

12th Asian Maize Conference and Expert Consultation on “Maize for Food, Feed, Nutrition and Environmental Security”

Rama Gardens Hotel, Bangkok, Thailand
30 October – 1 November, 2014

TENTATIVE PROGRAM

Day 1 : 30 October, 2014

08:45 – 10:00 Opening Session

- 08:45 – 08:55 Welcome – DG, DOA-Thailand
08:55 – 09:10 Introductory Remarks – Raj Paroda (Executive Secretary, APAARI)
09:10 – 09:25 Introduction of the Theme – Thomas Lumpkin (DG, CIMMYT)
09:25 – 09:35 Chairman’s Remarks – Simon Hearn (Chairman, APAARI)
09:35 – 09:55 Address by Chief Guest – Hiroyuki Konuma (ADG, FAO RAP)
09:55 – 10:00 Vote of thanks – BM Prasanna (Director, Global Maize Program, CIMMYT)

10:00 – 10:30 *Group Photograph & Tea/Coffee break*

10:30 – 11:40 Plenary Session 1

Co-Chairs: Nick Austin (ACIAR, Australia)
Thomas Lumpkin (CIMMYT)

Keynote Lectures:

- 10:30 – 10:55 Global maize R4D scenario: Challenges and opportunities in Asia
– BM Prasanna (CIMMYT)
10:55 – 11:20 Maize in Asia: Drivers of change – Subash Dasgupta (FAO RAP)
11:20 – 11:40 General discussion and concluding remarks by Co-Chairs

11:40 – 13:00 Plenary Session 2

Panel Discussion: “Doubling Asia’s maize production in the next decade”

Moderator: Raj Paroda (APAARI)

Panelists:

1. Iftikhar Ahmad (PARC, Pakistan)
2. Edwin C. Villar (PCAARRD, Philippines)
3. Xinhai Li (CAAS, China)
4. BS Dhillon (PAU, India)
5. Dil Bahadur Gurung (NARC, Nepal)
6. Marianne Banziger (CIMMYT, Mexico)

13:00 – 14:00 *Lunch break*

14:00 – 16:00 **Parallel Technical Sessions**

Technical Session 1: Enhancing genetic gains in maize breeding

Co-Chairs: Swapan K. Datta (ICAR, India)
Suwit Chaikattiyod (DOA, Thailand)

Keynote Lectures:

- 14:00 – 14:25 Advances in maize crop improvement: Monsanto pipeline – Mike Graham (Monsanto, USA)
- 14:25 – 14:50 Genetic gains in maize breeding in China: Experience and lessons – Shihuang Zhang (CAAS, China)

Speakers:

- 14:50 – 15:10 High throughput and precision phenotyping for improving abiotic stress resilience of maize – Jose Luis Araus (Univ. of Barcelona, Spain)
- 15:10 – 15:30 Strategies for germplasm enhancement of maize – Walter Trevisan (GEM Program, USA)
- 15:30 – 15:50 Seeds of Discovery: Characterizing and utilizing maize genetic resources for germplasm diversification – Kevin Pixley (CIMMYT, Mexico)
- 15:50 – 16:00 General discussion and concluding remarks by Co-Chairs

Technical Session 2: Maize for fodder/feed, specialty corn, value-addition and processing

Co-Chairs: Eskandar Zand (AREEO, Iran)
Sergie Bang (NARI, PNG)

Keynote Lecture:

- 14:00 – 14:25 Maize for feed and fodder security in Asian Countries, with special reference to India – A.K. Srivastava (NDRI, India)

Speakers:

- 14:25 – 14:45 The rapid growth of the poultry industry in Asia: Implications for research and development – Christian Boeber (CIMMYT, India)
- 14:45 – 15:05 The fodder value of maize stover vis-à-vis other cereals residues and opportunities for improvement through crop breeding and value addition – Michael Blummel (ILRI)

- 15:05 – 15:20 Breeding purple waxy corn for health and wellbeing – Kamol Lertart (KKU, Thailand)
- 15:20 – 15:35 Development and commercialization of value-added food products of Quality Protein Maize for nutrition security – Usha Singh (RAU, India)
- 15:35 – 15:50 Effect of extrusion technology on texture properties of corn starch – Jingsheng Liu (JAU, China)
- 15:50 – 16:00 General discussion and concluding remarks by Co-Chairs

16:00 – 16:30 Tea/Coffee break

16:30 – 18:15 Parallel Technical Sessions

Technical Session 3: Stress resilient maize for Asia

Co-Chairs: Ropate Ligairi (DoA, Fiji)
Md Rafiqul Islam Mondal (BARI, Bangladesh)

Keynote Lecture:

