# **Final Report**

### On the implementation of the PGTF Project PRK10/00040947(INT/05/K03) "Training of Groundnut Breeding Experts for the Effective Use of Groundnut Genetic Resources in the Developing Countries"

### Academy of Agricultural Sciences, DPR Korea June 3, 2005

The 28th Ministerial Meeting of the Group of 77 held in New York on September 30, 2004 approved the PGTF project "Training of Groundnut Breeding Experts for the Effective Use of Groundnut Genetic Resources in the Developing Countries" which had been submitted by the Academy of Agricultural Sciences, D.P.R of Korea.

DPRK National Coordination Committee for UNDP (the executing agency) and AAS (implementing agency) commenced implementation of the project by December 2004. This report includes background, activities, results, a bill and annexes relating to the accomplishment of the Perez-Guerrero Trust Fund's project PRK10/00040947 (INT/05/K03)

### 1. Background

Food production must be increased in order to provide people with stable life and consolidate independence of their national economy in developing countries. In order to solve the food shortage prevailing now we have been pushing forwards South-South cooperation and exchange in the agricultural field on the principle of the collective self-reliance.

Groundnut is very rich in edible oil and nutritional values and is consumed in big quantity by the people and as materials at food processing industry therefore it is vital to considerably increase the peanut yield.

Research and production on new varieties is thought to be the main way to boost groundnut production and better the quality. Recent years developing countries have managed in many ways to raise groundnut production, but there are few of big progress due to inactive introduction of the advanced techniques to the peanut breeding, pure foundation seed production and seed collection.

We need to train a number of groundnut technicians and experts who will be fully aware of the latest groundnut breeding technology and could speed up breeding of new groundnut varieties.

Academy of Agricultural Sciences of D.P.R.K has accordingly proposed the training of groundnut breeding experts of the West African countries with a desire to give full support by organizing the workshop on groundnut breeding techniques fit to the specific conditions of the aero-climate and geography of developing countries. We think that the project has made contributions to the training of the groundnut breeding experts of the western African countries through giving intensive lectures and field -practices on the advanced techniques of groundnut breeding, pure foundation, seed collection and crossbreeding to the experts from Guinea, Mali, Nigeria and Senegal who were invited to the workshop.

#### 2. Activities for the Implementation of the Project

The 28th Ministerial Meeting of the Group of 77 held in New York on September 30, 2004 approved the project PRK10/00040947(INT/05/K03) "Training of Groundnut Breeding Experts for the Effective Use of Groundnut Genetic Resources in the Developing Countries" submitted by the Academy of Agricultural Sciences, D.P.R of Korea. After National Coordination Committee for UNDP, AAS and. UNDP DPRK CO signed on the project documents on December 20, 2004, the work plan was revised and the sub-contract was also contracted between NCC for UNDP and AAS. 67,500 US\$ was put into the project implementation from the Government and 45000US\$ from Perez-Guerrero Trust Fund through UNDP DPRK CO.

On January 11, 2005, NCC for UNDP and AAS appointed a project coordinator and a project manager, formed a working group of 2 advisors, 4 experts (professors) and 8 assistants an began activities according to the work plan.

AAS made collection and analysis of the issues coming from the used of groundnut genetic resources at the beneficiary countries and prepared the workshop course, textbooks, reference papers, venues and facilities for the workshop and practice.

Course schedule of the effective use of groundnut genetic resources in developing countries was worked out to be the 18 hour-theoretical lectures, 4 hour-field practice and 4 hour-field visit to make sure that trainees have remarkable understanding of the practical experiences and theories already achieved and they were put into French. Computer power point-based visual educational lecture materials were prepared additionally in English version to help

Nigerian trainees. We formulated all of them in a way to make trainees exchange the theories, methods and experiences on the effective use of groundnut genetic resource based on the success and experience gained by the Republic of Guinea and DPRK and learn each other. They include a number of references and the worldwide tendency of groundnut production.

Mr.Choe Chol Ho(project manager and professor) and Mr. Kim Yong Chol (professor) were authorized by AAS to execute the workshop in the Republic of Guinea.

Mr. Ri Song Chol (coordinator) and Mr.Choe Chol Ho traveled to the Republic of Guinea on March 20, 2005 to do the following activities such as invitation of trainees, travel arrangement, accommodation, transportation, preparation of places and facilities of workshop and practice fields and procurement of workshop materials. Meanwhile they met the Minister and officials concerned of the Ministry of Agriculture and Animal Husbandry and the General Department of Science to inform and discuss of the workshop, supplementing the course with enough deliberations and recommendations.

