

PD-ABZ-180

Title: Quarterly technical report on Nigerian
Agriculture and Biotechnology Project

Author: C.A. Fatokun

Cooperative Agreement No: 620-A-00-03-00144-00

Project Title: Nigerian Agriculture and Biotechnology
Project (NABP)

Recipient: International Institute of Tropical
Agriculture (IITA)

USAID CTO: Dr. Andrew Levin, Agricultural
Development Officer (SO2)

Date: November 27, 2003

Nigerian Agriculture and Biotechnology Project (NABP) Quarterly Report

Activity Objectives

The Nigerian agriculture and biotechnology project aims to lay the foundation for a sustainable biotechnology program in Nigeria through building institutional and scientific capacity to conduct research, implement priority regulatory guidelines and policies to create the needed environment for biotechnology development. The project also aims to increase public awareness of the benefits of biotechnology. The project has three major components namely: 1) Improved research and development on crops and livestock, 2) Improved implementation of biosafety guidelines and testing of genetically modified crops and 3) Improved public acceptance of biotechnology.

Progress

The International Institute of Tropical Agriculture (IITA) signed the cooperative agreement between the USAID, Federal Government of Nigeria and IITA in August 2003. Since the signing of the agreement the project has cooperated with the National Biotechnology Development Agency (NABDA), Abuja to organise the inaugural meeting of the Nigerian Agric and Biotech Advisory Committee (NABAC) which took place on September 10, 2003 at NABDA's seminar room. The advisory committee has as its major responsibilities a) building a sense of community among stakeholders, b) identifying issues that are of concern and making recommendations to the coordinator and c) meet periodically (minimum twice yearly) to review progress and provide direction to the implementation team.

As part of the project the International Livestock Research Institute (ILRI) submitted a proposal on the scope of work for setting priorities for biotechnology research application to improve livestock productivity in Nigeria. The activities to be undertaken by ILRI in collaboration with relevant national bodies and individuals are within the first component of the project. This study is expected to identify areas where biotechnology can best be applied to improve livestock productivity in the country through priority setting exercise. There will also be constraints analyses through literature reviews and workshops. Questionnaires will be designed to assess national institutional capacities as well as through visits to different locations. A detailed work plan and budget for \$75,000 had been presented.

The project also collaborated with the USAID Mission Abuja to host a roundtable seminar which held at USAID conference room in Abuja on September 22-23, 2003. The seminar titled, "Food Biotechnology: Using Science and Communications to Facilitate Informed Decision Making" was delivered by Mr. Andrew Benson, Director of International Outreach for the International Food Information Council (IFIC). Participants included scientists, policy makers and members of the press. The seminar

was received by invited guests with enthusiasm and press men that were present asked questions meant to clarify some rumours and misconceptions about biotechnology and its products. There was a live television interview with some of the participants on biotechnology and its potential benefits. The interview program was broadcast to all parts of the country on the Nigerian Television Authority (NTA) network.

On Friday September 26, Mr. Benson also had a roundtable session specifically with members of the press on 'Biotechnology Reporting Briefing' at the USAID office, Abuja. Newspaper articles written by journalists who attended the seminar were more balanced than in the past. For example, the Guardian Newspaper, one of Nigeria's most popularly read daily, published an article titled 'Increasing Food Production Through Biotechnology' on Sunday September 28, 2003. The publication can be described as balanced.

A one-day meeting of stakeholders in the project took place at IITA Ibadan on Thursday November 20, 2003. There were 66 registered participants from different parts of Nigeria, Africa and the USA. We took advantage of the presence of scientists from other parts of the continent and the USA who participated in the third Annual Conference of the Africa USAID Partnership in Biotechnology which took place at IITA from November 17 to 19 to enrich discussion at the stakeholders meeting. The list of participants is in attachment 1 to this report. The objectives of this stakeholders advisory committee meeting were a) to intimate participants with the Nigerian Agriculture and Biotechnology Project by highlighting the activities to be undertaken in the project and b) identify areas of collaboration in research and training among stakeholders.

