



## Roots and tubers provide opportunity for long-term poverty alleviation and food security, says Ghanaian President

Improving the competitiveness of roots and tubers will help alleviate poverty in Africa, considering that 80% of people in the rural areas depend on agriculture as a source of livelihood, according to Ghanaian President, John Dramani Mahama.

“Root and tuber crops (sweet potato, cassava, and yams) provide a great opportunity for long-term poverty alleviation and food security much more than any other staple foods produced in the African, Caribbean, and Pacific regions,” said Mahama who was represented by Mohamed Alpha, Deputy Minister, Ministry of Environment, Science and Technology Innovation, at the 12th Symposium organized by the International Society for Tropical Root Crops-Africa Branch (ISTRC-AB) in Accra, Ghana.

Dr Nzola Mahungu, ISTRC-AB President, who is also the Country Representative for IITA in DR Congo said, “Root and tuber crops play an important role in ensuring food security in Africa, and we must tap the potentials of these crops.”

Widely consumed across Africa, root and tuber crops play a key role in the continent, providing incomes for farmers, generating wealth, and cushioning the effect of shortfall of cereals.

For instance, cassava is a source of livelihood for over 300 million people in Africa, and with climate change the root crop is becoming increasingly important, thanks to its ability to withstand drought and growth on soils with marginal fertility.

“But the potential of these crops is yet to be fully exploited,” Dr Mahungu said.

The conference, held 30 September-2 October, provides a window of opportunity for partners to the competitiveness of root and tuber crops and develop strategies that will unleash their potential in helping enhance the economies in the region.

Specific areas of interest include: African root crops trade and market scenarios; Policies favorable to competitiveness of root crops in Africa;

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## Yams 2013 in Accra this week

The First Global Yam Conference or Yams 2013 is underway this week in Accra, Ghana. Held back to back with the 12th Symposium of the International Society for Tropical Root Crops-Africa Branch (ISTRC-AB) the conference was attended by about 200 participants from all over the world.

The conference theme is ‘to harness research innovations to unleash the potential of yam’. The program included plenary and concurrent sessions on Yam future trends; Genetic resources, Genomics and breeding; Postharvest, markets and policy; Agronomy; Processing and utilization; Seed systems and Plant health. There were also workshops/group work on future priorities, conclusions, recommendations and next steps as well as posters and exhibits.

Dr Yemi Akinbami, Executive Director, Forum for Agricultural Research in Africa (FARA), delivered the keynote address, while the Honorable Minister for Food and Agriculture (MoFA), Ghana, represented by Deputy Minister for Food and Agriculture, Ahmed Yakubu Alhassan, served as Special Chief Guest.

Organizing partners of the conference include IITA; ISTRC-AB; Council for Scientific and Industrial Research, Ghana; Tokyo University of Agriculture; Yam Improvement for Income and Food Security in West Africa (YIIFSWA); CGIAR Research Programs on Integrated Systems for the Humid Tropics, Roots, Tubers & Bananas, and Genebanks; FARA; Africa’s Genomics Society; and ISTRC.

*Watch out for the full and updated story in next week’s issue of the IITA Bulletin.*



ISTRC-AB President, Dr Nzola Mahungu, addresses participants at the symposium on roots and tubers in Accra, Ghana.

# Ghanaian yam strategy to be launched

The national strategy for the development of yam will be presented by the Chairman of the Yam Strategy Committee, Mr Anthony Sikpa, at the First Global Conference on Yam on 4 October held back to back with ISTRC-AB in Accra. This event is the first of its kind because producers, exporters, and researchers from around the world will gather to decide on yam global priorities and to share experiences including the yam strategy for Ghana.

The Ghana Yam Strategy is a bottom-up policy process that started in 2012. It has been led by a public-private appointed committee and championed by the Ministry of Food and Agriculture and the Ministry of Trade and Industry. The International Trade Centre (ITC) and IITA have provided technical backstopping and process facilitation.