The workshop was conducted from April 4 to 8, 2005 in both of "**Kim II Sung** Centre of Agricultural Sciences of Guinea" and the Hotel Phare in the Republic of Guinea with participation of 10 trainees from Guinea, Mali, Nigeria and Senegal. At the opening ceremony with participation of the trainees, some Guinean high-ranking officials and all the Korean and Guinean researchers of the centre, Mr. Choe Chol Ho, project manager, made the welcome speech followed by the congratulatory addresses by Mr. Jean Belle Sahr, the Minister of Agriculture and Animal Husbandry of Republic of Guinea, and the Governor and several high-level officials from Quindia Province. There were also introduction of the lecturers, participants and the training program.

10 trainees participated in the workshop: 4 from Guinea, 2 from Mali, 2 from Nigeria and 2 from Senegal. They were provided with stationeries and training stuff.

Theoretical lectures were given on the worldwide peanut breeding tendency and the successes and experiences achieved at the effective use of groundnut genetic resources in DPRK and west African countries, while having exchange of views, the visit to the groundnut field and the practice to make them understand and learn more effectively.

Lectures and field practice include 2 titles on collection and use of groundnut genetic resources, 12 titles on theory and method of groundnut breeding, 1 title on theory and method of groundnut seed selection and 5 practice titles on groundnut breeding and seed selection.

In the closing ceremony, Mr. Choe Chol Ho made the training-review speech and the Minister of Agriculture and Animal Husbandry of Republic of Guinea, DPRK Ambassador

to the Republic of Guinea, trainees had congratulatory speeches. Certificates of participation in the "Training for Groundnut Breeding Experts for Effective Use of Groundnut Genetic Resources in Developing Countries" were granted to the participants on behalf of the Academy of Agricultural Sciences of DPR Korea.

Highly appreciating that the workshop was well done by the great attention and support of H.E. Mr. Kim Jong II, the Great Leader of the Korean people, the participants recognized that the project as a valuable event would benefit the participating countries with active dissemination and application of the advanced agricultural science and technology to increase food production, recommended that South-South technical cooperation projects in the agricultural sector continue in the future until food problem in Africa and other developing countries would be solved.

#### 3. Results of the Project implementation

- The need to improve the overall groundnut breeding in the West African developing countries is reaffirmed and the project's validity is proved.
- 2) It has contributed to consolidation of the scientific basis for effective use of peanut genetic resources in the participating countries by imparting the trainees the technology of breeding and cultivation of groundnuts and methodology of practice, to establishment of groundnut breeding system fit to their own specific conditions and to capacity building of self-training more and competent groundnut breeders.
- It has boosted their confidence that their groundnut breeding business once depended on developed countries will be done better through the South-South cooperation in the principle of collective self-reliance.
- 4) It will better the groundnut production and quality by spreading in the beneficiary countries of the knowledge obtained at the workshop.

#### 4. Conclusion

Implementing the project both in the DPRK and Republic of Guinea, Academy of Agricultural Sciences of DPR Korea has learnt that education of their own agricultural technicians with modern science and technology is the first step to be taken for increase of peanut production in developing countries and the agricultural technical cooperation should be continued between developing countries to solve food problem in the principle of collective self-reliance.

AAS would like to extend its warm gratitude to Group of 77, Perez-Guerrero Trust Fund, NCC for UNDP (DPRK Government), Guinean Government, Governments of the participating countries, UNDP and all the workshop participants for their all kinds of support, cooperation and assistance given to make the project successful.

# 5. The fund of US\$ 45,000 by the Perez-Guerrero Trust Fund was spent for the Project Implementation as accountable as below.

No	SPECIFICATION	COST(US\$)
1	PERSONNEL	
	Project Coordinator & Project Manager (2)	\$2,600
	Advisors (2)	\$2,900
	Experts (4)	\$2,060
	Assistants (8)	\$1,600
	Trainees (10)	\$6,764
2	TRAVEL	\$10,408
	PLACES OF LECTURE/PRACTICE,	
3	FACILITIES	\$2,851
4	MATERIALS, STATIONARY	\$14,167
	DATA PROCESSING	
5	DOCUMENTATION	\$1,200
	TOTAL COST:	\$44,550

X AAS on March 1, 2005 received from UNDP DPRK CO US\$ 40,095,

90% of 44,550US\$ along with its deduction of 450US\$ ,1 % as a UNDP service fare from 45,000US\$ which is the allocation from the Perez-Guerrero Trust Fund for the project implementation . US\$4,455, which is the remaining 10% of US\$ 44,550 to be sent by UNDP DPRK CO right after getting the project final report, will be used by AAS for paying for the services it has got for the project implementation.

