

April – July 2010

**In this issue**

In this issue we turn the spotlight on our country partner, Malawi and also focus on training and seed-related initiatives and news.

**Recent publications**

Results of 2009 Regional Trials Coordinated by CIMMYT-Kenya

Available at <http://dtma.cimmyt.org/index.php/publications>

More information: [dmakumbi@cgiar.org](mailto:dmakumbi@cgiar.org)

Results of 2008 Regional Trials in Southern Africa

Available at <http://dtma.cimmyt.org/index.php/publications>

More information: [cmagorokosho@cgiar.org](mailto:cmagorokosho@cgiar.org)

**Key events**

**Meetings**

- 19-20 April 2010. Platform for Agricultural Research and Innovation Launch Meeting; Mozambique
- 10 May 2010. DTMA Innovation Learning Platform Steering Committee Meeting; Chitedze, Malawi
- 17-21 May 2010. DTMA Maize Technicians Training Course; Embu, Kenya
- 2 July 2010. Launch of KDV1 by Dryland Seeds Ltd; Machakos, Kenya
- 19-23 July 2010. FARA Africa Agriculture Science Week; Ouagadougou, Burkina Faso
- 22 July 2010. Gates Grantees in Malawi: Collaboration with Farmer Voice Radio (FVR) for Radio Extension Services; Lilongwe, Malawi
- 11-13 August 2010. NSIMA/DTMA/IRMA Regional Steering Committee Meeting; Maputo, Mozambique
- 15-31 August 2010. DTMA Maize Breeders Training Course; Harare, Zimbabwe
- 13-17 September 2010. DTMA Project Annual Review and Planning Meeting; Nairobi, Kenya

**DTMA in the news**

April 2010  
Study says drought tolerant maize will greatly profit African farmers  
CIMMYT e-News <http://apps.cimmyt.org/english/wps/news/2010/apr/study-dtma.htm>

19 April 2010  
New CIMMYT study says that drought-tolerant maize will greatly profit African farmers  
Regional Strategic Analysis and Knowledge Support System (ReSAKSS) e-Newsletter  
<http://resakss.wordpress.com/2010/04/19/new-cimmyt-study-says-drought-tolerant-maize-will-greatly-profit-african-farmers/>

3 May 2010  
DNA fingerprinting – sifting the fake from the genuine  
CIMMYT blog <http://blog.cimmyt.org/?tag=dtma>

Training workshop for maize technicians wraps up its 13-country journey in Kenya  
CIMMYT blog <http://blog.cimmyt.org/?p=4793>

7 July 2010  
Maize farmers and seed businesses changing with the times in Malawi  
CIMMYT e-News <http://tinyurl.com/3xcarkq>

**Photo credits**

Judie-Lynn Rabar, CIMMYT  
Anne Wangalachi, CIMMYT

**Kenyan maize technicians trained**

Between 17 and 21 May, 2010, the Kenya Agricultural Research Institute (KARI) and the DTMA project organized a training workshop for 35 maize technicians, in Embu, Kenya. Course participants came from five KARI stations (Embu, Kakamega, Katumani, Muguga, and Mtwapa), seed companies, NGOs, and the CIMMYT field station in Kiboko. They got an opportunity to upgrade their skills and knowledge of field trial management, variety testing, registration, and release. Topics covered included breeding for abiotic and biotic stress, management of trials and nurseries, hybrid development, on-farm variety testing, seed production, variety descriptors, variety release and registration, and use of the CIMMYT Fieldbook (software for pedigree and data management). Course presentations were in the form of lectures, demonstrations, and practical sessions.

Wilfred Mwangi, associate director of the Global Maize Program (GMP) and DTMA project leader, urged the course participants to use the knowledge from the course to help the project achieve its aim of changing farmers' lives by improving the yield of drought tolerant maize varieties in drought-stressed areas. "Over the past four years, CIMMYT and its partners have developed tools to help build individual capacity by taking technology to the farmers," said Mwangi.