16:30 – 16:55 Abiotic stress resilient maize for adaptation to climate change in the Asian tropics – PH Zaidi (CIMMYT, India)

Speakers:

- 16:55 – 17:10 Multi-trait selection index for excess water tolerance in maize at seedling stage – M Shalim Uddin (BARI, Bangladesh)
- 17:10 – 17:25 Understanding of *Curvularia lunata* pathogenicity differentiation induced by resistance varieties – Jie Chen (SJU, China)
- 17:25 – 17:40 Effect of Maize Dwarf Mosaic inoculating at various growth stages on yield of Nakhon Sawan 3 – Siwilai Lapbanjob (NSFCRC, Thailand)
- 17:40 – 17:55 Temporal variation of stem borer damage in maize at Chitwan, Nepal – Buddhi B Achhami (NMRP, Nepal)
- 17:55 – 18:10 Genetic analyses of resistance to stored grain weevil (*Sitophilus oryzae* L.) in maize – Rajkumar Zunjare (IARI, India)
- 18:10 – 18:15 General discussion and concluding remarks by Co-Chairs

Technical Session 4: Socioeconomics and innovative policies for enhanced maize production and impacts

Co-Chairs: Raghunath Ghodake (NARI, PNG)
Prabath Wimal Kumara (SLCARP, Sri Lanka)

Keynote Lecture:

16:30 – 16:55 Policy frameworks for effective innovation, dissemination and adoption of maize technologies in Asia – Katinka Weinberger (CAPSA, Indonesia)

Speakers:

16:55 – 17:15 Scaling maize innovations in a changing Asia – Olaf Erenstein (CIMMYT)

17:15 – 17:35 Assessments of the maize situation, outlook and investment opportunities in Asia – K Srinivas (NAARM, India)

17:35 – 17:50 Competitiveness of maize production in Pakistan – Hassnain Shah (NARC, Pakistan)

17:50 – 18:05 Maize production in Bangladesh: way towards self-sufficiency – Monayam Miah (BARI, Bangladesh)

18:05 – 18:15 General discussion and concluding remarks by Co-Chairs

18:15 – 19:00 Poster Session

(Posters accepted under Technical Sessions shall be displayed all through the day for review by delegates, as well as for evaluation by a panel)

19:00 Dinner hosted by FAO

Day 2: 31 October 2014

08:30 – 09:30 Plenary Session 3

Co-Chairs: William Dar (ICRISAT)
Simon Hearn (APAARI)

Keynote Lectures:

- 08:30 – 08:55 Present and potential impacts of changing climate on maize-based cropping systems in Asia: Strategies for adaptation – Clare Stirling (CIMMYT-CCAFS)
- 08:55 – 09:20 Maize marketing in Asia: Innovations and reforms for improving efficiency – Ramesh Chand (NCAP, India)
- 09:20 – 09:30 General discussion and remarks by Co-Chairs

09:30 – 09:45 Tea/Coffee break

09:45 – 12:00 Parallel Technical Sessions

Technical Session 5: Biotechnology for maize improvement in Asia

Co-Chairs: Sharif Haron (MARDI, Malaysia)
HS Gupta (BISA, India)

Keynote Lecture:

- 09:45 – 10:10 Insect-resistant and herbicide-tolerant GM maize in Philippines: present status and prospects – Randy A. Hautea (ISAAA, SE Asia)

Speakers:

- 10:10 – 10:30 Developing resilient maize for Asia against biotic and abiotic stresses – Jan Samson (DuPont Pioneer)
- 10:30 – 10:50 Molecular marker-assisted breeding for tropical maize improvement – Raman Babu (CIMMYT, India)
- 10:50 – 11:05 Genome-wide analysis of phosphate transporter gene family in maize – Lijuan Yu (YAAS, China)
- 11:05 – 11:20 Deciphering genomic regions associated with waterlogging and drought tolerance traits in tropical maize using multiple connected populations – Dung Do Van (NMRI, Vietnam)
- 11:20 – 11:35 Genome-wide association study of resistance to rough dwarf disease in maize – Jianfeng Weng (CAAS, China)
- 11:35 – 11:50 Enrichment of kernel β -carotene in maize hybrids using marker-assisted backcross breeding strategy – Vignesh M (IARI, India)
- 11:50 – 12:00 General discussion and concluding remarks by Co-Chairs

Technical Session 6: Strengthening maize seed systems in Asia

Co-Chairs: Kevin Gallagher (FAO RAP)
NN Singh (TAAS, India)

Keynote Lecture:

09:45 – 10:10 Innovation, competition, and industry performance: better metrics for measuring the growth of Asia’s maize seed system – David Spielman (IFPRI)

Speakers:

10:10 – 10:30 Strengthening the maize seed sector in marginal markets in Asia – Ian Barker (SFSA)

10:30 – 10:50 International Maize Improvement Consortium (IMIC) in Asia: Partnership with seed companies for client-oriented product development and delivery – AR Sadananda & BS Vivek (CIMMYT, India)

10:50 – 11:10 Strengthening the local seed systems and disadvantaged communities: Success and evolution of the first community-managed seed production company in the hills of Nepal – DB Bhandari (Hariyali Seed Cooperative Ltd., Nepal)

11:10 – 11:30 Maize seed village: A self-reliance production for Thai farmers – Chutima Koshawatana (FRECRRI, Thailand)

11:30 – 12:00 General discussion and concluding remarks by Co-Chairs

12:00 – 13:00 Plenary Session 4

Panel Discussion: “Ensuring a vibrant maize seed sector in Asia through public-private partnerships”

Moderator: Marianne Banziger (CIMMYT)

Panelists:

1. Marco Ferroni (SFSA)
2. Arvind Kapur (Rasi Seeds, India)
3. Bijendra Pal (Bioseed)
4. Shilpa Divekar Nirula (Monsanto)
5. Fan Xingming (YAAS, China)
6. John McMurdy (USAID)

13:00 – 14:00 Lunch break

14:00 – 16:30 Parallel Technical Sessions

Technical Session 7: Regional Assessment of Maize in South Asia and the Oceania: Country Reports

Co-Chairs: Quasim Obaidi (ARIA, Afghanistan)
Bhag Mal (APAARI)

- 14:00 – 14:20 Bangladesh – Md. Abu Alam Mondal (BARI)
- 14:20 – 14:40 Bhutan – Dorji Wangchuk & Tirtha Katwal (RNR-RDC)
- 14:40 – 15:00 India – OP Yadav (DMR-ICAR)
- 15:00 – 15:20 Nepal – KB Koirala (NMRP-NARC)
- 15:20 – 15:40 Pakistan – Mian Md. Shafique (MMRI)
- 15:40 – 16:00 Sri Lanka – WMW Weerakoon (FCRDI)
- 16:00 – 16:20 Papua New Guinea – Julie Sip (NARI)

- 16:20 – 16:30 General discussion and concluding remarks by Co-Chairs

Technical Session 8: Regional Assessment of Maize in East Asia, South East Asia and West Asia: Country Reports

Co-Chairs: Xinhai Li (CAAS, China)
David Watson (MAIZE CRP)

- 14:00 – 14:20 China – Mingshun Li (CAAS)
- 14:20 – 14:40 Indonesia – Taufik Ratulle & Muhammad Azrai (ICERI)
- 14:40 – 15:00 Philippines – Roger V. Navarro (PhilMaize)
- 15:00 – 15:20 Thailand – Pichet Grudloyma (NSFCRC)
- 15:20 – 15:40 Vietnam – Mai Xuan Trieu (NMRI)
- 15:40 – 16:00 Myanmar – Thant Lwin Oo (DAR)
- 16:00 – 16:20 Iran – Rajab Choukan (SPII)
- 16:20 – 16:40 Turkey – Rahime Cengiz (MRS)

- 16:40 – 16:50 Discussion and concluding remarks by Co-Chairs

16:50 – 17:15 *Tea/Coffee break*

17:15 – 18:15 Plenary Session 5

Interface with Farmers and Entrepreneurs on Opportunities for Enhanced Maize Production and Utilization in Asia

Moderator: Mark Holderness (GFAR)

Panelists:

1. Esther Penunia (AFA, Philippines)
2. Ambika Pandey (Hariyali Seed Cooperative Ltd., Nepal)
3. Md. Abdul Mazid (BRAC, Bangladesh)
4. Yash Sahrawat (YPARD, India)
5. Baldev Singh (AIAMMA, India)
6. Taweesak Pulam (Sweet Seeds Co. Ltd., Thailand)

18:15 – 19:00 Poster Session

(Posters accepted under Technical Sessions shall be displayed all through the day for review by delegates, as well as for evaluation by a panel)

19:00 Dinner hosted by DOA, Thailand

08:30 – 10:30 Parallel Technical Sessions

Technical Session 9: Precision-conservation agriculture for enhanced input use efficiency

Co-Chairs: Alok K. Sikka (ICAR, India)
Tien-Jung Yu (COA, Chinese Taipei)

Keynote Lecture:

08:30 – 08:55 Conservation agriculture based management for sustainable maize systems: Learnings from South Asia – ML Jat (CIMMYT, India)

Speakers:

08:55 – 09:15 Precision nutrient management in smallholder maize systems: recent advances – Kaushik Majumdar (IPNI, South Asia)

