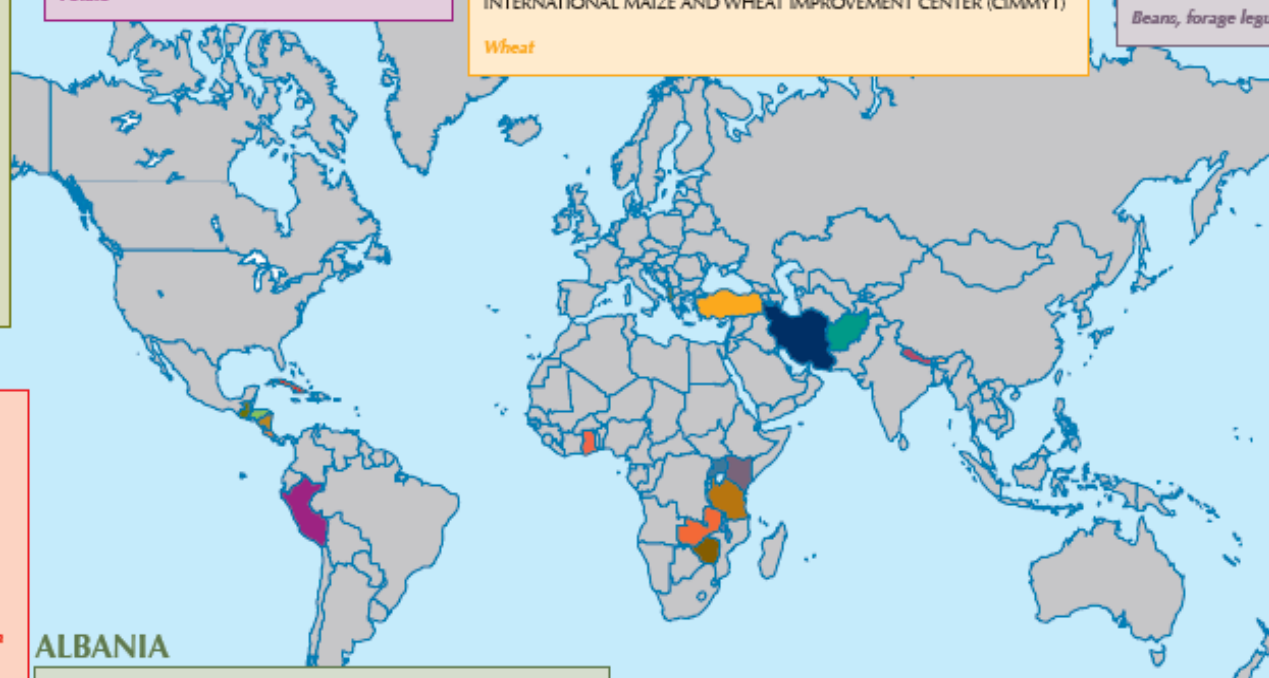
Sorghum, pearl millet, cowpeas and bambaranuts

GHANA

Sustainable utilization of cowpea genetic resources for enhanced food security and poverty alleviation in the dry savannah Northern regions of Ghana

UNIVERSITY OF CAPE COAST

[Vigna unguiculata (L) Walp.]



CALL FOR PROPOSALS OF THE BENEFIT-SHARING FUND: 2014 Window 3: Co-development and transfer of technologies

MOROCCO | **TUNISIA**
ALGERIA

In vitro culture and genomics-assisted fast track improvement of local landraces of wheat and barley in Morocco, Tunisia and Algeria for enhancing food security and adaptation to climate change

ICARDA

Bread wheat, durum wheat and barley

PERU | **ECUADOR**
VENEZUELA

Marker assisted selection for potato germplasm adapted to biotic and abiotic stresses caused by global climate change

UNIVERSIDAD NACIONAL AGRARIA LA MOLINA (UNALM)

