PROJECT DOCUMENT

Perez-Guerrero Trust Fund for Economic and Technical Cooperation Among Developing Countries, Members of the Group of 77

Regional / Interregional:

Interregional

Title of Project:

Training of Maize Breeding Experts for the Effective Use of Maize Genetic Resources

in Developing Countries

Award ID:

00037766

Project ID:

00083577

Sector:

Agriculture

Submitted by:

Academy of Agricultural Sciences (AAS), DPRK

Beneficiaries:

People engaged in maize breeding in the beneficiary countries: Guinea, Ethiopia,

Tanzania and Rwanda

Duration of project:

6 months

Estimated starting Date:

December 2013

PGTF inputs:

US\$ 34,000 (same as budget)

Other inputs:

US\$ 42,000 in-kind contribution by the Government of the DPR of Korea

Total cost of project:

US\$ 76,000

This project is to be executed by the UNDP under Direct Execution Modality, as part of the FAO executed project: Improved Seed Production for Sustainable Agriculture, in close collaboration with the relevant National Committee, as the national counterpart. All funds will be disbursed through the UNDP DPRK Country Office as per established PGTF guidelines once an agreed upon work plan and disbursement schedule is finalized.

On behalf of the Government of the DPR Korea

6/12/2013

Ri Hung Sik, Secretary-General

NCC for UNDP DPR of Korea

On behalf of UNDP

Ghulam Isaczai

Resident Representative, UNDP DPR of Korea

Project Justification and Background

Past experience in crop cultivation has proved that efficient use of genetic resources is one of the key factors that boosts the per hectare yield in modern agricultural practices in order to ensure food security. Acquisition and diffusion of research findings, relevant techniques and know-how are therefore of paramount importance in the introduction and effective utilization of these resources. Achieving this will require research and scientific cooperation, exchange of science and technology information especially in food crops like maize, one of the highest yielding crops, along with rice, through the cooperation by the Perez-Guerrero Trust Fund for Economic and Technical Cooperation among Developing Countries, Members of the Group of 77.

The training of breeding experts for the effective use of rice, maize and groundnut germplasm was organized in Guinea by the support of PGTF in 1999, 2002 and 2005. Experts of developing countries including Guinea and Democratic Republic of Congo had attended the training and played responsible roles in breeding rice and maize varieties suitable to the climatic conditions of African countries with the help of the Guinea Kim II Sung Research Institute of Agricultural Sciences.

The proposed additional activities (project) will make a practical contribution for improving food security by training local maize breeders as well as establishing maize breeding systems suited to local conditions with the joint efforts and cooperation of the participating countries. It would be also a supplement to the efficiency and effectiveness to the local breeding programs through collection, evaluation and exchange of genetic resources among the participating countries.

The Academy of Agricultural Sciences in DPRK will train the trainees to acquire the modern techniques of designing detailed programs of maize breeding and the superior procedures and methods of breeding, and will provide necessary protocols and other documents, thus enabling them to conduct independent breeding work by themselves. The proposed additional activities are designed based on the experiences of the implementing institution accumulated during its previous projects for the Green Revolution and the South-South cooperation.

2. Objectives:

The proposed activities aim at establishing cooperation among the participating countries in maize breeding system and methodology suitable to the local conditions of each country.

The objectives of the proposed activities include:

- i. Build human resource capacities in efficient use of maize genetic resources;
- ii. Increase awareness and build on the body of knowledge in maize research;
- iii. Contribute to improvement of food security;
- iv. Enhance South-South cooperation, food research, science and technology.

3. Results and Resources Framework

Intended Outcome: Improveme	Intended Outcome: Improvement of the agricultural production and food security in the beneficiary countries	n the beneficiary countries		
Outcome indicator:				
 Availability of 1 or 2 expert 	Availability of 1 or 2 experts from each beneficiary country trained in maize breeding	eeding		
Establishment of informative	Establishment of information exchange system on a regular basis of research results and experiences gained in the countries	ssults and experiences gained	in the countries	
Project: "Training of Maize Breeding Experts	eding Experts for the Effective Use of Genetic Resources in Developing Countries",	rces in Developing Countries",		
Intended Outputs	Activities	Inputs	Budget Line	Budget (Year)
1. Survey and analysis of the maize research and production activities and preparation of the workshop	Appointment of: - 3 lecturers for workshop *Two lecturers from AAS,DPRK/One lecturer will be appointed from the Guinea Kim II Sung Research Institute of Agricultural Sciences - workshop and practice venues - workshop course and outlines - translation of training materials and others - simulation workshops and consultative meetings - collection and analysis of data of the existing problems and suggestions from there - study of mutual cooperation system - data processing (analysis & report) - Selection of Trainees i. Selection of trainees from	Cost for all preparations of the workshop 1. Appointment: US\$ 30,000 2. Preparation: US\$ 12,000		US\$ 42,000