09:15 – 09:35 Sustainable intensification of maize-based systems: Lessons from SIMLESA – Mulugetta Mekuria (CIMMYT, Zimbabwe)

09:35 – 09:50 Performance of a precision planter with row cleaners and depth control units for no-till sowing of maize – Dongxing Zhang (CAU, China)

09:50 – 10:05 Sustainable intensification of cereal based cropping systems of north-western IGP for a food secure future in India – Hanuman Singh Jat (CIMMYT, India)

10:05 – 10:20 Influence of soil compaction stress on root endogenous hormone and protective enzyme activities in maize – Chaohai Li (HAU, China)

10:20 – 10:30 General discussion and concluding remarks by Co-Chairs

Technical Session 10: Enhancing nutritional quality of maize

Co-Chairs: Kevin Pixley (CIMMYT)
Sain Dass (IMDA, India)

Keynote Lecture:

08:30 – 08:55 Development of biofortified maize in southern China – Fan Xingming (YAAS, China)

Speakers:

08:55 – 09:15 Provitamin A enrichment in maize – Willy Suwarno (BAU, Indonesia)

09:35 – 09:50 Biofortification potential of QPM and normal maize for major micronutrients – Dharam Pal Chaudhary (DMR, India)

09:50 – 10:05 Evaluation of colored waxy corn germplasm for high anthocyanin concentration and antioxidant capacity – Harakotr B (KKU, Thailand)

10:05 – 10:20 Effect of locations and varieties on yield, phytochemicals and antioxidant activity in corn silk – Sarepoua E (KKU, Thailand)

10:20 – 10:30 General discussion and concluding remarks by Co-Chairs

10:30 – 11:00 Tea/Coffee break

11:00 – 13:00 Parallel Technical Sessions

Technical Session 11: Adapting maize production practices to the changing climate

Co-Chairs: BS Dhillon (PAU, India)
Bruno Gerard (CIMMYT)

Keynote Lecture:

11:00 – 11:30 Climate resilient agriculture: a major initiative in India – Alok K. Sikka (ICAR, India)

Speakers:

11:30 – 11:50 Building resilience to climate and non-climate drivers of change through systems diversification with maize: Scope and implications in the western and eastern IGP – Andrew McDonald (CIMMYT-Nepal)

11:50 – 12:05 Using ecological intensification to improve maize yields while minimizing adverse environmental effects – T Satyanaryana (IPNI, India)

12:05 – 12:20 Environmental footprint of maize-based cropping systems under different crop establishment methods in north-west India – Tek Sapkota (CIMMYT, India)

12:20 – 12:35 Effect of fertilizer management and cropping system on soil quality, greenhouse gas emission and maize productivity – Suphakarn Luanmanee (NSFCRC, Thailand)

12:35 – 13:00 General discussion and concluding remarks by Co-Chairs

Technical Session 12: Enhancing gender equity and social inclusiveness

Co-Chairs: Nora Lapitan (USAID)
Olaf Erenstein (CIMMYT)

Keynote Lecture:

11:00 – 11:30 Amplifying outcomes through addressing inequality: The role of gender transformative approaches in agricultural R4D – Paula Kantor (WorldFish, Egypt)

Speakers:

- 11:30 – 11:50 Community based seed systems in hills of Nepal – Yamuna Ghale (SDC, Nepal)
- 11:50 – 12:10 Gender roles or production relations? Gender equity and social inclusion through agriculture research – Maitrayee Mukhopadhyay (KIT, Netherlands)
- 12:10 – 12:30 ICT for gender empowerment – Surabhi Mittal (CIMMYT, India)
- 12:30 – 13:00 General discussion and concluding remarks by Co-Chairs

09:00 – 13:00 APAARI General Assembly Meeting
(Only for APAARI Members and Special Invitees)

13:00 – 14:00 Lunch break

14:00 – 15:15 Plenary Session 6

Co-Chairs: Nguyen Van Bo (VAAS, Vietnam)
Iftikhar Ahmad (PARC, Pakistan)

Special Lectures:

- 14:00 – 14:30 Nutritionally enriched maize: adoption and impact in Asia – SK Vasal
- 14:30 – 15:00 New developments in production of doubled haploids in maize breeding – Albrecht Melchinger (Univ. of Hohenheim, Germany)
- 15:00 – 15:15 General discussion and remarks by Co-Chairs

15:15 – 15:45 Tea/Coffee break

15:45 – 17:00 Concluding Plenary Session

Co-Chairs: Raj Paroda (APAARI)
Thomas Lumpkin (CIMMYT)

- Presentation of key recommendations from Technical Sessions
- Best Poster Awards
- Concluding remarks by Co-Chairs

19:00 Dinner hosted by APAARI and CIMMYT