Potato

JORDAN | **EGYPT**
ETHIOPIA
SUDAN

An integrated approach to identify and characterize climate resilient wheat for the West Asia and North Africa Region

ICARDA

*Wheat (*Triticum et al.*)*

TURKEY | **IRAN**
MOROCCO

Addressing the challenges of climate change for sustainable food security in Turkey, Iran and Morocco, through the creation and dissemination of an international database to promote the use of wheat genetic resources and increase genetic

INTERNATIONAL CENTER OF MAIZE AND WHEAT IMPROVEMENT (CIMMYT)

*Wheat (*Triticum aestivum*)*

MALAYSIA | **NIGERIA**
GHANA
INDONESIA

Genetic and trait characterisation of farmer and genebank sources of bambara groundnut for the development of drought tolerant lines in sub-Saharan Africa and Southeast Asia

CROPS FOR THE FUTURE RESEARCH CENTRE

*Bambara groundnut (*Vigna subterranea* (L.) Verdc.)*

TANZANIA | **KENYA**

Marker assisted selection of useful cassava germplasm adapted to biotic and abiotic stresses caused by global climate change

MIKOCHENI AGRICULTURAL RESEARCH INSTITUTE

*Cassava (*Manihot esculenta*)*

COSTA RICA

Tecnología informática para el uso y la conservación de recursos fitogenéticos de raíces tropicales (yuca, ñame, camote, tiquizque y malanga) que contribuyen a la alimentación humana y animal en Costa Rica

INSTITUTO NACIONAL DE INNOVACIÓN Y TRANSFERENCIA EN TECNOLOGÍA AGROPECUARIA (INTA)

*Yuca (*Manihot esculenta*), ñame (*Dioscorea spp.*), camote (*Ipomoea batatas*), aráceas: tiquizque; (*Xanthosoma spp.*) y malangas (*Colocassia spp.*)*

DPR KOREA

Genetic base broadening and germplasm enhancement for the development of drought tolerant cultivars of wheat and barley in Democratic People's Republic of Korea

ACADEMY OF AGRICULTURAL SCIENCES (AAS)
Wheat and barley

FIJI | **KIRIBATI**
MARSHALL ISLANDS
PALAU
SAMOA
TONGA
COOK ISLANDS

Using modern biotechnologies to sustain food security in Pacific island countries

SECRETARIAT OF THE PACIFIC COMMUNITY

Aroids (taro, alocaña, xanthosoma, swamp taro)

INDONESIA

Biomarker development Toolkit for improving rice production and resistance to climate change in Indonesia

BINA NUSANTARA UNIVERSITY

Rice

MALAYSIA
LAO PDR
PHILIPPINES

Co-Development and transfer of rice technologies

INDONESIAN AGENCY FOR AGRICULTURAL RESEARCH AND DEVELOPMENT

Rice

RWANDA
INDIA
BRAZIL

Multicountry construction of a test platform for the development and allocation of globally unique identifiers for rice germplasm, linking the MLS information infrastructure and the DivSeek repository

INDONESIAN AGENCY FOR AGRICULTURAL RESEARCH AND DEVELOPMENT

Rice



Window 3: Co-development and Transfer of Technologies

Scope and beneficiaries:

- co-development and transfer of key technologies which will enable the exchange of value added information on PGRFA, and in particular those that are related to the use of species in the genepool of the Multilateral System
- include activities such as the creation of PGRFA molecular, phenotypic and genotypic information, marker assisted selection systems to facilitate breeding for useful traits, development of climate-ready traits and plant varieties, transfer, co-development and deployment of technologies to support use of bioinformatics tools
- the primary beneficiaries will be research institutions, gene banks, scientists and breeders, and ultimately resource-poor rural populations in the target countries

Size and duration

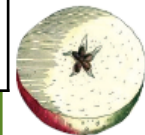
- Single country projects
Maximum funding: US\$ 300 000
Duration: 2 years
- Multi-country projects
Maximum funding: USD 500.000
Duration: 3 years





