



## New project launched: Heat Stress Tolerant Maize for Asia



South Asian farm lands have been increasingly experiencing climate change related weather extremes. [A report from the Asian](#)

[Development Bank in 2009](#) warns that if the current trends persist until 2050, major crop yields and food production capacity of South Asia will significantly decrease — by 17% for maize, 12% for wheat, and 10% for rice— due to climate change induced heat and water stress. In response to this situation, [USAID's Feed the Future \(FTF\)](#) initiative has decided to support the “Heat stress resilient maize for South Asia through a public-private partnership” (Heat Tolerant Maize for Asia, HTMA) project to develop heat resilient maize for South Asia.

HTMA is a public-private CIMMYT-led alliance consisting of [Purdue University](#), [Pioneer Hi-Bred](#), seed companies, and South Asian public-sector maize programs. It targets resource-poor people of South Asia who rely on growing maize for subsistence or income in rainfed conditions, and whose welfare

is directly dependent on maize yields and negatively affected by crop failures. To develop and deploy heat stress resilient, high-yielding maize hybrids for vulnerable regions in South Asia, the HTMA project will build upon CIMMYT's elite abiotic stress tolerant maize germplasm base; the technical expertise of the key resource partners (Purdue University, Pioneer Hi-Bred, and CIMMYT); the maize breeding and phenotyping locations and strengths of the national agricultural research systems of India, Nepal, Bangladesh, and Pakistan; and the seed production capacity, strong links with the farming communities, and the market reach of private sector partners (Pioneer Hi-Bred, [Vibha AgriTech](#), [Ajeet Seeds](#), and [Kaveri Seeds](#)).

During 23-25 January 2013, project launch meeting took place in Hyderabad, India, where 44 scientists gathered to discuss various aspects of the project, including the [genomic selection \(GS\)](#) approach which is proposed to be one of its major approaches. CIMMYT's Jose Crossa, Paulino

Perez, and Raman Babu discussed the GS concept, its application in breeding programs, and data analysis and management for fast-track breeding progress and product development. The meeting included a presentation on the FTF initiative by Larry Beach (USAID) who explained the role of HTMA in achieving FTF goals in South Asia. B.M. Prasanna (Global Maize Program director) discussed the climate change scenario in South Asia, its potential impact on the farming community, ▶

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and the importance of HTMA in addressing these challenges. P.H. Zaidi (CIMMYT maize physiologist and HTMA coordinator) then provided an overview of HTMA's scope, objectives, outputs, and outcomes, which was followed by presentations from participating countries on the current progress status of heat tolerant maize and on suitability of HTMA for country and institutional priorities.

These deliberations set up an excellent platform for further discussions on work plans, activities, and intended outputs and outcomes, including breeding strategies, trial sites, resources, bottlenecks, and potential solutions. The group then agreed on an implementation strategy for each of the planned activity and decided that a project management committee would hold bi-monthly web-based meetings to review implementation of planned activities, perform monitoring visits, and receive updates on activities during crop season at each site. A project steering committee, an overseeing body chaired by B.M. Prasanna, also met to discuss the project structure and execution plan.

The meeting was considered successful by its attendants. USAID's Beach concluded the meeting with encouraging remarks showing confidence in the alliance and its capability to execute the planned activities and thus achieve the outputs that will eventually help FTF to reach its goals. The HTMA team is looking forward to working on helping resource-poor farmers of South Asia. 🇵🇰🇮🇳

## CIMMYT supports Pakistan's agricultural machinery modernization

On 22 December 2012, two agricultural research organizations in Pakistan — National Agricultural Research Center, Islamabad, and Wheat Research Institute (WRI) Faisalabad, Punjab — received new Wintersteiger combine harvester and seeding machines from the Wheat Production Enhancement Program for Pakistan (WPEP) funded by [USDA](#) and implemented by CIMMYT in an effort to upgrade Pakistan's wheat research infrastructure. Until now, the institutes were relying on old harvesting and planting machines which could no longer satisfy their research needs. Makhdoom Hussain, WRI Faisalabad director, expressed his gratitude regarding the purchase: "The replacement of old irreparable machines was much needed. It will build the Institute's capacity to precisely design and conduct experiments."



