[Attachment 5]

IFAR 2007 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 within two months after the completion of the fellowship.

Please check if Thalwitz Scholarship __

Name of Applicant ---------- Mr Beloved Mensah Dzomeku ----------

Sponsoring CGIAR Center **----Bioversity International----------**

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

This study was conducted in the two Assin districts of the Central region of Ghana. The objectives were to measure the adoption and impact of new technologies for clean seed production and new cultivars of banana and plantain on livelihoods to shed light on the formal and informal impact pathways and therefore contribute to improved collaboration between NARS and IARCs. A total of 130 farmers from seven communities were selected randomly and interviewed using structured questionnaires. The findings revealed that 75% of respondents in participating communities and 18% non-project participating farmers adopted useful technologies. Social networks contributed about 10%-20% to the spread of new technologies within and between communities. The formation of community farmer organizations as a result of the project yielded dividends to the community. The introduction of new hybrids of plantains has increased farm productivity, leading to improved food security and opportunities to generate cash income. However, bunch prices are traditionally low during certain periods of the year which means that increased bunch weight does not translate into greater incomes to farmers. Major constraints to the further adoption of new banana and plantain technologies are low seasonal bunch prices as well as land tenure and access to credit.

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

A workshop will be organized for data analysis and result discussion in March by the team. Another workshop will be organized in April to present and discuss the results with field organization that participated in the dissemination programme. The results will also be discussed at the internal strategy planning meeting of Crops Research Institute in the first week of April, 2008. As part of the plantain development programme, the methodology will be incorporated into the plantain development programme of Ghana. The results will also be presented at an institutional seminar to be organized in the course of the year. An improved method will be used for another new plantain dissemination project underway. Scientific journal papers will be published out of the study this year. An abstract has been accepted for oral presentation at a banana conference in Mombasa, Kenya. The knowledge acquired from the study will be incorporated into new extension approaches. For increased and sustainability, continuous training and monitoring of farmers would be embedded in innovation

dissemination. Strengthening farmer organizations and social networks will be used as an effective measure to further disseminate improved technologies.

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

The budget of $11,000 secured from IFAR for the study with an additional $7,000 from Bioversity International. An initial 3-day planning workshop cost $2,500. An amount of $7,200 was used for data collection, subsistence and stipend. $500 was for data entry. I also added $500 to the $1000 for equipment to purchase some books and a laptop computer. Bank charges totaled $150. $440 was the administrative cost for Bioversity International and $335.82 was used for partial travel support of a scientist from IITA. Office expenses and communication were $800. The final workshops will be financed with the remaining funds.

IV. Assessment of the fellowship experience and general comments.

(maximum length: 300 words)

The implementation of the study has exposed me to approaches of adoption pathways in relation to bananas and plantains. I have learnt the design of questionnaires for social studies, pre-testing and administering of questionnaires and the use of the Software Package for Social Scientists (SPSS) for data analysis. As a physiologist/agronomist, I have learnt linkage between agronomic research and technology development and the social aspects of technology dissemination and adoption. The study has revealed to me various pathways for adoption and impact of agricultural technologies. Social networking, resources availability, farm size, risk exposure and capacity to bear risk, human capital, labour availability, credit constraints, land tenure and access to market, lack of knowledge and unavailability of technique or inputs are some factors that contribute to adoption of technologies.. This study has helped me to collect data that can yield at least three journal and one conference papers. An abstract has been accepted for oral presentation at a banana conference in April, 2008 in Kenya. I have also topped-up the funds for equipment and books to purchase a laptop computer and two textbooks on banana production.

Additionally, the fellowship has exposed me to new contacts. The development of the proposal introduced me to other experts in the International centers. Also I was able to contact other scientists for publications to support my proposal. The management of a team of scientists, coordinating, planning and taking decisions to meet deadlines though was initially challenging, I have gained a lot of experience.