At the meeting it was emphasised that the technologies to be developed in this project will be 'home grown' hence the major efforts being devoted to training of Nigerian scientists in the development of transgenic crop varieties and risk assessment of transgenic crop. The non-inclusion of intellectual property rights (IPR) in the project document was discussed and in order to rectify this contacts have been made with the Institute of International Agriculture of the Michigan State University for a three day course on IP and technology transfer for Nigerian scientists under this project during the first quarter of 2004. Research in risk assessment of transgenic crops should continue to receive funds in this project as results obtained will make regulators more confident in discharging their regulatory responsibilities. The public awareness programs which are intended to improve public acceptance of biotechnology will be carried out cooperatively between IITA and NABDA.

The Director, Institute for Agricultural Research (IAR), Ahmadu Bello University Dr. S. Misari expressed his institute's interest and willingness to collaborate with the project since cowpea for, which the institute has a national mandate, is a crop that will receive attention in this project. The Director of the Bean/Cowpea CRSP, Dr. I. Widders of Michigan State University, also spoke in the same manner. The representative of the United Nations Industrial Development Organisation (UNIDO) at the meeting Dr. M. Bokanga informed the meeting of the contact the Nigerian President has made with the Director General of the organisation and that there is potential for the organisation to

assist in curricular development in science in the country. Officials of NABDA and the biotechnology center of the University of Agriculture Abeokuta (UNAAB) have established contacts with Dr. Bokanga for further discussions.

Some participants expressed concern about the lack of adequate infrastructural facilities to support biotechnology research in the country and some would like support from the project in developing infrastructure.

The choice of cowpea as the crop to receive focus at this stage of the project did not elicit any negative comments. Rather it was accepted as a good candidate especially as it is a typical Africa crop.

There was also a media briefing during the Africa USAID partnership in biotechnology conference which focused on the development of transgenic cowpea with resistance to insect pests. The case of cowpea needing biotechnology intervention in order to reduce the insect problems which conventional methods could not accomplish was well taken.

Problems and opportunities/upcoming events

- 1) In the next three months the scientists to be trained in recombinant DNA techniques will be identified and letters of invitation sent to at least two of them.
- 2) ILRI will commence work with the assessment of potential for biotechnology application to improve livestock productivity in Nigeria.
- 3) A Nigerian will be employed to work in the context of the third component of the project which is, 'Increased Public Acceptance of Biotechnology'.
- 4) The program for the workshop on IPR scheduled to take place early in 2004 will be developed in close collaboration with Michigan State University during this period.
- 5) The program for the training of members of Nigeria Biosafety Committee (NBC) will be developed. The training is expected to take place early in February 2004.