CIMMYT-Pakistan provided support in purchasing and importing these machines as part of its commitment to increase efficiency and productivity of Pakistan's national programs. Imtiaz Muhammad, CIMMYT-Pakistan, commented: "These modern and flexible plot-combine and tractor-mounted seeders are packed with enough bells and whistles to satisfy the most demanding research team and challenging work environments. It shows that CIMMYT is really committed to upgrading the capacity of the national programs to deliver pro-poor farmer technologies." Yaqub Mujahid, national wheat coordinator, added that "the Wintersteiger tractor mounted XL heavy plot seeder is another valuable addition to the National Coordinated Wheat Program machinery and equipment lot, as it is designed and developed for precise sowing of wheat experimental plots in field research."

WPEP for Pakistan is a USDA-financed and CIMMYT-implemented program cooperating with Pakistan Agricultural Research Council ([PARC](#)), the Government of Pakistan, International Center for Agricultural Research in Dry Areas ([ICARDA](#)), 11 other national partner institutes in Pakistan, and 3 institutes in the US. Infrastructure improvement is one of the key components of the program. 🇵🇰🇮🇳





## Zhonghu He received the China Agriculture Elite Award



Zhonghu He, CIMMYT distinguished scientist and country liaison officer for China, received the China Agriculture Elite Award from the Ministry of

Agriculture (MOA) in December 2012. The award, presented to 10 Chinese agricultural scientists every 2 years, was created by the MOA in 2006 to recognize individual scientists for their outstanding contributions to the advancement of agricultural science and technology and to the development of agriculture and rural economy in China.

He established and led the joint CIMMYT-Chinese Academy of Agricultural Science (CAAS) program. Under his leadership, the program has achieved significant progress in quality testing protocol standardization for traditional Chinese products, development

and application of functional markers, characterization and QTL mapping for adult resistance to yellow rust and powdery mildew, variety development, and training.

As part of the award, He also received USD 32,000, which he donated to the CAAS Zhuang Qiaosheng Wheat Award Foundation designed to recognize breeders and agronomists at provincial and prefectural levels for their contributions to wheat improvement in China. "This great honor is not only for me, but also for my team members, my collaborators in China, CIMMYT, and other countries around the world," He explained his donation. He will add this award to the 2008 First Class Science and Technology Award from the State Council, which he received for his work on quality improvement,

and the 2011 First Class Science Award from the Beijing Municipal Government for China-CIMMYT wheat shuttle breeding. Congratulations! 🙌



## First orientation course of 2013 in El Batán

On 29 January, 32 newcomers took part in the first orientation course of 2013 at El Batán. The course, which is part of the orientation plan Human Resources initiated last year, was introduced by Nellooli Rajasekharan, Director of Human Resources International, who welcomed all the participants. Thomas Short, Deputy Director General of Corporative Services, then presented an overview of CIMMYT's work in Mexico and the world. The newcomers learned about the most relevant projects from all the different work areas in El Batán, as well as the issues that



are of interest to those new to CIMMYT: legal matters, accounting procedures, administrative services request, computing services, benefits, etc. The group gathered for lunch together with some of the speakers and course organizers to foster further interaction among them.

We would like to thank Erica Chimuka and Ángeles Rojas for the course and logistics organization and to all the participants for their enthusiasm. Welcome to CIMMYT! 🙌

## Watch out for spurious journal outlets

Spurious, substandard, bogus, suspect, predatory – whatever the term, all researchers need to be aware of the existence of such journals. Corrupting the great idea of scholarly open-access publishing, which has helped to expand worldwide access to the latest research, predatory publishers have entered the market to publish counterfeit journals, thus exploiting the open access model.

As we have begun another year of work and publishing, we would like to warn CIMMYT researchers against these journals.

### How to spot predatory publishers:

- Lack of transparency.
- Spamming researchers.
- Dishonesty.
- Questionable or downright low quality of published journals.
- Solicitation of manuscripts but failing to mention the required author fee.
- Accepting almost any article as long as the author pays the fee.

### How to avoid becoming a victim:

- As a researcher, resist the temptation to publish quickly and easily.
- Submit your articles to journals recognized by the [Thomson Reuters Master Journal List](#).
- For some of the spurious publishers, see [Jeffrey Beall's blacklist](#) of potential, possible, or probable predatory scholarly open-access publishers.

