



## Africa urged to step up efforts against deforestation

Africa needs to step up efforts against deforestation by planting more trees for food security and environmental sustainability, says Dr Hartmann on Monday.

While planting an *Iroko* tree as part of his last public official engagement as the Director General of IITA, Hartmann said forest restoration in Africa is necessary for both environmental sustainability and food security.

According to him, there was a nexus between forestry and agriculture that needed to be understood better by experts in both fields.

Hartmann said it was the realization of this fact that IITA delved into reforestation of the campus land in Ibadan.

"The idea was to demonstrate to the world that it is possible... and we see that the reforestation work is going on well," he said.

The tree planting by Hartmann marks the end of the tenure of the outgoing director general. Hartmann said the opportunity given him to plant a tree on campus was a 'gift well conceived.'

Deni Bown, Medicinal Plant Expert of the IITA-Leventis Reforestation Project, described the reforestation project as major undertaking by Hartmann.



*Hartmann pose for a group photo with staff after planting the Iroko tree in front of I-House.*

According to her, Hartmann's vision to reforest much larger areas of IITA was part of a plan to create a Science Park for Africa.

"His vision is looking towards the future of agricultural research in Africa, which will continue to develop higher yielding staple crops while at the same time taking the lead in addressing issues of land degradation caused by deforestation and unsustainable methods of cultivation," she explained.

She also noted that Nigeria has the worst deforestation record in the world. Because of Hartmann's foresight, the Nigerian Field

Society Young Explorers was created last year and will be formally launched next month.

Paula Bramel, DDG-Research thanked Hartmann for his efforts at IITA. She said trees were a good way to commemorate one's efforts. She also used the opportunity to say goodbye to Hartmann.

Hartmann served 10 years as the DG of IITA and will end his tenure on 31 October. Dr Nteranya Sanginga takes over from Hartmann and will assume office on 1 November 2011.

## Bakare wins the Ontology Trilogy Award

Moshood Agba Bakare, data analyst and cassava database curator of the Cassava Breeding Unit, has won the "The Ontology Trilogy Award" for his poster presentation titled: "Expansion of the Crop Ontology by Adding Cassava Trait Ontology."



*Bakare (right) honored in Hyderabad*

Bakare curated the ontology with support from his supervisor, Cassava Breeder Peter Kulakow, in which over 125 traits were classified into five major classes: agronomic, morphological, physiological, quality, and stress traits.

The award was presented to Bakare during the Annual General Research Meeting of the CGIAR Generation Challenge Program which was held in Hyderabad, India, on 21-25 September.

Bakare's work has the following benefits to the research community:

- Defined cassava traits that use standard terminology can now be easily shared among cassava researchers
- Sharing of information between research trials is facilitated
- Increased efficiency of information retrieval

• Information is integrated from different sources

• Research documents, reports, and databases are annotated with common ontological terms

• Researchers and end users query keywords related to traits

In addition to maintenance of the ontology, Bakare will work to harmonize definition of cassava traits with researchers from CIAT and national agricultural research systems. He will also facilitate ongoing communication among cassava researchers to continuously add new cassava traits to the ontology.

The cassava trait ontology has been developed in collaboration with CIAT, CIMMYT, Bioversity International, Generation Challenge Program, and the National Root Crop Research Institute.

# CIALCA partnership highlights contribution of research to bringing stability in Africa's Great Lakes Region

The Consortium for Improving Agriculture-based Livelihoods in Central Africa (CIALCA) and the CGIAR Research Program on the Humid Tropics held the first international conference to examine the challenges and opportunities for intensifying farm production in sub-Saharan Africa's humid tropical regions.

Although good rainfall and temperatures allow cropping most of the year, small farm sizes, persistent civil conflicts, poor infrastructure, and political instability have made it difficult for Central Africa's small farmers to eke out a living. The region has some of the highest rates of food insecurity, malnutrition, and poverty in sub-Saharan Africa.

"When CIALCA first started, we thought this was the best opportunity to highlight that science can contribute to peace," said Nteranya Sanginga, a Congolese scientist and Director General designate of IITA, which will lead a major global CGIAR research program for the humid tropics that builds off of CIALCA's work.

"Achieving food security in the CIALCA region is a big challenge," said Sanginga. "If we don't find solutions to food security under the current constraints, we will face major challenges and increased conflict over food, land, and other natural resources in the next few decades."



Participants at the CIALCA conference in Kigali, Rwanda.

During the opening plenary, CIALCA partners and representatives of the Rwandan government highlighted the success of several projects that are delivering results for farmers and national food security. In 2007, 20 out of 30 districts in Rwanda were reported as being food insecure. Today, as a result of increased public investment in agriculture and the country's National Crop Intensification Program, all of Rwanda's districts are now food secure. In addition, the country is exporting surplus crops to neighboring countries and is the only country in the region

not dealing with a food crisis.

Rwanda's Permanent Secretary for Agriculture, Ernest Ruzindaza, noted the importance of linking research knowledge to the needs of farmers on the ground and taking a more systemic approach to ensure food security and eradicate poverty.

"CAADP is here to support African countries in their push to support agriculture, but agriculture alone cannot solve the problem of poverty. Other rural development programs are needed and agriculture is a key player," he said.

## Farmers anticipate higher yields from participatory trials of key staples

Farmers participating in field trials of staple food crops with researchers from the Nigerian national programs and IITA in Kwara State are hopeful of increasing their yield this season, as the growth of plants show promise of a bumper harvest in the days ahead.

The trials, which commenced in July this year, is part of the Africa Development Bank (AfDB)-funded Community-Based Agriculture and Rural Development Project (CBARDP) that is targeting four key crops in that region: maize, cassava, soybean, and yam.



Umaru Olarewaju, Crop Production Development Officer, Kwara ADP, looks at the plants in the maize fields

Farmer Joseph Ayeni says the maize plants under the trials have better ears and the soybean has more pods.

"We expect more yield from this participatory trials because the crops are performing better," he explains.

Typically, most farmers use local planting materials, a situation that predisposes them to low yields. They also lack farming expertise and in some cases inputs are scarce and not available.

The AfDB-CBARDP project is working on these constraints to production by assisting farmers with improved seeds backed with training.

Farmer Kehinde Adeyemi said the training sessions were helpful because they introduced farmers to new ways of farming and getting better results.

"For instance, we were trained on the use of recommended plant spacing which is often neglected... and because we adopted the right spacing, we are seeing better results," he says.

Scientists introduced high-yielding and extra-early maturing maize varieties and other varieties that are tolerant of pests and diseases such as *Striga* and stemborer.

The Kwara state's success story is part of the bigger project which also covers Adamawa, Gombe, Bauchi, and Kaduna.

IITA Maize Breeder Sam Ajala says the essence of the project is to contribute to house-level food security and enhance income by exposing farmers to better varieties and agronomic practices that increase productivity.