**Nigerian Agriculture and Biotechnology Project
Stakeholders Meeting at IITA, Ibadan, Nigeria - 20 November 2003**

List of participants

| No | Name | Address |
|-----------|--------------------------|---|
| 1 | Adebambo, A.O. (Prof.) | University of Agriculture, Abeokuta |
| 2 | Adejare, G.O. (Mr.) | Nigeria Plant Quarantine Service, Ibadan |
| 3 | Agbeniyi, S.O. (Mr.) | Cocoa Research Institute of Nigeria, Ibadan |
| 4 | Agboade, P.O. (Dr.) | Head of Unit, Plant Quarantine Services, Moor Plantation, Ibadan |
| 5 | Alhassan, Walter (Prof.) | 2, Gowa Close, Roman Ridge, Accra, Ghana Tel: 233-20-8146668, Fax: 233-21-773676; Email: walteralhassan@hotmail.com |
| 6 | Amakiri, Mildred (Prof.) | Rivers State University of Technology, Portharcourt, Rivers State |
| 7 | Asante, Isaac (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: i.asante@cgiar.org |
| 8 | Asemota, Efe (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: e.asekota@cgiar.org |
| 9 | Asiedu, R. (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: r.asiedu@cgiar.org |
| 10 | Awosusi, O.O. (Mrs.) | Nigeria Plant Quarantine Service, Ibadan |
| 11 | Babatola, J.O. (Prof.) | Director, National Horticultural Research Institute, Idi Ishin Jericho Reservation Area, PMB 5432, Ibadan Tel: 02-2412230; 02-2412501 |
| 12 | Bhattachargee | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221 |
| 13 | Beach, Larry (Dr.) | USAID Office, Washington, DC |
| 14 | Bokanga, M. (Dr.) | Industrial Development Officer, NIPC Building, Plot 1181 Aguiyi Ironsi Street, Maitama District, Abuja. Tel: 09-4134294, 08036651044; Email: mpoko.bokanga@undp.org |
| 15 | Chase, P. (Dr.) | State Department, USA |
| 16 | Chineke, A. | Nigeria Plant Quarantine Service, Ibadan |
| 17 | Dixon, A. (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: a.dixon@cgiar.org |
| 18 | Dore, Matthew (Mr.) | Federal Ministry of Environment, PMB 468, Garki, Abuja Tel: 09-2346140; 08023367704; Email: mpo_dore@yahoo.com |
| 19 | Egesi, Chiedozie (Dr.) | NRCRI, Umudike |
| 20 | Fademi, Tayo (Dr.) | CRIN, Ibadan |
| 21 | Fajuyigbe, F.B. | Nigeria Plant Quarantine Service, Ibadan |
| 22 | Fatokun, C.A. (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: c.fatokun@cgiar.org |
| 23 | Fawole, I. (Dr.) | University of Ibadan, Ibadan |
| 24 | Fecitt, Rebecca | USDA, Washington |
| 25 | Gadzama, N.M. (Prof.) | Biotechnology Centre, University of Maiduguri, Maiduguri Tel: 076-342707; Email: gadzama@infoweb.abs.net |
| 26 | Gira, A.A. | IFAD-CBARAP, Katsina |
| 27 | Herron, Caroline | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: c.herron@cgiar.org |
| 28 | Ikotun, B. (Prof.) | Faculty of Agric. & Forestry, UI, Ibadan Email: b.terry@cgiar.org |
| 29 | Ingelbrecht, I. (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626, Fax: 02-241-2221; Email: i.ingelbrecht@cgiar.org |
| 30 | Ishiyaku, M.F. (Dr.) | IAR, Zaria |
| 31 | Kent, Lawrence (Dr.) | Manager, ILTAB, Donald Danforth Plant Science Center, 975 |

