

Daily Digest No. 3

Making genetics work for rice in Africa

Day 2 of the 3rd Africa Rice Congress began with a plenary session on How to make genetics work for Africa.

Keynote and panel discussion

Dr Gary Atlin, Senior Program Officer, Bill & Melinda Gates Foundation noted in his keynote address that too many rice systems in Africa are reliant on cultivars developed over 20 years ago, for which the crosses were made another 10 years earlier. Breeding efforts serve no purpose if farmers cannot get access to seed of new varieties. The best-protected farmers (i.e. those at least at risk of crop failure or poor yield) are those that use cultivars no more than 5–6 years old.



First plenary: Gary Atlin addresses a packed auditorium

Dr Atlin focused on the importance of the rate of genetic gain, which he defined as “the annual rate of productivity increase in farmers’ fields”. He explained that it is important that genetic gain be measured under farmer management. Such gain is rarely measured by public plant-breeding programs. The Gates Foundation is set to invest US\$ 52 million in plant breeding over the coming 5 years.

The rate of gain is directly proportional to the research genetic gain, the proportion of farm area planted to the new cultivars, the proportion of research genetic gain achieved on farm, and the rate of cultivar turnover on

Today's program:	
Plenary Debate 2	
Value chain actors: From seed to markets	
09:00	Introduction <i>Bas Bouman (IRRI)</i>
09:10	Keynote address <i>Oumar Niangado (Syngenta Foundation)</i>
09:40	Panel discussion
10:30	<i>Coffee / tea break</i>
Plenary Debate 3	
Ministerial policy dialogue: Rice sector development	
11:00	Introduction <i>Chair (Cameroon)</i>
11:10	Ministerial Policy Dialogue Panel members: Ministers from Cameroon, Chad, The Gambia, Mali, Senegal
12:30	Lunch Sponsored lunch session (by invitation only) <i>FAO and AfricaRice</i>
World Café: Listening and defining priorities with the rice sector stakeholders	
14:30	Introduction <i>Facilitators</i>
14:45	Roundtable discussion
16:00	<i>Tea / coffee break</i>
Closing ceremony	
16:30	Introduction
16:45	Summary and Recommendations of the Congress
17:15	Awards
17:45	Closing
18:00	End of Congress

farm. Publicly funded programs are often only achieving about 1% gain per year or less.

Atlin indicated six ‘routes’ to improved genetic gain: bigger breeding programs with higher selection intensity (including mechanization, automation, digitization); adequate genetic variability (in the breeding program); accurate selection (higher heritability); faster cycles (plant breeding cycles are typically 10 years); empowered and accountable management — research managers need



The panel on the platform with chairman Masa Iwanaga (at the lecturn)

to lead their teams and drive the research; and staff that understand product development (perhaps more of an ‘engineering approach’ than a biological one).

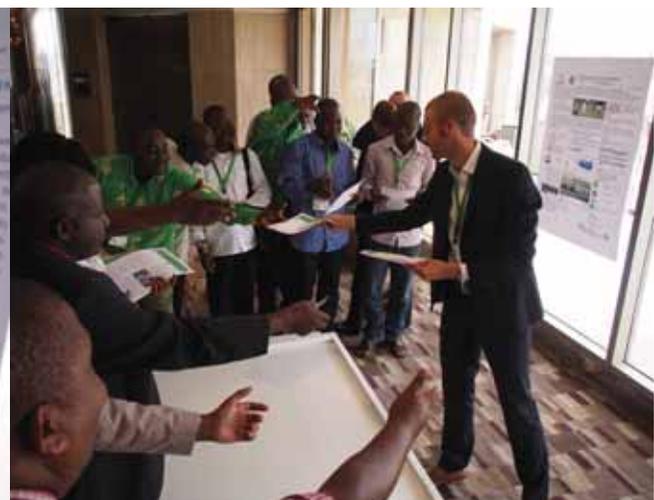
After the keynote, chairman Masa Iwanaga, President, JIRCAS, invited a panel of experts to the platform to discuss the topic at hand: Péricles Neves, Rice & Beans, Brazilian Agricultural Research Corporation (Embrapa); Robert G. Guei, Senior Technical Officer, FAO; K. Nani Dramé, Molecular Biologist, AfricaRice; and Aboubakar Njoya, Director of Programs, WECARD/CORAF.

