



# THE MESSSENGER

Newsletter of the **AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION**

Issue No. 6

April 2005

## AATF Mission & Core Business

To link needs of resource-poor, smallholder farmers in sub-Saharan Africa with potential technological solutions through:

- ✂ Identifying and facilitating royalty free transfers of proprietary technologies through negotiation
- ✂ Entering into contractual agreements with existing institutions that will manage deployment of the technologies
- ✂ Ensuring that subsequent constraints after access are addressed

## AATF Board approves two new problem areas

At its April 2005 meeting, the AATF Board of Trustees approved the expansion of problem areas for AATF intervention by inclusion of two new areas, namely building sustainable seed systems and the control of locusts and grasshoppers in Africa.

In endorsing 'building sustainable seed systems' as a problem area, the Board noted that without proper mechanisms of deploying technologies to farmers, the impact of agricultural technology transfer would be hampered. It was noted that seed is a central input in agriculture and it represents the medium through which most technologies being developed by AATF will be delivered to farmers. Thus the successful deployment of improved high value seeds needs a functional and sustainable seed system. Most countries in sub-Saharan Africa have yet to develop organized formal seed systems. A number of farmers rely on own saved seeds while some borrow or buy from their neighbours, friends or relatives. Though used over the years, this informal seed system alone cannot support sustainable use of high value seeds such as hybrids, synthetics or transgenics. The AATF is thus formulating interventions that



AATF Board of Trustees members – Fifth meeting held 6-7 April 2005.

will contribute towards development of working seed systems, which incorporates farmers, and private and public sectors.

In the second problem area, locusts and grasshoppers were noted as both chronic and acute pests of crops. Their attack has continued to wreak havoc to farmers' produce thus creating famine situations. The Board recognized the necessity of averting such famine outbreaks. It was noted that several studies had been undertaken in this area and control technologies identified. However, their deployment is hindered by various factors that include intellectual property rights. The Board mandated the management of the Foundation to assess the possibility of facilitating a public/private partnership to address this issue.

These two areas will complement the Foundation's other areas of intervention that include the control of parasitic weeds and insect pests in staple food crops such as maize and cowpea, enhancing the nutritional quality of sorghum, improving the productivity of banana, plantain and cassava, control of mycotoxins in food grains and alleviating drought stress in cereals. (Visit [www.aatf-africa.org/projects.php](http://www.aatf-africa.org/projects.php) for more information on AATF projects)

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## Ua Kayongo tested in farmers' fields

The new IR maize hybrid, *Ua Kayongo*, is being tested on-farm during this year's long rain season in parts of Western Kenya. Farmers in this *Striga*-infested region recently received test kits of *Ua Kayongo* seeds produced through the joint effort of BASF, CIMMYT, AATF and seed companies.



Preparation of IR maize seed packages for distribution to farmers.



A farmer collects IR maize ready for planting during the long rains season of 2005.

These kits were distributed to trial farmers by the WeRate Alliance of NGOs involved in the control of *Striga* in the region and Western Seed Company. Each household was issued with a test kit that contained 1 kg of IR maize seed, 1 kg of Diammonium Phosphate (DAP), 1 kg Urea and 1 kg of Calcium Ammonium Nitrate (CAN) fertilizers. This was used to sow a test area of 400 m<sup>2</sup>.



Farmers with IR maize kits ready for planting.

Initial progress reports from some trial fields indicate more than 95% germination rate and vigorous crop growth of the IR maize. Preliminary monitoring and evaluation is planned to further assess trial progress. (See [www.aatf-africa.org/press-uakayongo.php](http://www.aatf-africa.org/press-uakayongo.php))



Farm prepared for planting with test IR maize.



Ua Kayongo field test in Kenya, 30 March 2005.

## AATF 14 steps to successful projects

To ensure the successful transfer of agricultural technologies that are viable and can be adopted by smallholder farmers in sub-Saharan Africa, AATF has defined its project development and implementation cycle to include fourteen steps.

The 14-step cycle constitutes the Foundation's business process that will guide decisions on selection of projects, management and stewardship, impact assessment, partner involvement and progress reporting.

The steps have been divided into four key phases that cover intelligence gathering, business plan development, product development and product deployment. For each phase, strategic decisions will be made based on findings to inform next steps and specifically whether or not to continue the project.

These steps complement the AATF project selection process that is defined in the Foundation's business plan. (Visit [www.aatf-africa.org/projectsteps.php](http://www.aatf-africa.org/projectsteps.php) for a quick view of the steps and [www.aatf-africa.org/criteria.php](http://www.aatf-africa.org/criteria.php) for project selection process)

## Improved rice productivity under drought conditions

Negotiations have commenced between AATF and the Africa Rice Center (WARDA) to develop a collaborative project for the production of rice varieties with improved performance under drought conditions. At a recent meeting held in Cotonou, Benin, the two organizations agreed to investigate available technologies that will confer nitrogen use efficiency and tolerance to drought and salinity on rice. It was noted during the meeting that rice production on the continent is curtailed by abiotic and biotic factors under both irrigated and non-irrigated systems. The AATF management confirmed the availability of potential technology providers and agreed to commence discussions for donation of the technologies.