| | | |
|----|--------------------------|---|
| | | North Warson Road, St. Louis, MO 63132, USA, Tel: 314-5871247; Fax: 314-5871794; Email: lkent@danforthcenter.org |
| 32 | Koyaolu, Salami O. | Nigeria Plant Quarantine Service, Ibadan |
| 33 | Levin, Andrew (Dr) | USAID, Abuja |
| 34 | Lokko, Y. (Dr) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626. Fax: 02-241-2221 |
| 35 | Mani, R.I. (Dr.) | Federal Ministry of Agriculture & Rural Development, Abuja Tel: 08033326855 |
| 36 | Maziya-Dixon, B. (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626. Fax: 02-241-2221 |
| 37 | Maredia, K. (Dr.) | Michigan State University, E. Lansing, USA |
| 38 | Megeed, Eid M.A. | Egypt/ARC |
| 39 | Menkir, A. (Dr) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626. Fax: 02-241-2221; Email: c.fatokun@cgiar.org |
| 40 | Mbanaso, E.N. (Dr.) | National Root Crops Research Institute, PMB 7006, Umuahia |
| 41 | Misari, S.M. (Dr.) | Director, IAR, Ahmadu Bello University, Zaria, Tel: 069-551355; 08034522521; Email: iar2002@yahoo.com |
| 42 | Mowbray, David (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626. Fax: 02-241-2221 |
| 43 | Nwagbo, E.C. (Dr.) | NABDA, Abuja. |
| 44 | Nwalozie, Marcel (Dr.) | Scientific Coordinator, CORAF/WECARD, West & Central Africa Council for Agric. Res. & Dev., 7 Avenue Bourguiba, BP 6237 Lusaka, Zambia, Tel: 260-1-234539; Fax: 260-1-1234559 Email: fsrp1@msu.edu |
| 45 | Ogbadu, G.H. (Prof.) | SHESTCO, Federal Ministry of Science and Technology, Federal Secretariat, Shagari Way, Maitana, Abuja. Tel: 09-8822151; 09-5233916; Fax: 09-5233919; Email: goddyharuna@yahoo.com |
| 46 | Ogbadu Lucy (Prof.) | NABDA, Abuja |
| 47 | Ogbe, Francis (Dr.) | National Root Crops Research Institute, Umudike |
| 48 | Ogunkanmi, Bayo (Mr.) | IITA, Biotechnology Unit, Ibadan |
| 49 | Olagorite Adetula (Dr.) | NIHORT, Ibadan |
| 50 | Olutogun, O. (Dr.) | BIOGROW, Oshin Street, Kongi, Ibadan |
| 51 | Omaliko, C.P.E. (Dr.) | National Biotechnology Dev. Agency, PMB 518, Abuja |
| 52 | Omo-Ikenodah, E.E. (Mrs) | IITA, Biotechnology Unit, Ibadan |
| 53 | Ortiz, R. (Dr.) | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626. Fax: 02-241-2221; Email: r.ortiz@cgiar.org |
| 54 | Oyebo, O. (Mr.) | Federal Ministry of Environment, Environment House, Abuja |
| 55 | Quemada, Hector | Consultant, Crop Technology Consulting Inc., 2524 East G Avenue Kalamazoo, MI 49004, USA, Tel: 269-387-5869 cell 269-370-2358 Fax: 269-387-5609; Email: hdquemada@croptechnology.com |
| 56 | Sithole-Niang Idah | University of Zimbabwe |
| 57 | Shamaki, David (Dr.) | National Veterinary Research Institute, Vom |
| 58 | Shetty, R. | USAID, Mali |
| 59 | Tamo, Manu (Dr.) | IITA, Benin Station, Cotonou |
| 60 | Terry, Eugene (Dr.) | Implementing Director, AATF, c/o ILRI, P.O. Box 30709, Nairobi 00100, Kenya. Tel: 254-2-630743. Fax: 254-2-631499 |
| 61 | Tijani, Bukar (Alhaji) | Program Co-ordinator, IFAD Community Based Agricultural and Rural Dev. Programme, Olusegun Obasanjo Drive, Box 2163, GRA Katsina. Tel: 065-433971; Fax: 065-433972 |
| 62 | Traynor, Patricia | Coordinator, National Biological Impact Assessment Program VA Polytechnic Institute & State University, P.O. Box 10173 |

| | |
|----------------------------|---|
| | Blacksburg, VA 24062, USA. Tel: 540-961-2629; Fax: 540-9612629 Email: traynor@newagritech.net |
| 63: Tripathi, L. | IITA, Oyo Road, PMB 5320, Ibadan. Tel: 02-2412626; Fax: 02-241-2221; Email: l.tripathi@cgiar.org |
| 64 Upshaw, Darrell (Dr.) | Development Resources Specialist, USDA/FAS/ICD, Food Industries Division |
| 65 Uzochukwu, Sylvia (Dr.) | University of Agriculture, Abeokuta, Tel: 039-244357; 08033531178 Email: suzochi@yahoo.com |
| 66 Widders, Irv (Dr) | Director, Bean/Cowpea CRSP/IIA, Michigan State University 200 International Center, East Lansing, MI 48824, USA. Tel: 517-355-4693; Fax: 517-432-1073; Email: widders@msu.edu |