#### ANNEX 1

# List of the Participants in the **«Training for Peanut Breeding Experts for Effective Use** of Peanut Genetic Resources in Developing Countries**»**

#### Guinea (4 persons)

1. Mr. Malik Soumah 50 years

Head of Laboratory of Peanut at **Kim II Sung** Research Centre of Agricultural Sciences, General Department for the Research of Agricultural Sciences, Ministry of Agriculture and Animal Husbandry of Guinea

- Mr. Siba II Dopavogui 46 years
   Head of Laboratory of Peanut, Bordeaux Research Centre of Agricultural Sciences,
   General Department for the Research of Agricultural Sciences, Ministry of Agriculture and
   Animal Husbandry of Guinea
- Mr. Bakary Camara 49 years
   Head of Department General of Planning and Budget, Ministry of Agriculture and Animal Husbandry of Guinea
- 4. Ms. Aye Kesso Baldé 47 years

Head of Department General of Planning and Budget, Ministry of Agriculture and Animal Husbandry of Guinea

Nigeria (2 persons)

- Mr.Echekwu Candidus Aleichenu 50 years
   Head of Programme for Peanut Breeding and Oil Vegetables, Research Institute of Agriculture, Ahmed Bello University of Nigeria
- Mr. Ndirpaya Yarama Dakwa 42 years
   Section-Chief of Science Study, General Department of Sciences, Ministry of Agriculture of Nigeria

#### Mali (2 persons)

1. Mr. Ondié Kodio 55 years

Peanut Planning Section-Chief, Research Institute of Agricultural Economy of Mali

2. Mr. Amadou Sidibé 48 years

Section-Chief of Genetic Resources, Research Institute of Agricultural Economy of Mali

#### Senegal (2 persons)

1. Mr. Amadou Tidiane Ba56 yearsHead of Inspection Agency of Foundation Seeds of Senegal

2. Mr. Ousmane Ndoyé 48years

Section-Chief of Seeds of Senegal

## High-level officials of DPRK and Republic of Guinea participated at the opening and closing ceremonies of the workshop

- Mr. Kim Bong Hui, DPR Korean Ambassador to the Republic of Guinea
- Mr. Jean Paul Sahr, Minister of Agriculture and Animal Husbandry, Republic of Guinea

Mr. Abdoulahi Cériph Sila, Secretary of the Ministry of Agriculture and Animal Husbandry,

#### Republic of Guinea

Mr. Sékou Béavogui, Director General of the Department General of Agricultural Sciences,

Ministry of Agriculture and Animal Husbandry, Republic of Guinea

- Mr. Munhir Camara, Governor of Quindia State, Republic of Guinea
- Mr. Mohamed Conaté, Provincial Governor of Quindia Province, Republic of Guinea
- Mr. Fassauou Elly Décey, Secretary General of the Ministry of Agriculture and Animal Husbandry, Republic of Guinea

### ANNEX 2

### TITLE OF LECTURE AND PRACTICE

#### LECTURE

#### April 5

- 1. "The Recent Tendency of Groundnut Breeding and Breeding Activities"
- 2. "Methods of Collection, Evaluation and Conservation of Groundnut Genetic Resource"
- 3. "Selection and Assignment of Genetic Resource for Groundnut Breeding

#### April 6

- 4. "Heredity of Groundnuts"
- 5. "Method of Cross-Breeding of Groundnuts"
- 6. "Selection Method of Superior Groundnut Line from Separated Group"

#### April 7

- 7. "Method of Comparing Trials of Selected Groundnut Line"
- "Evaluation of Resistance against Major Biological Stresses of Groundnut Genetic Resources"
- 9. "Analysis of Components of Selected Groundnut Lines"

#### PRACTICE

#### April 7

- 1. "Methods of Breeding and Cross-Fertilization of Groundnuts"
- 2. "Line Comparison and Selection"

Lectures were given by Mr. Kim Yong Chol, Professor, Master of Sciences, Head of Groundnut Breeding Research Agency of Academy of Agricultural Sciences, DPRK and practices by Mr. Kim Yong Chol and Mr. Choe Chol Ho, Professor and Project Manager, AAS.

# ANNES 3

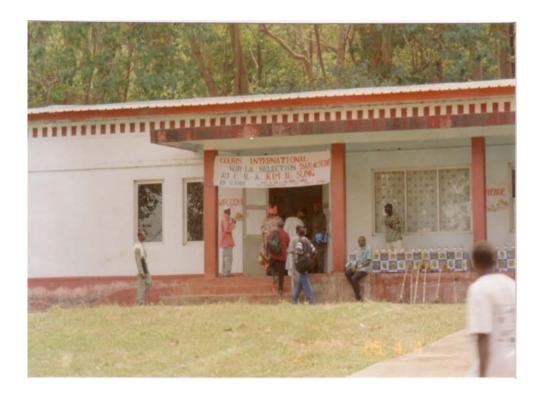
# PICTURES OF THE WORKSHOP

### **OPENING CEREMONY**









# LECTURE





FIELD PRACTICE





**CLOSING CEREMONY** 