	beneficiary countries		
	ii. Vetting and Registration of trainees by UNDP		
2. Training of trainees	Workshop to train trainees in, Ethiopia, Tanzania, Rwanda and Guinea STEP 1	Cost of the workshop Travel: 14, 000 Training	US\$ 34,000
	- Travel	(trainers' fees): 15, 000 Workshop costs: 5, 000	
	 3 persons (1 government focal point & 2 lecturer) from DPRK to Ethiopia 		
	 1 person each from Tanzania and Rwanda to Ethiopia and back 		
	- Accommodation		
	 5 persons for one week in Ethiopia Conduct of training: 		
	i. Designing a general maize breeding		
	ii. Stepwise procedures and techniques		
	of breeding		
	terials:		
	i. Collection, evaluation and		
	II. Selection of the source germplasm accessions for breeding		
	Inducing variations		
	- Crossing		
	- Mutation		
	- Selection from segregating populations		
	- Comparison of lines		
	their yield potentials		-
	- Evaluation of the homogeneity of the selected		
	lines		
	- Exploration of the proper techniques of growing		
	the selected lines		2

- Protocols for the evaluation of the resistance/	
- Drought tolerance	
- Indoing tolerance	
- Analysis of the contents of different substances	
in selected lines	
liO-	
- Protein	
- Minerals	
- Vitamins	
- Development of pre-basic seeds	
- Performance of data processing and prepare	
research reports	
- Documentation and Thai report	
STEP 2	27
- Travel	
• 3 persons (1 government focal point & 2	
lecturer) from Ethiopia to Guinea to DPRK	
- Accommodation	
3 nersons for one week in Griinea	
Conduct of training:	
III. Designing a general maize breeding	
project	
iv. Stepwise procedures and techniques	
of breeding	
Survey for breeding materials:	
iii. Collection, evaluation and	
conservation of maize germplasm	
iv. Selection of the source germplasm	
accessions for breeding	
Inducing variations	
- Crossing	
- Mutation	3

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- Selection from segregating populations		
- Comparison of lines	-343	
- Characterization of the selected lines and test		
their yield potentials		
- Evaluation of the homogeneity of the selected	-1/-	
lines		
- Exploration of the proper techniques of growing		
the selected lines		
- Protocols for the evaluation of the resistance/		
tolerance to major biotic stresses		
 Drought tolerance 	-	
- Lodging tolerance		
- Analysis of the contents of different substances		
in selected lines		
liO -		
- Protein		
- Minerals	***	
- Vitamins		
- Development of pre-basic seeds		
- Performance of data processing and prepare		
research reports		
 Documentation and final report 		

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-Accommodation	
-Documentation	
-Data processing	
Execution Fee %	0.00
Total	US\$ 76,000

4. Management Arrangements

The project will be executed by the UNDP, DPRK as part of the UNDP funded project titled; Improved Seed Production for Sustainable Agriculture implemented by FAO.

The UNDP Country Office will, on receipt of funds from SU-SSC, release funds for project execution as per PGTF guidelines and based on a disbursement plan and satisfactory progress of work. UNDP, with inputs from national counterpart, will produce a report to be submitted to SU-TCDC.

The role of the Country Office per DEX modality will be to provide full implementation and oversight to the project.

Project Work Plans

A work plan is attached as Annex 1 to the Project Document. It may be revised when the first allocation is made.

Execution Arrangements

The project will be executed under the Direct Execution Modality by the UNDP.

Lecturers' list, CVs and ToRs will need to be shared with UNDP and approved in advance.

Potential participants' list and registration details will be shared with UNDP and approved in advance.

Progress monitoring will be done by the executing agency, the UNDP. The project may be audited by the Perez-Guerrero Trust Fund.