Panelists reacted to the keynote from their own perspectives. It was noted that breeding capacity at NARS is woefully inadequate. The need to strengthen Africa’s breeding capacity was stressed because “the best varieties are those bred in the prevailing climate”. Given the lack of critical mass and to gain in efficiency and efficacy, regional approaches are required. This will eventually result in varieties that are better adapted to

Africa’s enormously diverse rice-growing environments and consumer preferences, and resilient to climate change. The success story of Embrapa’s breeding program is built upon a large number of carefully chosen and well-equipped testing sites across the country. The Africa-wide Rice Breeding Task Force convened by AfricaRice is adopting that approach at the continent level, with testing sites in more than 25 African countries to help NARS access new materials and identify varieties that best fit the growth conditions in their target regions and consumer preferences. All participants agreed that seed systems development remains a top priority for Africa, to enable farmers to access both existing improved varieties and new varieties.

Mini-symposia wrap up

The mini-symposia covering the Congress’s five sub-themes concluded on Tuesday with their third, fourth



and fifth sessions. These mini-symposia provided the platform for the presentation of research results in the form of more than 250 presentations and posters. The papers will be published in due course and the discussion points are being fed into the Congress declaration and recommendations for the final day.

Lunch anyone?

Day 2 saw two parallel lunchtime sessions, sponsored by partners other than the co-organizers. These promoted further discussion and interaction.

Syngenta Foundation and CTA sponsored a session on 'Public-private partnerships (PPP) and agribusiness in rice', which was oversubscribed and the room packed. Representatives of the public and private sectors presented their experiences with PPP in various national contexts. PPPs take different forms in different countries, as they have to be adapted to the prevailing socio-political context. While PPPs are common in the health sector, they are not so in agriculture.

At the same time, ROPPA, CRCOPR, Oxfam, Agricord, SNV and VECO sponsored a session on 'Increasing synergy between actors in the West African rice sector & improving future supplies to cities'.



More detailed summaries of these discussions will be available in due course.

Rice Sector Development Hubs go live

Tuesday also saw the official launch of the Rice Sector Development Hubs, a key mechanism in the research-for-development strategy 2011–2020 for Africa's rice sector — see www.ricehub.org

Mechanizing Africa's rice sector

The final session of Mini Symposium 5 on Tuesday comprised a demonstration by and discussion with agricultural machinery manufacturers and entrepreneurs from Cameroon, Ghana, Nigeria and Senegal. In order



to enable other participants to experience this important aspect of the upgrading of the rice value chain, the session will be repeated on Thursday lunchtime, starting at 14:00.

Want to read and see more?

Scenes from Day 1: Inauguration, Exhibition, Science Sessions & Book Launch: www.flickr.com/photos/africarice/sets/72157636820525425/

Scenes from Day 2: First Plenary Debate, Mini-symposia, Sponsored Lunch Sessions, Exhibition of Small Machinery:

www.flickr.com/photos/africarice/sets/72157636856332154/

AfricaRice Daily:

http://paper.li/AfricaRice/1329726306?edition_id=9415d500-3b2e-11e3-8eae-0025907212f4

For all AfricaRice's Flickr-hosted images, including other elements of the Congress: www.flickr.com/photos/africarice/sets/

Congress website: www.africarice.org/arc2013/intro1.asp

What others are saying about the Congress: http://ajcsb.net/affiche_article.php?page=Agriculture&article=212&PHPSESSID=02um2t8nc561v9vj81vjovv2f0





Cameroon Rice Day

On Wednesday, participants had the opportunity to visit the headquarters and research center of co-organizers Institute of Agricultural Research for Development (IRAD) at Nkolbisson towards the west of the city. The trip included aspects of rice work going on at the research station, and commercial rice and rice products in Cameroon. The tour began with a welcome from the director general of IRAD and was later joined by HE the Minister of Scientific Research and Innovation (center of image top left).



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AfricaRice is one of the 15 international agricultural research Centers that are members of the CGIAR Consortium. It is also an intergovernmental association of African member countries.

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AfricaRice est l'un des 15 Centres internationaux de recherche agricole qui sont membres du Consortium du CGIAR. AfricaRice est aussi une association intergouvernementale composée de pays membres africains.