

First Circular

1st International Agrobiodiversity Congress

Science, Technology, Policy and Partnership



November 6-9, 2016, New Delhi, INDIA

www.iac2016.in

Context and Rationale

Agrobiodiversity includes all components of biological diversity relevant to food and agriculture: the varieties, breeds and populations of useful plant, animal, and fish species and the diversity of insects, microbes and other species that are part of production systems. Human-mediated co-existence in diverse agro-ecosystems around the world has shaped, and sustained the unique structures, processes, functions and their economic value. With the advancement of societies and nations, the available food and nutrition basket has expanded globally due to exchange and effective use of available agrobiodiversity.



The past century has witnessed unprecedented growth in human population and shrinking per capita land under agriculture have resulted in over-exploitation and abuse of available natural resources, including agrobiodiversity. Considerable loss of genetic diversity has thus occurred demanding an urgent action to research and conserve available genetic resources for posterity. In the process, National Agricultural Research Systems (NARS), International Research Centers under the Consultative Group on International Agricultural Research (CGIAR) and the Food and Agriculture Organisation of the United Nations (FAO) have made significant efforts for conservation, but it continues to remain a major challenge.

Currently about 800 million people suffer from insecure food supplies and malnutrition globally. Pattern and determinants of inadequate nutrition or hidden hunger are changing. People world over face complex and interrelated malnutrition burden called 'triple burden' that combines chronic under-nutrition, overweight and obesity, and above all the micronutrient deficiencies. Women and children are the most vulnerable segments. Although, the Green Revolution led to considerable reduction in the poor and undernourished people, yet hidden hunger persists and affects over two billion people worldwide. Recently, the United Nations has renewed commitment to push the sustainable development agenda, in which food, nutrition and environmental security figures as the key Sustainable Development Goals (SDGs).



Capacity, including the institutional capacity, trained human resource, and partnerships, to research and adopt new technological options is imminently required for meeting the future demand of new varieties and breeds in agriculture through fast track germplasm use. Increased and targeted use of genetic resources is needed to cope with changed production environments, stress, etc., in climate change situations. Increased diversity in agriculture production systems, including their sustainable intensification will buffer capacity to cope with increased environmental instability. Thus, increased use of genetic resources is again critical and the challenge is to identify how these demands can be met.



Efficient and sustainable agrobiodiversity management also requires functional convergence of global policy and regulatory frameworks [United Nations Convention on Biological Diversity (CBD), International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), Food and Agriculture Organization of the United Nations (FAO), Commission on Genetic Resources for Food and Agriculture (CGRFA), Nagoya Protocol on Access and Benefit Sharing (NP-ABS), Aichi Targets 2011-2020, Framework Convention on Climate Change (UNFCCC), World Trade Organization (WTO), etc.] related to biodiversity, food and agriculture, climate change and trade related mechanisms.

Scope and Significance

Agrobiodiversity-centric issues, needs and specific problems are intended to be better elucidated and addressed through in-depth deliberations involving researchers, intellectuals, regulators, policy makers, executives, farmers, NGOs, donors, philanthropists, and other stakeholders on a common platform. This could bring out a clear roadmap as well as implementation strategy for various agrobiodiversity policies, programmes and capacity building at large.



In this context, the Indian Society of Plant Genetic Resources (ISPGR) and Bioversity International are jointly organizing with the Indian Council of Agricultural Research (ICAR), Protection of Plant Varieties and Farmers' Right Authority (PPV&FRA), Ministry of Agriculture and Farmers' Welfare (MoAFW), National Biodiversity Authority (NBA), Ministry of Environment, Forest and Climate Change (MoEFCC), Trust for Advancement of Agricultural Sciences (TAAS) and National Academy of Agricultural Sciences (NAAS) the '1st International Agrobiodiversity Congress IAC 2016' from November 6-9, 2016 in New Delhi, India.

The Congress aims to bring together experts in genetic resources, genetics and breeding, biotechnology, human nutrition, ecology and environmental science, information management, bioinformatics, genomics, agronomy, forestry, integrated pest management, conservation biology, law and policy analysis, economics and other social sciences. A system-wide approach is proposed for the deliberations which may reflect both in situ and ex situ conservation, use and sustainability of agrobiodiversity, including plants (crops, horticulture, agroforestry), animals, fish, insects, microbes, etc.



Objectives

- Provide a common platform to share experience and knowledge on the sustainable conservation and use of agrobiodiversity
- Critically evaluate the current research and systems of management and use of agrobiodiversity and to assess the preparedness for meeting short-term and long-term requirements of humanity
- Identify and prioritize research areas that require greater inputs and thrusts for better management of agrobiodiversity
- Strengthen capacity and build new partnerships to help manage agrobiodiversity worldwide

Themes and Sub-themes

1 Agrobiodiversity for Food, Nutrition and Ecosystem Services

- a. Harnessing traditional foods: landraces, indigenous breeds, native strains and races for nutrition and health
- b. New species for diversification: genetic resources for the future
- c. Genetic resources for ecosystem services
- d. Sustainable use of genetic resources

2 Agrobiodiversity for Adaptation and Mitigation of Climate Change

- a. Climate change - threats and opportunities
- b. Assessing real impact of climate change on agrobiodiversity
- c. Genetic resources for resilience in agriculture

3 Intellectual Property Rights (IPRs), Access and Benefit Sharing (ABS) and Farmers' Rights

- a. IPR and other legal instruments: national and international experiences
- b. Germplasm exchange: current concerns and options for access
- c. Access and benefit sharing: the way forward
- d. Farmers' and Breeders' rights: implications

4 Quarantine, Biosafety and Biosecurity Issues

- a. Introducing germplasm: challenges and innovations
- b. Preparedness for biosafety and biosecurity
- c. Implementing Cartagena protocol, SPS agreements and other treaties
- d. Invasive alien species: threat assessment and management

