



**IFAR 2005 Professional Development Program  
Completion Report  
[800 words]**

**Instructions:**

Please submit the completion report by email, using this form, through the sponsoring CGIAR Center to [ifar@ifar4dev.org](mailto:ifar@ifar4dev.org) within two months after the completion of the fellowship.

*Please check if Thalwitz Scholarship*

Yes

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Name of Applicant    Dr. Amanova Makhfurat

Sponsoring CGIAR Center

ICRISAT

**I. Work Program goals achieved (maximum length: 200 words)**

After three-year evaluation of 600 genotypes, 8 for precocity, 2 for high yield, 3 for large seed size and 11 for high oil content were identified in 2005. From these 24 genotypes, 6 (Kibray-4 and Mumtoz from Uzbekistan, K-565211 and K-565212 from South Africa, K-57426 from Vietnam and ICGV 00417 from ICRISAT) were selected based on various traits of economic importance for hybridization to develop high yielding groundnut varieties suitable for Uzbekistan. Four crosses (Kibray-4 x K 565211, Kibray-4 x K-565212, Mumtoz x K-565211 and ICGV 00417 x K-57426) were completed. The F<sub>1</sub>s were grown in the field in 2005 to confirm their genuineness before advancing them to F<sub>2</sub> generation. From earlier work, two groundnut varieties, Mumtoz and Salomat, introduced as breeding lines from ICRISAT, were included in the State Registry as prospective varieties. The primary and other categories of seed these two varieties (50 kg of super stock, 500 kg of elite specimen and 950 kg of first reproduction seeds) was produced at the experimental station of UzRIPI at Kibray and Surkhandarya.

On-going agronomic experiments were concluded during the year. Based on their results, appropriate agronomic recommendations for groundnut production were developed and made available to the farming community.

**II. Plans for follow-up (maximum length: 200 words)**

Following successful hybridization, a modest beginning has been made to initiate a regular groundnut breeding program at UzRIPI. This program will be sustained while acquiring new breeding materials and germplasm from ICRISAT and other sources. New groundnut varieties will be developed for cultivation both as the main crop and the second crop. New breeding lines for the second crop will be tested in the southern region of the country. Newly introduced germplasm and breeding lines will be thoroughly studied to identify better sources of economic traits for use in breeding program. Collaborative linkages will be established with the Uzbek experimental station of the oil-bearing and fiber crops and farms of the Tashkent province to carry evaluation of breeding lines and seed multiplication of prospective varieties. The main diseases and pests of groundnut in the country will be studied jointly with the Uzbek Research Institute of Plant Protection and their management practices will be worked out. Relevant groundnut text-books, manuals, new techniques and recommendations will be translated from English and Russian into Uzbek language for the benefit of students, extension workers and farmers.

**III. Report budget utilization including whether budget was spent as planned (maximum length: 100 words)**

The budget was spent as planned on the following items:

1. Salary of staff involved in grant implementation (2 scientists, besides the project manager, 5 lab assistants, 6 temporary employees and 2 irrigators) – US \$ 3000.00
2. Field, laboratory and office supplies (tarpaulin, practical bags, synthetic bags for collection, mineral fertilizers, lubricants, stationery, labor instruments, syringes, scales etc) – US \$ 2000.00
3. Local travel (Surkhandarya) – US \$ 400.00
4. International travel (ICRISAT, India) – US \$ 3000.00
5. Publication (recommendations on seed production and cultural practices) – US \$ 600.00
6. Communication and administrative services – US \$ 1000.00

**IV. Assessment of the fellowship experience and general comments.  
(maximum length: 300 words)**

The fellowship played a catalytic role in rejuvenating and expanding the groundnut breeding program at Uzbek Research Institute of Plant Industry. Personally, it gave immense satisfaction to the fellowship awardee as she could visit ICRISAT, India and update herself in scientific developments in groundnut, upgrade her skills and also select breeding materials and germplasm for use in breeding program in Uzbekistan. The enrichment of groundnut genetic resources will go a long way in sustaining the breeding efforts in the country. With dismantling of centralized planning and privatization of agriculture, the groundnut scenario in the country looks promising. There is a good scope to enlarge area under the crop. Increased groundnut production will fill in the gap in demand and supply of edible oil in the country and encourage export of groundnut kernel to Russia, Kazakhstan and Ukraine). It will also stimulate growth of local food and oil processing industries. As the groundnut area increases, new problems are likely to be encountered. The collaborative linkages with other institutions facilitated by the fellowship will help to face such eventualities in the future.