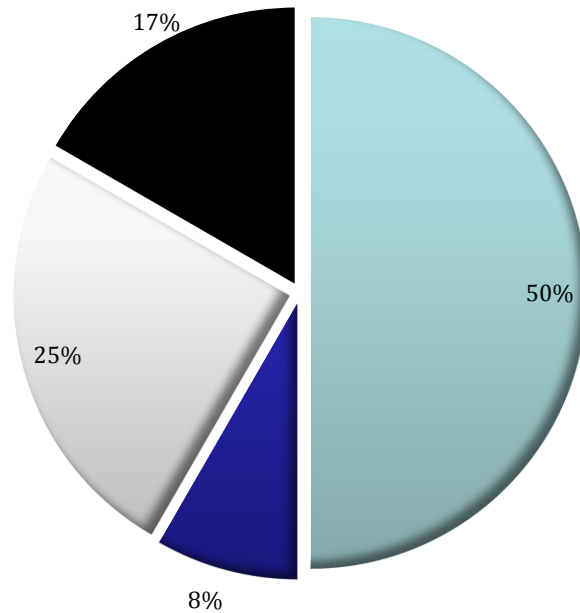
Window 3 projects: partnerships arrangements

<p>W3A Single country</p>	<p>A leading developing Contracting Party that had identified a problem to be addressed in its country will work together with partnering institutions that have the necessary/complementary know how, skills, technologies and information that are required to solve the identified problem</p> <p><u>Lead institution=applicant institution=main beneficiary</u></p> <p><u>A typical partnership:</u> involves a national research institution in a developing country working in partnership with a research institute from another country, to develop a particular item of technology and transferring it to the lead institution for further adaptation, testing, use and dissemination.</p> <p><u>Partnership arrangements will always benefit developing Contracting Parties</u></p>
<p>W3B Multi country</p>	<p>A consortium of institutions comes together to solve a similar problem being faced in different countries that are developing countries and Contracting Parties to the Treaty.</p> <p>The consortium can include national partners of the beneficiary and regional or international partners who have complementary technologies and information, and are operating or creating large-scale data hubs and repositories.</p> <p>Partners in the consortium will work together in the co-development and utilization of technologies that enable the utilization of PGRFA for the generation, exchange and utilization of molecular, phenotypic and genotypic information</p>





Executing agencies



■ National Research Institutes

■ Regional Research Institutes

■ International Research Institutes

■ University



Window 3 projects: expected outputs

- Local varieties genetically analysed to discover the presence of potentially useful alleles;
- Germplasm phenotyped for traits of potential value for adaptation to CC;
- Marker assisted selection systems to facilitate breeding for traits relevant for adaptation to CC;
- Breeding populations developed through crossing with crop wild relatives having useful traits;
- Information created, disseminated and accessed on scientific, technical and environmental matters related to PGRFA, including genotypic and phenotypic data;
- Technologies transferred, co-developed and deployed to support use of bioinformatics tools for exchange of information on PGRFA;
- Specialized tools available, transferred and deployed for integrated data analysis and interpretation of germplasm, genomic and phenotypic data;
- Capacity of involved institutions strengthened to use information management systems that support the discovery and use of traits that facilitate adaptation to the possible effects of climate change.



Window 3: support to implementation

- Ensure good delivery under the project (backstopping by qualified institutions)
- Share experiences among implementing entities (methodologies, lessons learned)
- Explore thematic coherence among the projects (study on technology pathways)
- Assessment of further technology needs

A role for the Platform?



Future calls for proposals: recommendations

To strengthen the programmatic approach in order to make support to the BSF more attractive

- ✓ providing greater predictability to donors (planned activities, targeted outputs, impacts)
- ✓ improving thematic coherence between individual projects, and project cycles;
- ✓ developing a long-term investment strategy, with objectives and results;
- ✓ promoting synergy between the Benefit-Sharing Fund and the Funding Strategy

A role for the Platform?