The Yam Strategy will be launched on 8 October at La Palm Beach Royal Hotel in Accra. The Minister of Food and Agriculture and the Minister of Trade and Industry will attend together with development partners and the donor community. More than a hundred representatives from the private sector, including yam farmers, traders, exporters and processors, research centers, finance and other support institutions, and agroprocessing experts from Africa and abroad will participate in the launch ceremony.

Following the launch ceremony, the Yam Committee together with the Ministry of Trade and the Ministry of Food and Agriculture will be available for further meetings and discussions with developing partners to explore synergies and collaboration.

The Ghana Yam Strategy has been designed and developed to provide a



A vibrant yam market in Ghana.

holistic approach to sector development by considering both the economic and social value of yam in Ghana. The methodology used combines IITA's experience in agriculture research and development with ITC's practice of participatory mechanisms and market-led planning for policy, enterprise, and sector development.

Country ownership and leadership have been ensured through a private-public platform in charge of building partnerships and articulating support for implementation. The platform includes approximately 200 stakeholders from the private sector, representing all stages of the industry, and support institutions (Ghana Standards Authority, Ghana Export Promotion Authority, Export Development and Agriculture Investment Fund and National Development Planning Commission), commercial and development banks, research centers (CSIR-FRI, CSIR-CRI, CSIR-SARI), academia, and key ministries such as Trade, Agriculture, Finance, and Women and Children.

The Strategy aims to transform

Ghana into "the leading source of premium quality yam products with global penetration and contributing to an improved Ghanaian economy and livelihoods".

The Yam Sector Strategy aims at creating business and industry development with social impact while ensuring food security. It is based on its five pillars:

- P1: Increase fresh yam exports;
- P2: Develop a market for yam by-products and ingredients;
- P3: Reinforce domestic industry competitiveness;
- P4: Promote women-led yam business;
- P5: Increase income from yam and ensure food security.

The interventions in the Strategy will be piloted in selected districts based on commercial and social criteria including overall competitiveness, production conditions, infrastructure and distribution channels, markets and community-level impact with the aim of boosting exports and developing new business links and processing capacities in yam-derived products.

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African scenario on production and utilization of root and tuber crops; Business and investment scenarios on competitiveness of root crops in Africa—benchmarking Latin American, Asian, and European markets (Learning from Latin American, Asian, & European industries); Mobilizing investors for sustainable root and tuber crops research and development.

IITA Director General, Dr Nteranya Sanginga, who was represented by the Deputy Director General (Partnerships and Capacity Development), Dr Kenton Dashiell, said the meeting was timely especially in light of the

growing threats to food security and rising unemployment in the continent.

Dr Sanginga noted that if properly harnessed, the root and tuber crops would help in absorbing the burgeoning number of unemployed youths, and put this pool of human resource to productive use.

He also called on scientists to ensure that their research outputs were creating the desired change at the farm level by addressing the constraints of development.

The week-long event attracted over 200 hundred local and international scientists, donors, farmers, and other development partners.

The 12th ISTRC Symposium is organized with support from the government of Ghana, the Council for Scientific and Industrial Research, IITA, CGIAR Research Program on Roots, Tubers and Bananas, HarvestPlus, African Development Bank-funded Support for Agricultural Research and Development of Strategic Crops project, IITA-Yam Improvement for Incomes and Food Security in West Africa (YIIFSWA), Ministry of Food and Agriculture (MOFA), National Root Crops Research Institute (Umudike), Federal Government of Nigeria, the Food and Agriculture Organization (FAO), International Potato Center (CIP), and several other organizations.

## IITA biocontrol pioneer Hans R. Herren wins the prestigious Right Livelihood Award for his commitment to end hunger and poverty

Hans R. Herren, biocontrol pioneer at IITA and president of the Biovision Foundation in Switzerland, has been named one of this year's Right Livelihood Award recipients.