Monitoring and Evaluation; Lessons Learned

Progress monitoring will be done by the executing agency, the UNDP, in collaboration with FAO. The project might be audited by the UNDP and/or Perez-Guerrero Trust Fund.

Reports will be produced on activities and on overall project, which will be submitted to, and approved by UNDP. The Project will be monitored through the following:

Reports

- > Terminal Report, which will be prepared at the final month of Project implementation by the Project Manager (the Programme Analyst-Agric in UNDP). The Terminal Report will present the accomplishments of the Project against targets and key performance indicators, lessons learned and problems faced during the execution of the activities, and recommendations for follow up or future programmes. The Terminal Report will also contain the financial report of the Project.
- Mission Reports. Reports will be prepared and submitted to UNDP by lecturers on the trainings and workshops conducted in target countries.
- ➤ PGTF reporting guidelines: PGTF reporting guidelines shall also be adhered to. Any such required reporting will be done by FAO with the support of the SPA-M&E

The following table shows the M&E plan of the Project.

M&E Activities	Frequency /Timing	Aspects to be Monitored & Evaluated/ Description	In-charge of Activity	Approval
Annual Work plan and budget	Beginning of project	Detailed activities, budget, milestones, deliverables, manpower inputs for the next year	PA, UNDP	UNDP Management
Selection and Registration of Trainees	Preparation of the Training	Selection criteria Names, job titles, area of expertise and contact details	PA, UNDP	UNDP Management
Terminal Report	End of Project	Project accomplishments; Project expenses and financial report; Records and evidences of all outputs; Lessons learned and recommendations for future actions	PA, UNDP	UNDP Management
Mission reports	After mission	Relevant aspects of the mission (according to defined template)	Individual participants or team leader	UNDP Management
Financial recording & reporting	Throughout the Project; continuous	Expenditure against budget and activity	Project Assistant, PSU and PA, UNDP	UNDP Management

5. Legal Context

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of the DPRK and UNDP, signed on 1979.

UNDP as the Executing Agency shall comply with the policies, procedures and practices of the United Nations safety and security management system.

UNDP agrees to undertake all reasonable efforts to ensure that none of the project funds are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

Project Budget Covering Perez-Guerrero Trust Fund Contribution

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Project Number:

Training of Maize Breeding Experts for the Effective Use of

Project Title Maize Genetic Resources in Developing Countries

Management Arrangement UNDP Direct Execution

Country DPR Korea

			Total	2014
Bud. Line	Description	Exe. Agy.	US\$	US\$
	Training	UNDP	34,000	34,000
	Budget Total		34,000	34,000

^{*} Mandatory withholding of 10% project budget in accordance with PGTF guidelines, to be released when all project reports (progress, terminal and expenditure) are received.

Annex 1. Work Plan

Remarks											
Means of Verification		Monitoring & Evaluation (M&E) by UNDP			Feedback from trainees			Monitoring & Evaluation (M&E) by UNDP	Mission report of	training	
Party Responsible		DEX			DEX			Beneficiary countries	DEX	DEX	DEX
	JUL										
	JUN			×							
4)	MAY			Salessastiles							
Time Frame (2013-14)	APR										×
ne (20	MAR								×	×	
Fram	FEB						×	×			
Time	JAN						×				
	DEC	×									
	NOV			New York							
	ОСТ										
	Action	1: Appointment of 2 lecturers for workshop (1 in Guinea)	2: Preparation of Facilities & Materials - workshop and practice venues	 equipment, facilities, stationery workshop course and outlines 	 collection and analysis of data of the existing problems and suggestions from there 	- study of mutual cooperation system	data processing (analysis & report)	- selection and invitation of trainees	1: Travel & Accommodation	2: Conduct of training	3:Documentation and Final Reporting
	Output/Activity			Preparation for the training					Workshops in	Ethiopia and	Guinea
	Outcome										

Project Budgets

Rudaet Line	acitairosaC	Responsible	Period	Total
חממפכו בוווכ	iond need	Parties	from to m/m	m USD
Government In-Kind Contribution				42,000
N/A	Appointment	Government		30,000
N/A	Preparation	Government		12,000
Trainings (PGTF Contribution)				34,000
71600	Travel	DEX		14,000
75700	Trainings	DEX		15,000
75700	Workshops	DEX		5,000
			Grand-total	tal 76,000