Rice is a staple food crop in Africa and constitutes a major part of the diet in many countries. The demand for rice in sub-Saharan Africa has been growing rapidly since the mid-1970s. The continent imports about 3.3 million tonnes annually to satisfy growth in rice consumption that is estimated at over 10 million tonnes of milled rice per year.

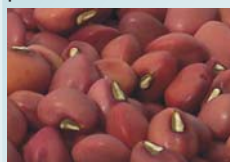
Following the preliminary discussions between AATF and WARDA, a small group meeting will be organized to discuss further interventions and collaborations to support the proposed project.

## Transformational approach to agriculture is key to MDG achievement in Africa

Business as usual will not help Africa in meeting the millennium development goals (MDG) nor will adherence to the structural adjustment programmes (SAPs). The way forward for Africa is to seek to transform its agriculture into a vibrant business sector that will contribute to economic development. This can be achieved if the continent seeks a clear diagnosis of the problems that challenge the continent's agriculture and '... think and act with commitment.' These were some of the comments made by presenters during the national conference for revitalizing agriculture organized by the Kenya Government in February 2005. Prof. Jeffrey Sachs cited the Asian example and its current food sufficiency status that resulted from the Green Revolution saying that it is time Africa had its own green revolution. He called on the international community to fulfil promises made to Africa noting that empowerment, not dependency, would save the continent. In order to increase production, Prof. Sachs said that Africa's farmers needed physical support in what he termed the "Big Five" to increase productivity. These include agricultural inputs, investment in education, infrastructure and safe drinking water and sanitation. During the meeting, irrigation, yield-increasing technologies and infrastructure were noted as some of the important elements towards improvement of agricultural productivity in the continent.

## Strategies needed to encourage legume production, consumption and utilization

In a continent battling with hunger and malnutrition, legumes play a central role in agricultural development and overall food security. Legumes provide Africa with a number of advantages. They are important food and feed crops providing major sources of protein and oil. In addition they play a vital role in enhancing soil fertility, preventing soil erosion and assisting in weed control, thus supporting the sustainability of the African cropping system. In his opening address during the first international edible



legumes conference held in Durban in mid April, Dr. Kosi Dongo of department of agriculture and land administration, Mpumalanga Province, South Africa, called for the development of policies that would support legume production. He recommended that food aid to Africa be translated into cash to fund scientists, industries and other organizations involved in legume production. Dr. Irvin Widders of the Bean/Cowpea CRSP said there was need to consider demand-driven strategies such as consumer preferences, expansion of market opportunities and value addition to encourage consumption and utilization of legumes. Scientists attending the meeting presented their findings in crop management, breeding and protection to post-harvest utilization and potential for genetic transformation. The meeting, whose main sponsor was Syngenta South Africa, was organized by the University of Pretoria. Kenya was proposed as the venue for the next meeting to be held in 2010.

## Appointments

### Alhaji Bamanga Tukur joins AATF Board of Trustees

Alhaji Bamanga Tukur has joined the AATF Board of Trustees. Alhaji Tukur is the Executive President of the African Business Round Table and Chairman of the NEPAD Business Group and is a member of the International Business Advisory Council (IBAC) to United Nations Industrial Development Organization (UNIDO). He is a graduate of Ahmadu Bello University, the

London School of Economics, where he studied Transportation and Economics, and the University of Pittsburgh, USA, where he received his Master's Degree in Public and International Affairs. Alhaji has served in various leadership positions in Nigeria's industries including the

Nigerian Ports Authority, Railway Corporation, National Shipping Line and Nigeria Airways. He has also been conferred several awards in recog-

nition of his contribution at various levels including the African Business Roundtable, the OECD-Africa Investment Advisory Board and the advisory Board to the IFPRI Vision 2020. He is currently the Group Chairman of BHI Holdings Limited (Daddo Group of Companies), and the Vice President of the International Ports and Harbours Association. Alhaji Tukur, a national of Nigeria, holds the traditional title of Tafidan Adamawa. He brings to the AATF Board a solid understanding of the African private and public sectors and of the increasing importance of agricultural development to African economic growth. His guidance will help AATF devise efficient mechanisms for holding strong public-private partnerships for agricultural technology delivery to smallholder African farmers. Alhaji Tukur will serve on the nominations committee of the AATF Board of Trustees. (Visit [www.aatf-africa.org/bmbamanga.php](http://www.aatf-africa.org/bmbamanga.php) for profile)

### Eugene Terry appointed BECA Interim Co-ordinator

Dr. Eugene Terry has been appointed Interim Co-ordinator of the Biosciences East and Central Africa (BECA) for a six-month period effective 1 April 2005. The announcement was made by BECA's Interim Committee Chair, Dr. Romano Kiome. Dr. Terry is a member of the AATF Board of Trustees and is the founding Implementing Director of the Foundation. He takes over BECA's co-ordination from Prof. James Ochanda, whose term ended on 31 March 2005. ([www.biosciencesafrica.org/news.htm](http://www.biosciencesafrica.org/news.htm))