Hans started his field career at IITA in 1979 with a very precise target in mind: fight the invasive and highly destructive cassava mealybug, which had been inadvertently introduced into Africa a few years earlier. To fight this pest, he chose the most obvious management option for an invasive species: biological control. Because the pest came to Africa without any natural enemies, the first step of the new endeavor was to identify with precision the area of origin of the mealybug, and at the same time find efficient natural enemies which could be used as biological control agents in Africa. A series of scouting trips to Latin America allowed the discovery of a minute wasp, *Anagyrus lopezi*, considered to be the most appropriate biological control candidate against the cassava mealybug. Seconded by a team of enthusiastic colleagues, including our emeritus IITA scientist Peter Neuenschwander who still resides in Benin, Hans spearheaded a continent-

wide project for mass production and release of the parasitic wasp, resulting in the complete control of the pests within a few years from the initial releases. Hans was bestowed with the World Food Prize in 1995 for this achievement.

The Right Livelihood Award award, also known as the 'alternative Nobel prize', recognizes "his expertise and pioneering work in promoting safe, secure, and sustainable global food supply", as an important endorsement of his vision: a world that can provide all nine billion people expected to live on our planet in 2050 with sufficient, healthy food.

"And this has to happen without overstepping planetary boundaries. This is only possible if we invest in smallholder structures with sustainable and efficient ecological cultivation methods and move away from the paradigm of industrial agriculture which overuses natural resources and



destroys biodiversity," Hans said.

This award recognizes his work as the president of the Biovision Foundation in Switzerland, founded 15 years ago to support projects in East Africa, and as president of the Millennium Institute in Washington D.C., which supports governments of developing countries in developing sustainable policies. The primary aim of Biovision is to disseminate knowledge to smallholders who had been largely neglected by scientific research during the "Green Revolution" and the development of industrial agriculture—despite the fact that even today the majority of all food produced worldwide comes from smallholders. The Farmer Communication Programme of Biovision Foundation reaches around 4 million farmers in East Africa through its various channels, helping them to help themselves with the information they receive.

Currently, Biovision and the Millennium Institute support three African countries, Senegal, Kenya, and Ethiopia, in a pilot project analyzing their agricultural sector and food systems to explore ways to achieve a change in agricultural policies.

## Researchers from 5 African countries trained in post-flask management of tissue cultured cassava plantlets

Fourteen field and lab technicians have completed a one-week course on post-flask management of tissue culture plantlets at the National Crops Resources Research Institute (NaCRRI), Namulonge in Uganda. The course was conducted as part of the activities of the Cassava Varieties and Clean Seed to Combat Cassava Brown Streak Disease (CBSD) and Cassava Mosaic Disease (CMD) (5CP) project.

The training, conducted 3-13 September, was organized by IITA's 5CP project. It drew participants from national research institutes and laboratories in the five project countries: Malawi, Mozambique, Tanzania, Kenya, and Uganda.

Dr Godfrey Asea, representing the Director NaCRRI at the closing ceremony, thanked IITA for its collaboration and for facilitating partner countries' exchange of elite germplasm through the 5CP project. He urged the training participants to go back and deliver on the project goals using the knowledge and skills attained during the training.

The 5CP project brings together breeders and virologists to combat the effects of both CBSD and CMD through delivery of clean new improved cassava varieties.



Participants at the practical training on handling of tissue culture plantlets.

Dr Edward Kanju, 5CP project leader, said that the project will carry out a regional trial to study the genotype by environment by viruses (G×E×V) interactions. Unlike previous projects, this one will start with virus-indexed materials. He therefore underscored the responsibilities that lie ahead of the participants. So far, 28 elite cassava clones from five partner countries have been cleaned (at Natural Resources Research Institute UK and Kenya Plant Health Inspectorate Services, Nairobi) of viruses, and are currently being mass propagated at a private tissue culture laboratory, (Genetic Technologies International Limited (GTIL) in Kenya

to raise about 1500 tissue culture (TC) plantlets per clone.

Each partner country will receive about 300 plantlets per clone between November and December 2013. Once in the countries, the TC plantlets will need specialized personnel to receive and wean them into field plants.

The training was therefore aimed at equipping the trainees with the needed knowledge and skills to manage and wean tender TC materials, and establish and manage field multiplication of weaned plants in their respective countries. It also covered the practices that needed to be minimized during handling of the materials.