

FINAL REPORT

On Implementation of PGTF Project PRK10/00041074 (INT/05/K02)

“Training of Researchers for Production, Processing and Inspection Methods of Seed in Developing Countries”

Seed Technical Center, Ministry of Agriculture, D.P.R.Korea

July 15, 2005

The 28th Ministerial meeting of the Group of 77 held in New York on September 30, 2004 approved the PGTF project “Training of Researchers for Production, Processing and Inspection Methods of Seed in Developing Countries” which had been submitted by the Seed Technical Center, Ministry of Agriculture, DPR Korea.

DPRK National Coordination Committee for UNDP (the executing agency) and STC (the implementing agency) started implementation of the project on December 2004.

This report includes background, activities, results, a bill and annexes relating to accomplishment of Perez-Guerrero Trust Fund’s project PRK10/00041047 (INT/05/K02).

1. Background

Good quality seed production in developing countries is regarded as vital to increase agricultural production, guaranteeing the national food security and improving livelihood of their rural population. At present, some of the developing countries still use outdated methods of seed production owing to shortage of technology and fund. So quality of seeds and crop yield has remained low.

But developing countries own the specific experiences and advanced technology acquired from their activities of production, processing and inspection of seed. If the developing countries further exchange of such experiences and techniques, and establish economic and technical cooperation system in the seed sector, the production and quality of seed would be improved.

DPRK has some of modern experiences and techniques for seed production of staple & vegetable crops. Great efforts and concern have been directed in recent years to seed improvement under the policy of bringing about innovation in breeding new varieties. Lots of successes achieved in developing hybrid varieties and developing seed selection and inspection techniques will be applied for improvement of seed production sectors.

F1 hybrid-seed production method based on inbred line breeding, male sterility and self-compatibility techniques may be used as one of approaches in seed breeding and

production sectors of developing countries. Improvement in seed inspection technology through combining modern technology and traditional methods is a prerequisite for supplying crop farms good quality seed.

Abiding by the principle of developing South-South cooperation on the basis of collective self reliance, Seed Technical Center of Ministry of Agriculture, DPRK proposed and implemented the project of training of researchers for production, processing and inspection methods of seed for eastern African developing countries and DPRK. The project has made a contribution to the training of seed technicians of the Republic of Ethiopia, the United Republic of Tanzania, the Republic of Uganda and D.P.R.Korea.

2. Activities for Implementation of Project

The 28th Ministerial meeting of the Group of 77 held in New York on September 30, 2004 approved the project PRK10/00041047 (INT/05/K02)“Training of Researchers for Production,

Processing and Inspection Methods of Seed in Developing Countries” which had been submitted by the seed Technical Center, Ministry of Agriculture, DPR Korea.

After D.P.R.Korean National Coordination Committee for UNDP, STC and UNDP Pyongyang CO signed on the project documents on December 20, 2004, the work plan was revised and the sub-contract was signed by NCC for UNDP and STC. US\$ 67,500 was put for the project implementation from the Government and US\$ 45,000 from Perez-Guerrero Trust Fund through the UNDP Pyongyang CO in DPRK.

On Jan. 5, 2005, NCC and STC appointed a project coordinator and 2 project co-managers. A working group was formed with 3 advisors (collection and analysis of data), 5 trainers (for lectures and practices) and 6 assistants and began the activities according to the work plan.

STC conducted collection and analysis of problems in seed sectors of the beneficiary countries and prepared training course, lecture plans, reference materials, venues and facilities for lectures and practices.

Training schedule included 8-hour lecture, 4-hour field practice, 8-hour laboratory practice and 11-hour discussion to facilitate understanding of all subjects. All materials were printed in Korean and English languages and visualized on power-point based presentations. Deep attention was paid to exchange of experiences and information of actual situation in every participating country and participants were provided floor to present their reports.

Mr. Chon Jong Nam and Mr. Ri Gil Ung (both co-managers) were authorized by STC to execute training workshop. Mr. Ri Song Chol (coordinator) was authorized by NCC to supervise project activities. Trainers responsible for lectures were Mr. Choi Jong Hu (Dr. Ph. Chief researcher, PAU), Mr. Sonu Song Jin (M. Sc. Senior lecturer, PAU), Mr. Choi Song Un (B. Sc. Junior lecturer, PAU), Mr. Kim Su Geun (M. Sc. Laboratory section leader, STC) and Mr. Hwang Jong Su (B. Sc. Senior inspector, STC).

The workshop took place June 29 to July 5, 2005 at the People's Palace of Culture (for lectures and discussions), Junghwa Seed Multiplication Farm (for field inspection practice) and Central Seed Inspection Laboratory (for laboratory inspection practice) with participation of 12 trainees (1 from Ethiopia, 2 from Tanzania, 2 from Uganda and 7 from DPRK). All the participants were provided with stationary and training stuff.

All the participants visited the statue of President Kim Il Sung to express their respect. At the opening ceremony, opening speech was addressed by Mr. Chang Si Pil, Director of External Cooperation in Ministry of Agriculture and Mr. Ri Gil Ung, co-manager, outlined workshop program which was followed by participants' introduction.

Lectures were given on "Seed production system in DPRK," "Breeding and seed production of F1 hybrid," "F1 hybrid seed production in staple crops" and "F1 hybrid seed production in vegetable crops." There were practices on "seed inspection at the field" and "Seed inspection at laboratory."