Christine Khamumia (pictured, left) from KARI-Kakamega was sure that the knowledge acquired would greatly benefit her work. "I have especially learnt a lot about randomization of trials," she said. "The course covered all activities that maize technicians are involved in. It was very useful and has greatly helped us in understanding the work that we do," added Fred Manyara, a participant from KARI-Embu.

Resource persons for the training were CIMMYT maize breeders Dan Makumbi, Peter Setimela, Stephen Mugo, and Yoseph Beyene; CIMMYT research technicians Silvano Assanga, Haron Karaya, Andrew Chavangi, and Joseph Kasango; KARI maize breeder Dr James Gethi; and Dr Evans Sikinyi, of Seed Traders Association of Kenya (STAK).



Dr Stephen Njoka (r), Center Director of KARI Embu presents Christine Khamumia (l) of KARI Kakamega, with her award for outstanding effort

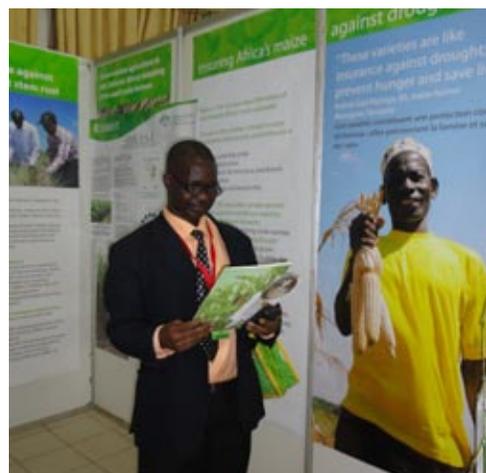
**DTMA project at FARA African Agricultural Science Week**

During 19 – 23 July 2010, the Forum for Agricultural Research in Africa (FARA) held an African Agricultural Science Week in Ouagadougou, Burkina Faso. The event tackled key issues affecting African agricultural research and development in the face of climate change and the global financial crisis. FARA is a key umbrella organization for major agricultural stakeholders in Africa. At the meeting were more

than 700 representatives, among them ministers of agriculture, researchers from international and national agricultural centers, policymakers, development partners, and partners from farmer and non-governmental organizations. The work of the DTMA project was found to be highly relevant as it addresses climate change.

The DTMA project was represented by Wilfred Mwangi, Project Leader and Anne Wangalachi, Science Writer. The project was showcased as part of CIMMYT initiatives in Africa under the 'Market Place' side event and the DTMA project's progress in developing and disseminating new drought tolerant maize varieties was shown through poster displays, reports and leaflets; with a focus on getting seed into farmers' hands (through the Innovation Learning Platform in Malawi) and the 'crop insurance' element of DT maize. Among the visitors was Rwandan Minister of Agriculture, Dr Agnes Kalibata, who was interested in DT maize technology and how it could be introduced and scaled up in her country. Other visitors to the exhibition booth were also interested in the DT maize technology, how to obtain seed, and community-based seed production; and project publications – the seed sector study and policy briefs, and the seed business management in Africa manual. French translations of some of the materials proved useful and popular.

More information: [www.fara-africa.org](http://www.fara-africa.org) and [www.faraweek2010.blogspot.com/](http://www.faraweek2010.blogspot.com/)



**Ghana passes a new seed law**

On June 4, 2010, Ghana's parliament passed the "Plants and Fertilizer Act of Ghana", which will have positive impacts for the country's seed industry, and the work of the DTMA project in Ghana and the greater West African region. The new Act is in three parts: the Seed Law, Fertilizer Law and Plant Protection Law. Through efforts coordinated by the Alliance for a Green Revolution in Africa (AGRA) and Ghana's Millennium Development Authority (MiDA), various stakeholders were engaged in reviewing the new law. AGRA's Policy Officer, Dr Augustine Langyintuo, led these efforts and was co-author of a recent DTMA project report on the West African seed sector that provided useful insights in the revision of the Act, which repeals all previous seed, fertilizers and

