New Chair for ICRISAT Governing Board

Dr Paco Sereme, the Chair of ICRISAT Board’s Program Committee, will take over as the new Chair of its Governing Board in October this year. A plant pathologist and a national of Burkina Faso, Dr Sereme is Research Director in Plant Pathology at the National Agricultural Research Institute of Burkina Faso (INERA), and a former Executive Director of CORAF/WECARD (West and Central African Council for Agricultural Research and Development), both very influential positions. Dr Sereme has made significant contributions to agriculture research and is credited with building strong relations with many institutions to transform agriculture in West and Central Africa.

Dr Sereme will take over from Dr Nigel Kerby MBE, the outgoing Chair of ICRISAT’s Governing Board (GB). Dr Kerby, who was Chair from May 2017, has been very passionate about the institution’s mission and its goal to serve people in the dryland tropics. During his tenure, he pushed for global partnerships and funding for the institution leading to increased research and partnership opportunities. A major achievement of Dr Kerby was getting the CGIAR Research Program – Grain Legumes and Dryland Cereals initiated. At the inception of the GLDC program, Dr Kerby highlighted the importance of partnerships. "Fighting malnutrition at scale is complex and needs an understanding of local opportunities and an understanding of constraints and possible solutions," he said. "Above all, it requires enduring partnerships. I believe partnerships are being strengthened and new ones being forged to help ICRISAT realize its potential. I wish ICRISAT and its stakeholders every success in the future.”

Speaking of Dr Kerby’s contribution and vision, Dr Peter Carberry, Director General (Acting), ICRISAT, says, “Dr Nigel Kerby brought to the ICRISAT Governing Board a wealth of experience in last mile connection between research and practice, especially through private sector drivers for commercial uptake of technology. Nigel always asked for...
research targets and the business case for investment. Such thinking must drive ICRISAT’s agenda of demand-driven research. I am personally indebted to Nigel for his mentorship and guidance over the time he was Chair of the GB and I acted as Director General.”

Dr Shobhana K Pattanayak, ICRISAT GB member, notes, “Though a short tenure, Dr Nigel Kerby as Chair guided us very well on many sensitive issues, carried every member along into confidence in all deliberations. We miss him as the Chair, but hope that he will continue with his skillful advice to the institution in future. I take this opportunity to welcome Dr Paco Sereme as the new Chair. His long experience in development of African agriculture would definitely prove handy in managing research activities of ICRISAT. I wish him good luck.”

Global endorsement of CGIAR work: IITA wins first Africa Food Prize

The first Africa Food Prize has been awarded to the International Institute of Tropical Agriculture (IITA), a member of the CGIAR System Organization. The institute received the distinguished prize in Kigali, Rwanda, last week for ‘Leadership and Innovation in Finding Solutions to the Continent’s Most Pressing Challenges’.

IITA, based in Ibadan, Nigeria, was recognized for generating solutions on and off the farm that have improved the lives of millions in the face of climate change, a surge of crop pests and disease, and an urgent need for youth employment. This recognition reiterates CGIAR research endeavors to create a better future for the world’s poor.

“IITA stood out to us for its steadfast and inspiring commitment to a research agenda that aligns with both our African traditions as well as the evolving needs of African farmers and consumers for the latest advances food production,” said H E Olusegun Obasanjo, former President of Nigeria, who chaired the prize committee.

Congratulating Dr Nteranya Sanginga, Director General, IITA, for receiving a well-deserved award, Dr Peter Carberry, Director General (Acting), ICRISAT, sought a closer research alignment between the two institutes. He said, “I refer often to IITA being the African center for agricultural research and this prize recognizes the role you and IITA have played in achieving significant outcomes for Africa. IITA is an excellent collaborative partner and is proactive in building research partnerships that draw on the CRP Grain Legumes and Dryland Cereals network.”

At the ICRISAT GB meeting in September 2018, Board members will formally thank Dr Kerby for his contribution during his tenure.

Dr Nigel Kerby MBE, with farmers at a goat market in Africa.
Scientists from India and the United Kingdom came together to improve food production and optimize use of nitrogen in agriculture. At the recently concluded review meeting of four Virtual Joint Centers (VJCs), scientists and researchers deliberated on the long-term support needed for targeting complex traits such as Nitrogen Use Efficiency (NUE).

The meeting assumes significance in light of concerns around indiscriminate usage of nitrogen in agriculture that could potentially have a negative impact on the environment as well as on the livelihood of smallholder farmers.

The participants discussed success stories of low-cost solutions, such as that of the Leaf Colour Chart for judicious N use, which resulted in a significant savings of urea in a village adopted by CINTRIN in Punjab. Various ongoing and new areas of nitrogen research were discussed in details as part of ‘long look’ discussions.

The four VJCs working together on this project targeting biological nitrogen use (CINTRIN: Cambridge India Network for Translational Research in Nitrogen and INEW: Indo-UK Centre for the Improvement of Nitrogen use Efficiency in Wheat), nitrogen fixation (IUNFC: India-UK Nitrogen Fixation Centre) and agronomic nitrogen use (NEWS: Newton-Bhabha Virtual Centre on Nitrogen Efficiency of Whole-cropping Systems for improved performance and resilience in agriculture) were initiated in 2016.

The ‘Long look’ and review meeting, held during 30-31 August 2018, was attended by over 50 scientists representing universities of Cambridge, Rothamsted, Aberdeen and Edinburgh, Indian State Agricultural Universities, NARS, and ICAR institutes. The funding agencies – the Department of Biotechnology, Government of India and the UK Research and Innovation, UK – were satisfied with the progress made so far and promised to look into ways to support the initiative in the long term, so as to have a sustained impact on food and environment security.
Strategies to revolutionize the pigeonpea breeding program in India, including delivering new varieties with market-friendly traits, was the main focus of a recent workshop, ‘Pigeonpea Product Design and Management’ conducted at ICRISAT India. A multidisciplinary team of scientists representing five agro-ecological zones of India brainstormed to update the Indian pigeonpea breeding program.