At the closing ceremony, Mr. Ri Gil Ung made the training wrap-up speech and certificates of participation to the "Training of Researchers for Production, Processing and Inspection

Methods of Seed in Developing Countries" were granted to participants on behalf of STC, MOA, DPRK. A letter of thanks to H. E. Mr. **Kim Jong Il** initiated by African trainees was adopted unanimously by the participants. Closing speech was delivered by Mr. Chang Si Pil. Highly appreciating the success of the training held in deep concern and support of H. E. Mr. **Kim Jong Il** and D.P.R.K government, all the participants expressed their will to disseminate and apply new techniques **learned** in the training course and their hope for consecutive South-South technical cooperation projects in agricultural sector which benefits developing countries, especially African countries.

3. Results of Project Implementation

- The need and means to improve seed sector in developing countries has been affirmed.
- Newly developed seed techniques have been introduced and learned, thus consolidating technical capacity of seed sector of the beneficiary countries to produce the first generation hybrid seed with high productivity by 10%, to decrease rate of seed waste by 5%, to increase crop production by 12%.
- Mutual understanding formed in process of exchanging the technology and experience in the workshop has set up a basis for further cooperation between the countries.

- 12 seed experts have been trained who will be responsible for activities in seed sectors in the countries.

4. Conclusion

The South-South cooperation based on collective self-reliance is a sole way-out to solve food-deficiency and improve living standards of people in developing countries. Modernization of agricultural sector in developing countries should take place in line with their specific conditions.

STC would like to extend its warm gratitude to Perez-Guerrero Trust Fund, the Group of 77, NCC for UNDP (DPRK Government), Governments of participating countries, UNDP Pyongyang CO and all the participants for their support and contribution to successful implementation of the project.

5. Bill

The fund of US\$ 45,000 from PGTF was spent for project implementation accountably as follows;

No	SPECIFICATION	COST(US\$)
1	PERSONNEL	
	Project Coordinator (1)	\$ 600
	Project Manager (2)	\$ 1,420
	Advisors (3)	\$ 1,880
	Trainers (5)	\$ 1,380
	Assistants (6)	\$ 900
	Trainees (12)	\$ 5,440
2	TRAVEL	\$ 14,130
3	PLACES OF LECTURE/PRACTICE,	\$ 2,600
4	MATERIALS, STATIONARY	\$ 13,790

5	DATA PROCESSING	\$ 1,110
6	DOCUMENTATION	\$ 1,300
	TOTAL COST:	\$ 44,550

✂ STC on Mar. 1, 2005 received from UNDP Pyongyang CO US\$ 40,095, 90% of US\$ 44,550 along with its deduction of US\$ 450, 1% as a UNDP service fare from US\$ 45,000 which is the allocation from PGTF for project implementation. US\$ 4,455, the remaining 10% of US\$ 44,550 to be sent by UNDP Resident Representatives in DPRK right after receiving project final report, will be used by STC to pay for the services it has received for project implementation.

ANNEX 1

List of Participants at the“Training of Researchers for Production, Processing and

Inspection Methods of Seed in Developing Countries”

1. Trainees

1 Ethiopia (1 person)

- **Ms. Tigist Wondimu Kiflemichael**, 33 yrs, Lecturer, Department of Biology, Addis Ababa University, Ethiopia

2 Tanzania (2 persons)

- **Mr. Japheth Lujabiko Kihupi**, 52 yrs, Seed Production Farm Manager, Uyole Agricultural Research Institute, Tanzania
- **Mr. Raymond Philip Swai**, 58 yrs, Seed Production Farm Manager, Crop Development Department, Ministry of Agriculture and food Security, Tanzania

3 Uganda (2 persons)

- **Mr. Bazzale Joseph Aliguma**, 45yrs, Chief inspector, Plant Protection Department, Ministry of Agriculture, Animal Husbandry and Fishery, Uganda
- **Mr. Okullo Kwany Fidele Steve**, 58 yrs, Vice-director, Plant Protection Department, Ministry of Agriculture, Animal Husbandry and Fishery, Uganda

4 DPR Korea (7 persons)

- **Mr. Pak Bong Dok** , 48 yrs, Chief Engineer of Seed Technical Center, MOA
- **Mr. Ri Min Gyu**, 38 yrs, Senior Technician, STC, MOA
- **Mr. Chong Ho Song**,48 yrs,Vice-president of Pyongyang Agricultural University
- **Mr. Kim Yong Son**, 32 yrs, Junior Researcher, PAU
- **Mr. Choi Jong Ho**, 28 yrs, Junior Researcher, PAU
- **Mr. Rim Mun Hyok**, 31 yrs, Junior Researcher, PAU
- **Mr. Ri Song Chol**, 33 yrs, Junior Researcher, PAU

2 List of Coordinator, Co-managers and Trainers

1. Coordinator

- Mr. Ri Song Chol, Senior Official, NCC for UNDP

2. Co-managers

- Mr. Chon Jong Nam, Junior Official, External Cooperation Department, MOA
- Mr. Ri Gil Ung, M. A. Senior Lecturer, PAU

3 Trainers

- Mr. Choi Jong Hu, Dr. Ph. Chief Researcher, PAU
- Mr. Sonu Song Jin, M. Sc. Senior Lecturer, PAU
- Mr. Choi Song Un, B. Sc. Junior Lecturer, PAU
- Mr. Kim Su Geun, M. Sc. Laboratory Section Leader, STC
- Mr. Hwang Jong Su, B. Sc. Senior Inspector, STC

ANNEX 2

Titles of Lecture and Practice

1. Titles of Lectures

- Seed Production System in DPRK
- Breeding and Seed Production of F1 Hybrid
- F1 Hybrid Seed Production in Staple Crops
- F1 hybrid Seed Production in Vegetable Crops

2. Titles of Practices

- Seed Inspection at Farm Field
- Seed Inspection at Laboratory

ANNEX 3

PICTURES OF THE WORKSHOP

