pesticide laws. With the new laws, the country's private seed sector will be more involved in foundation seed production, previously a reserve of the state-run Ghana Grains Legumes Development Board. Expected benefits include better access by seed companies to foundation seed (seed that is used to produce the seed which is finally sold to farmers), and a more vibrant and streamlined seed sector, with these benefits spilling over to Ghana's neighbors. Nigeria, Mali and Benin are the region's other DTMA project countries. More information: Dr Augustine Langyintuo, [Alangyintuo@agra-alliance.org](mailto:Alangyintuo@agra-alliance.org).

## Seed management institute up and running

Between 23 May and 05 June, 2010, the Seed Enterprise Management Institute (SEMI) conducted two courses in seed production, drying, processing and storage, for 60 representatives of 30 seed companies operating in 13 sub-Saharan Africa (SSA) countries. Set up in March 2010, SEMI's goal is to contribute to alleviating food insecurity through building capacity of the SSA seed supply chain. SEMI is a collaboration led by University of Nairobi (UoN) and involves the Alliance for a Green Revolution (AGRA)'s Program for Africa's Seed Systems (PASS), the International Maize and Wheat Improvement Center (CIMMYT), Iowa State University, national seed policy regulating agents, and private seed business experts. It is based at the College of Agriculture and Veterinary Sciences (CAVS), University of Nairobi, Kabete campus, and its training modules will focus on seed production, drying, processing, conditioning and storage; seed testing and quality assurance; seed marketing and business management; seed policies and regulations; and information management.

In the region, small and emerging seed enterprises play a vital role in reaching farmers in far-flung areas, and the training offered at the institute specifically targets them. "SEMI is about experiential learning—approximately 50% is through practical training and 50% through formal lectures," says Prof Agnes Mwang'ombe, Principal of CAVS and the Leader of the SEMI team. Other SEMI activities include training plant breeding graduate students in African universities, supporting the production of improved seed varieties and creating a web-based network for information exchange on seed technology.

CIMMYT Seed Systems Specialist, John MacRobert was one of the resource persons during the recent training and covered seed production planning and management, emphasizing that seed enterprises should establish clear production strategies, based on market requirements. Key components of this production strategy are: planning production based on future marketing goals; contracting and managing seed growers; and producing seed of specified quantity and quality.

"We from Ghana have learnt a lot from our course here at SEMI, there is no way we would have learned what we now know on seed quality issues had we not visited KEPHIS" says Joseph Bapule from Ghana. The Kenya Plant Health Inspectorate Services (KEPHIS) is the seed inspection and certification body in Kenya. Other course participants came from Kenya, Uganda, Tanzania, Mozambique, Rwanda, Malawi, Zambia, Burkina Faso, Mali, Nigeria, Niger, and Ethiopia.

David Ndung'u, SEMI Project Manager, and a former Visiting Scientist with the DTMA project confirms this: "We are especially encouraged by feedback from the small seed companies, because SEMI and the courses are about building the capacity of those that need it the most."

More information: Dr David Ndung'u, Project Manager, [kamundian@yahoo.com](mailto:kamundian@yahoo.com)

## DTMA project to begin radio extension partnership

More than 70% of smallholders in sub-Saharan Africa own a radio, and radio represents a very effective means of reaching farmers with agricultural extension messages. However, only 7% of radio airtime is devoted to agriculture, with a huge potential for more. These were some of the key issues raised by participants at a recent workshop organized by the Bill & Melinda Gates Foundation and Farmer Voice Radio (FVR) in Lilongwe, Malawi, for grantees to explore opportunities available for maximizing airtime with radio stations. Twenty-six representatives from 10 foundation grants across 17 organizations, including the DTMA project took part in the workshop. The project was represented by Judie-Lynn Rabar, CIMMYT Science Writer and Tom Mathinji, a radio journalist with the Kenya Broadcasting Corporation, interested in the DTMA project and working with FVR in Kenya.