## INTELLECTUAL PROPERTY & SCIENCE



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### For more information:

- Follow the [Scholarly Open Access](#) blog of Jeffrey Beall, Scholarly Initiatives Librarian at the University of Colorado, Denver, who monitors suspect journals.
- Comprehensive Directory of Open Access Journals ([DOAJ](#)).
- A [list of information on journals](#) compiled by CIMMYT library.
- [Contact CIMMYT library](#) if you need further assistance. 📞

## CIMMYT-Nairobi welcomes new staff



**Amos Mbugua Thairu** joined Global Maize Program (GMP) as germplasm data coordinator on 01 January 2013. He works under the supervision of the GMP director B.M. Prasanna and assists CIMMYT scientists and partners with handling and processing large molecular and phenotypic data analysis. Amos holds an MSc in Biostatistics from Stockholm University and a BSc in Mathematics and Statistics from the University of Nairobi. He previously worked as data manager with the Karolinska Institute/University of Nairobi collaborative HIV/AIDS research group.



**Arthur Karugu** joined CIMMYT's Global Maize Program in January 2013. He works with Sotero Bumagat on the double haploid project responsible for the development of maize inbred lines for breeders, small- and medium-sized enterprises, and private and public institutions across Africa. Arthur is not new to the CG system, as he worked with IITA and ICRISAT before, where he was involved in research and training on the use of molecular tools for genotype improvement. He holds an MSc in Plant Breeding and Genetics and a BSc in Agriculture (Crop Science) from the University of Nairobi.



**Donald Musembi Mutwota** joined CIMMYT as research technician on 01 August 2012. He works under the supervision of CIMMYT entomologist Tadele Tefera on artificial rearing of different species of maize stem borers. He holds a national diploma in applied biology from Ol'lessos Technical Training Institute. Donald previously worked with the KARI Crop Protection Section in the stem borer mass rearing laboratory.



**Juma Ongeti Collins** joined the Global Maize Program as research assistant on 01 January 2013 to work with the Water Efficient Maize for Africa (WEMA) and Insect Resistant Maize for Africa (IRMA) projects under the supervision of Stephen Mugo. He is assisting WEMA/IRMA CIMMYT scientists and maize research partners. Juma holds an MSc in Plant Breeding and Biotechnology and a BSc in Agriculture (Crop Science) from the University of Nairobi. Prior to joining CIMMYT, he worked at Western Seed Company as maize research officer.



**Joseph Ombaka Orende** joined the Global Maize Program (GMP) as research assistant on 01 January 2013. He works under the supervision of B.M. Prasanna and assists CIMMYT scientists and partners with handling and managing nurseries, trials, data collection, and analysis. Joseph holds an MSc in Plant Breeding and Genetics and a BSc in Agriculture (Crop Protection) from the University of Nairobi. Previously, he worked with African Bean Consortium (ABC) at the University of Nairobi Grain Legume Program.





### ► More newcomers

- Cinthya Mathys**, Monitoring and Evaluation Specialist, Conservation Agriculture/India, 21 January.
- Shaheen Akter**, Consultant, Socioeconomics/Bangladesh, 20 January.
- Yogesh Kumar**, Assistant Research Scientist, Conservation Agriculture/India, 01 January.
- Aigerim Abirova**, Accountant/Secretary, Global Wheat Program/Kazakhstan, 01 January.
- Okan Diyar**, Logistician & Driver, Global Wheat Program/Turkey, 14 January.

### Departures

- Akif Murat Erguney**, Logistician & Driver, Global Wheat Program/Turkey, 11 January.
- Michelle DeFreese**, Communications Assistant, DG's Office, 25 January.