India accounts for more than 80% of the world’s pigeonpea area and production; yet, it remains a major importer of pigeonpea. In order to boost yields that have stagnated over the last six decades, new varieties with preferred market traits need to be developed.

At the workshop, supported by the Excellence in Breeding (EiB) platform, Dr Kiran Sharma, Deputy Director General (Acting), ICRISAT, highlighted the importance of product design and value chain marketing for scalable returns. Dr George Kotch, CGIAR Excellence in Breeding Module #1 Leader, provided technical advice on how to develop efficient product profiles, prioritize traits and create strategies to develop new varieties rapidly.

For example, as part of a strategy to replace existing pigeonpea varieties in many parts of India, a product profile contract was crafted and the design tailored for multiple disease resistance, photo-insensitivity, and nutritive traits, among others.

Emerging production risks due to climate change, and developing product profiles with the help of integrated modern breeding techniques were also debated.

This initiative set the stage for a cross-function team from CGIAR and National Agriculture Research System (NARS) to collaborate from the product planning stage to the product delivery stage, giving accountability to all stakeholders.

Due to the presence of an extensive pigeonpea fraternity, this workshop became an excellent platform to brainstorm for trait prioritization of pigeonpea to deliver new varieties according to farmer requirements and consumer preferences.

About 35 scientists from ICRISAT, NARS and the private sector, along with officers from seed certification agencies, traders, millers and market experts attended the workshop conducted on 14 August 2018. Apart from Dr Kotch, Dr Jan Debaene, Global Head – Breeding, ICRISAT, and Dr Anupama Hingane, Scientist-Pigeonpea Breeding, ICRISAT, moderated the workshop. This workshop was conducted with support from the Excellence in Breeding (EiB) Platform funded by CGIAR and the Bill & Melinda Gates Foundation.

This work contributes to UN Sustainable Development Goals.

New videos

Dr Alison Bentley, Director of Genetics and Breeding at The National Institute of Agricultural Botany, UK, explains why she thinks the future of genomics in agriculture lies in the value it creates for the farmer in the field.

Dr Tina Barsby, CEO, National Institute of Agricultural Botany, UK, speaks about the essentials of a robust seed system.
Stronger collaboration sought with India’s agricultural management institute

Calling for a stronger collaboration between the Indian Council of Agricultural Research - National Academy of Agricultural Research Management (ICAR-NAARM) and ICRISAT, Dr Peter Carberry, Director General (Acting), ICRISAT, advocated research that is market-led and provides demand-driven products and services to smallholder farmers. Speaking as the Chief Guest on the occasion of ICAR-NAARM’s 43rd Foundation Day on 1 September 2018, Dr Carberry said, “Indian agricultural human resources is second to none in the world in agricultural research and in reaching out to commerce.”

Presenting the annual and special recognition awards to NAARM staff, Dr Ch. Srinivasa Rao, Director, ICAR-NAARM, congratulated them and elaborated on forthcoming programs and strategies in agricultural research policy development and education systems in ICAR and NARES.

New Publications

Assessment of genetic diversity of rice based on SNP markers for selection of parents for sheath rot (Sarocladium oryzae) resistance breeding

Authors: Mvuyekure SM, Sibiya J, Derera J, Nzungize J and Nkima G

Published: 2018, South African Journal of Plant and Soil, 35 (1). pp. 51-59. ISSN 0257-1862

http://oar.icrisat.org/10543/

Dissecting genomic hotspots underlying seed protein, oil, and sucrose content in an interspecific mapping population of soybean using high-density linkage mapping


http://oar.icrisat.org/10577/

Latitudinal Adaptation of Flowering Response to Photoperiod and Temperature in the World Collection of Sorghum Landraces

Authors: Upadhyaya HD, Reddy KN, Vettrievtan M, Ahmed MI and Reddy MT

Published: 2018, Crop Science (TSI). ISSN 0011-183X

http://oar.icrisat.org/10578/

Role of Local Agro-minerals in Mineral Fertilizer Recommendations for Crops: Examples of Some West Africa Phosphate Rocks

Authors: Lompo F, Bationo A, Sedogo MP, Bado VB, Hien V and Ouattara B


http://oar.icrisat.org/10579/

In the media

Farmers urged to cultivate improved seed varieties

Smallholder farmers in the country have been advised to adopt and plant new improved seed varieties to increase productivity. Read more...

Kenya’s arid regions food secure as cultivation of green grams gain traction

Cultivation of green grams has been embraced by farmers in the semi-arid eastern Kenya. Read more...
With the impact of climate change being felt around the globe, the role of plant scientists in working on resilient crops is more significant than ever. To highlight this, ICRISAT and Corteva Agriscience™ conducted the Plant Science Symposium 2018 on 6-7 September 2018.

The Plant Science Symposium – 2018 conducted on 6-7 Sept, 2018 was themed around ‘Climate is changing, agriculture must too’. This is different from many other institutional events as it was organized ‘By the students For the students’. An event where participants attended from across the country and was well-received could only happen because of the months of planning and coordination.

The symposium feedback form is 90% tilted with the responses as ‘Very Satisfied’. This sentiment is also shared by Corteva Agriscience team, the other speakers and panel members too. Apart from the technical sessions and panel discussion the cultural segment that had performances by ISH students and Ashray Akruti (Institution for hearing impaired children) was much appreciated.

Research students at ICRISAT planned and executed the entire event successfully. Here are a few snapshots of the events and the preparations that went into it.