FVR is planning a series of radio programs whose focus is to be on the farmer, with content developed collaboratively by experts, farmers and radio extension officers. The DTMA project will participate through generating content, and providing expert interviews.

FVR is a consortium of radio broadcasters, agricultural experts, and farmers, established to provide a variety of agriculture-related radio programming, and serve as a megaphone for two-way extension priorities from content providers. Its 10-year vision is to reach 80% of sub-Saharan African smallholder farmers, with first in-depth work through a 3-year grant, in Malawi and Kenya, to implement and test the consortium. Further expansion to Ghana, Mali, Tanzania and Uganda is planned.



## Country partner focus: Malawi

In Malawi, the DTMA project works closely with the Ministry of Agriculture and Food Security, the Chitedze Research Station, Seed Co, Demeter Seeds and non-governmental organizations.

In 2010, activities have focused on seed production and promotion of two new DT maize varieties – ZM 309 and

ZM 523 – which are providing a niche market for improved open-pollinated variety (OPV) seed.

The DTMA project's Innovation Learning Platform (ILeP) has provided an opportunity for many more farmers to learn about DT maize varieties from their peers through on-farm demonstration plots. The ILeP is led by the Ministry of Agriculture and Food Security, and involves national maize breeders and extension agents, private and community seed producers, agro-dealers, grain marketing companies, micro-financial institutions, non-governmental organizations and farmers, who collaborate across the entire maize value chain (maize breeding to grain marketing).



ILeP, through linking with the country's Agricultural Input Subsidy Program, has enabled more farmers to access seed of ZM 309, and grow the variety in six of the most drought-prone districts in Malawi, thus contributing to improved food security for thousands of farm families. During the last main cropping season (December 2009 – March 2010), a severe drought hit these areas and many farmers lost their crop. However, the ZM 523 and ZM 309 varieties stood out because of their drought tolerance especially in Mwanza and Balaka, and the people were able to see the difference.

This year, Seed Co Malawi and Demeter Seeds will be increasing their seed production to target the drought-hit areas. Seed Co's aim is to produce 165 tons of ZM 309 and 210 tons of ZM 523, while Demeter Seeds will produce 520 tons of ZM 523.

"Farmers are now asking for these varieties by name. We hope that from seeing the performance of ZM 309, obtained through the subsidy program, farmers will be encouraged to start buying certified maize seed to boost production," says Dellings Phiri, Managing Director of Seed Co Malawi.

Through this innovative partnership, local seed companies are boosting their sales from fulfilling the demand created for ZM 209 and ZM 523.

"The climate is changing, rainfall is decreasing and the weather is now dictating which varieties farmers grow and in turn, what varieties seed companies produce," says Phiri.

Drought tolerance is a trait that is beneficial to both smallholder and commercial farmers.

"Not many farmers have access to irrigation to secure their maize crops – we are giving them options by investing in production of ZM 309, ZM 523 and other DT maize varieties," says Martin Andrews, General Manager at Demeter Seeds. The other DT maize varieties include ZM 621, ZM 623 and ZM 721.

The Drought Tolerant Maize for Africa (DTMA) Project is being implemented jointly by CIMMYT and the IITA, and is funded by the Bill & Melinda Gates Foundation and the Howard G. Buffett Foundation. The project is part of a broad partnership also involving national agricultural research and extension systems, seed companies, non-governmental organizations (NGOs), community-based organizations (CBOs), and advanced research institutes, known as the Drought Tolerant Maize for Africa (DTMA) Initiative. Its activities build on longer-term support by other donors, including the Swiss Agency for Development and Cooperation (SDC), the German Federal Ministry for Economic Cooperation and Development (BMZ), the International Fund for Agricultural Development (IFAD), and the Eselsen Foundation. The project aims to develop and disseminate drought tolerant, high-yielding, locally-adapted maize varieties and to reach 30-40 million people in sub-Saharan Africa with these varieties in 10 years.