**In 2012: Neelam Chaudhary**, Hub Communication Manager, Conservation Agriculture/India, 12 June; **Surya Mani Dhungana**, Assistant Research Scientist, Socioeconomics /India, 12 June; **AKM Salah Uddin**, Training & Outreach Specialist, Conservation Agriculture/Bangladesh, 16 July; **Marziyeh Kazempour**, Administration assistant, Global Wheat Program/Iran, 21 August; **Mapurisa Mawire**, Junior Research Assistant, Global Maize Program/Zimbabwe, 03 September; **Moshin Al-Sadat**, Project Officer, Global Wheat Program/Bangladesh, 24 September; **Mahmuduzzaman**, Technical Officer, Conservation Agriculture/Bangladesh, 29 September; **Moses Chiputu**, Junior Research Assistant, Global Maize Program/Zimbabwe, 03 October; **Prakash Sadashivappa**, Senior Research Associate, Socioeconomics/India, 26 October; **Prabhakaran T.R.**, Research Economist, Socioeconomics /India, 09 November; **Virender Kumar**, Senior Scientist and Research Platform Coordinator, CSISA/Haryana, 31 December; **Arman Baitassov**, Agronomist, Global Wheat Program/Kazakhstan, 31 December; **Didem Saglam**, Program Assistant, Global Wheat Program/Turkey, 31 December.

### Recent publications by CIMMYT staff

- Genetic distance among doubled haploid maize lines and their testcross performance under drought stress and non-stress conditions.** 2013. Beyene, Y.; Mugo, S.N.; Fentaye Kassa Semagn; Asea, G.; Trevisan, W.; Amsal Tesfaye Tarekegne; Tadele Tefera; Gethi, J.; Kiula, B.; Gakunga, J.; Haraya, H.; Chavangi, A. *Euphytica* Online first
- Multi-environment QTL analyses for drought-related traits in a recombinant inbred population of chickpea (*Cicer arietinum* L.).** 2013. Hamwieh, A.; Imtiaz, M.; Malhotra, R.S. *Theoretical and Applied Genetics* Online first
- Relay planting of wheat in cotton: an innovative technology for enhancing productivity and profitability of wheat in cotton-wheat production system of South Asia.** 2013. Buttar, G.S.; Sidhu, H.S.; Singh, S.; Jat, M.L.; Gupta, R.; Singh, Y.; Singh, B. *Experimental Agriculture* 49(1):19-30
- Root-root interactions: extending our perspective to be more inclusive of the range of theories in ecology and agriculture using in-vivo analyses.** 2013. Faget, M.; Nagel, K.A.; Walter, A.; Herrera, J.M.; Jahnke, S.; Schurr, U.; Temperton, V.M. *Annals of Botany* Online first
- Infrared thermal imaging as a rapid tool for identifying water-stress tolerant maize genotypes of different phenology.** 2013. Zia, S.; Romano, G.; Spreer, W.; Sanchez, C.; Cairns, J.; Araus, J.L.; Muller, J. *Journal of Agronomy and Crop Science* Online first

### Birthdays 10-18 February

Bernardo Valdez 11; Francisco Magallanes 11; José Luis Jiménez 11; Mario Alberto Aragón 12; Héctor Flores 12; Wandera Ojanji 12; Mauro Sánchez 13; Antonio Pedraza 14; Efrén Rodríguez 14; Niha Ranzon Das 15; Alejandro Vázquez 16; Kapil Singla 16; Okan Diyar,16; Ndeye Ndack Diop 17; Meenakshi Chandiramani 17; Claudia López 18; Xuecai Zhang 18; Yusuf Ali 18; Debrah Kudzai Maleni 18.

CIMMYT-Obregón would like to congratulate the Yanquis de Obregón for winning the Caribbean Series for the third time in a row!



## Weekly photo contest winner: Traveling through the main maize belt of Ethiopia

Our winner in this week's Informa photo competition comes from CIMMYT socioeconomicist Hugo De Groot. Hugo took this photo in Bure, a district in the main maize belt of Ethiopia, while traveling to examine the gender aspects of agricultural extension in Ethiopia in the NuME ([Nutritious Maize for Ethiopia](#)) project areas, for which CIMMYT has developed quality protein maize varieties. Hugo took this photo in one of the Bure villages while waiting for an extension officer to discuss the project.



Don't forget to send us your entries for next week's competition. Please email your photos to **Barbora Nencova** ([b.nencova@cgiar.org](mailto:b.nencova@cgiar.org))—or hand them over on a USB stick—and look out for the winners on CIMMYT's [flickr](#), where they are shared under a Creative Commons license. Congratulations to Hugo and thank you to all our participants!