5 Conservation Strategies and Methodologies

- a. Genebanks: options for efficient management
- b. In situ and on farm conservation: incentives and sustainability
- c. Conserving wild relatives and species
- d. Managing community genebanks: strategies, technologies and policies

6 Science-led Innovation for Agrobiodiversity Management and Sustainable Use

- a. Genomic resources: conservation and utilization
- b. Pre-breeding and genetic enhancement
- c. Geographical information system (GIS) and remote sensing
- d. Genetic resource databases and informatics

7 Capacity Building and Strengthening Partnerships

- a. Capacity building: new initiatives and paradigm shifts
- b. Civil society organisations: sharing of experiences
- c. Engendering agrobiodiversity and role of youth
- d. Partnership and networking

Expected Outputs

- New thinking on the sustainable management and use of agrobiodiversity through interdisciplinary exchange of ideas and opinions among various stakeholders.
- A roadmap to enhance food, nutrition and health security by optimal utilization of agrobiodiversity while protecting agro-ecosystems and landscapes.
- Mainstreaming agrobiodiversity related issues into global discussions to ensure fair access, benefit sharing and sustainable use.
- Developing a network of partnerships to strengthen agrobiodiversity management systems at the national, regional and global level.

International Advisory Committee

M. S. Swaminathan

MSSRF, India, Chair

R. S. Paroda

ISPGR & TAAS, India, Co-Chair

Peter H. Raven

Missouri Botanical Garden, USA

Geoffery Hawtin

RBG, Kew, UK

T. Mohapatra

ICAR & DARE, India

Ann Tutwiler

Biodiversity International, Italy

Marie Haga

GCDT, Germany

S. Ayyappan

NAAS, India

Martin Kropff

CIMMYT, Mexico

David Bergvinson

ICRISAT, India

P. L. Gautam

Executive Board Member, GCDT, India

Matthew K. Morell

IRRI, Philippines

S. K. Vasal

CIMMYT, Mexico

Mahmoud Solh

ICARDA, Lebanon

Jimmy Smith

ILRI, Kenya

Tony Simons

ICRAF, Kenya

Ruben G. Echeverria

CIAT, Columbia

Wu Kongming

CAAS, China

Masa Iwanaga

JIRCAS, Japan

National Steering Committee

R. S. Paroda, Chair

ISPGR & TAAS, New Delhi

R. R. Hanchinal, Co-Chair

PPV&FRA, New Delhi

J. S. Sandhu, Co-Chair

ICAR, New Delhi

Hem Pande

MoEFCC, New Delhi

B. Meenakumari

NBA, Chennai

N. K. Krishna Kumar

ICAR, New Delhi

J. K. Jena

ICAR, New Delhi

A. Rahman

ICAR, New Delhi

H. S. Gupta

BISA, New Delhi

Ashwani Kumar

ICFRE, Dehradun

B. S. Dhillon

PAU, Ludhiana

R. C. Agrawal

PPV&FRA, New Delhi

K. C. Bansal

ICAR-NBPGR, New Delhi

Arjava Sharma

ICAR-NBAGR, Karnal

Abraham Verghese

ICAR-NBAII, Bengaluru

Anil Kumar Saxena

ICAR-NBAIM, Mau

Technical Committee

R. S. Paroda, Chair

ISPGR & TAAS, India

P. L. Gautam, Co-Chair

Executive Board Member, GCDT, India

Stephan Weise

Biodiversity International, Italy

Toby Hodgkin

Biodiversity International, Italy

Carl-Gustaf Thornström

Swedish University of
Agricultural Sciences, Sweden

H. D. Upadhyaya

ICRISAT, India

Sudhir Kochhar

Ex-ICAR, India

N. Murthi Anishetty

Ex-FAO, India

Zhu Youyong

Yunnan Agricultural University, China

Wang Shumin

CAAS, China

Ronnie Coffman

Cornell University, USA

Jean Hanson

ILRI, Ethiopia

Sunil Archak

Member Secretary, ICAR-NBPGR, India

Program Outline

1

Seven technical sessions with keynote addresses by distinguished scientists

2

Plenary Sessions

3

Daily poster presentation on each theme

4

Exhibitions & Side Events

5

Pre- & Post-Congress Tours

Call for Papers

Participants of the IAC 2016 are invited to contribute abstracts of papers for oral/poster presentation on areas pertaining to Congress themes. For guidelines and format please visit congress website www.iac2016.in

Registration

Registration Category	On or before July 30, 2016	After July 30, 2016
International Participant	USD 500	USD 600
International Accompanying Person	USD 200	USD 250
SAARC Country Participant	USD 250	USD 300
International Student	USD 250	USD 250
Indian Participant	INR 8,000	INR 10,000
Indian Accompanying Person	INR 5,000	INR 6,000
Indian Student	INR 3,000	INR 3,000

The above mentioned registration fee is exclusive of 14.5% Service Tax. Additional 2.5% bank charges will be levied on online payments.

Important Dates

Abstract Submission

March 31, 2016

Acceptance of Abstract

April 30, 2016

Early Bird Registration

July 30, 2016

Congress Secretariat

Bioversity International
G-1, B-Block, NASC Complex, DPS Marg,
Pusa Campus, New Delhi 110012, INDIA
Tel : +91 11 25849000/1/2
Fax : +91 11 25849002
Email : info@iac2016.in
Web : www.iac2016.in

For Details Contact

Prem Narain Mathur (Organizing Secretary)
Email : p.mathur@cgjar.org
Rishi Kumar Tyagi (Co-Organizing Secretary)
Email : tyaginbpgr@gmail.com

ORGANIZED BY

