Proponent: International Institute of Tropical Agriculture (IITA)

Key partners: National Root and Tuber Crop Research Institute (NRCRI), Nigeria; Crops Research Institute (CRI), Ghana; Natural Resources Institute (NRI, UK); Alliance for a Green Revolution in Africa (AGRA) through the Farmer Organizations Support Center in Africa (FOSCA); Diocesan Development Services (DDS), Kogi State, Nigeria; and Catholic Relief Services (CRS) in collaboration with other national institutions

Geographic coverage: Nigeria and Ghana

Backgrounder
Yam (Dioscorea spp.) is a very important food and income source for 60 million producers, processors, and consumers in West Africa. Productivity per hectare has remained stagnant or is declining. Since 2000, the rate of annual increase in yam production has been slowing (e.g., < 1% per year increase in Nigeria).

Objective: To double incomes from yam for 3 million small-holder farming families who depend on the crop in West Africa, and contribute to food security for producers and consumers.

Project outputs
The medium- to long-term outputs / outcomes of this project include:

1. Functional breeder seed units and reliable foundation and certified seed yam producers in Ghana and Nigeria
2. Tuber pest damage in storage barns of participating farmers reduced by at least 25%
3. Farmers using clean planting material increase their yields by 40%
4. Standards for high quality clean seed yam production formalized in all participating countries
5. Farmers linked to the markets and generating incomes through increased production and marketing of yams
6. Yam that is affordable to urban and rural poor consumers
7. Preferred stress-tolerant varieties widely grown by farmers
8. Diagnostic tool kits available for production of clean seed yam and certification

Impact of adopting the technology: This project will, in the next five years: (a) increase yam productivity (yield and net output) by 40% for 200,000 small-holder yam farmers in Ghana and Nigeria; and (b) deliver key global good research products that will contribute to the 10-year vision of doubling incomes from yams for 3 million small-holder farming families who depend on the crop in West Africa, and (c) contribute to food security for producers and consumers.

Project overview
This project will address challenges in yam production and development through the following objectives:

1. Strengthen small-scale farmer and trader market linkages, particularly in less accessible production areas, to realise benefits from increased ware yam productivity and market demand.
2. Strengthen capacities and empower smallholder farmers in the yam value chain.
3. Establish sustainable availability of high quality seed yam on a commercially viable (price competitive) basis in targeted areas.
4. Reduce postharvest losses and improve product quality.
5. Develop technologies for high ratio propagation of high quality breeder and foundation seed yam.
6. Evaluate and scale out yam production technologies with improved and local popular varieties.
7. Identify more effective prevention and management tools and strategies for pests and diseases.

These objectives are supported by cross-cutting components: monitoring, evaluation and learning; and communication and information dissemination.

Donor, project duration, and cost: Bill & Melinda Gates Foundation; 5 years; $12.2 million