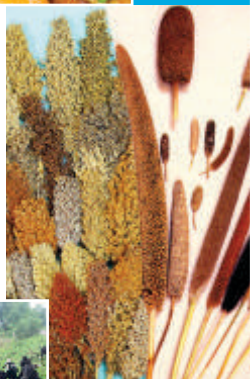


PROGRAM

1st International Agrobiodiversity Congress

Science, Technology, Policy and Partnership

November 6-9, 2016, New Delhi, India



Organizers

Indian Society of Plant Genetic Resources
Bioversity International



1st International Agrobiodiversity Congress

Science, Technology, Policy and Partnership

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PROGRAM

Day One: 6th November, 2016 Vigyan Bhawan

10:30-11:30	Inaugural Session	
12:00-13:30	Plenary Session 1	Agrobiodiversity for Sustainable Development Goals (SDGs)
14:30-17:30	Technical Session 1	Food, Nutrition and Environmental Security
	Concurrent Sessions (2)	Plant Genetic Resources Animal, Aquatic, Microbe and Insect GR
18:00-19:00	Evening Lecture	Agrobiodiversity and Achieving the Zero Hunger Challenge

Day Two: 7th November, 2016 NASC, Pusa

09:00-10:40	Plenary Session 2	Conservation through Use
11:00-13:15	Technical Session 2	Conservation Strategies and Methodologies
	Concurrent Sessions (5) Plant Genetic Resources	
	2-A Seed Genebank	2-B <i>In Situ</i> and On-farm
	2-C <i>In Vitro</i> , Cryo and DNA Bank	2-D Animal and Aquatic GR
	2-E Microbe and Insect GR	
14:15-16:40	Technical Session 3	Adaptation and Mitigation of Climate Change
14:15-16:40	Satellite Session 1	Harnessing Biodiversity for Food Security and Sustainable Development (Organized by CIMMYT)
14:15-16:40	Satellite Session 2	Agrobiodiversity for Nutrition and Health (Organized by Bioversity International and NIN)
14:15-16:40	Farmers' Forum	Farmers' Role in Conservation of Genetic Resources
17:00-18:00	Evening Lecture	Biodiversity, Food, and the Future

Day Three: 8th November, 2016 NASC, Pusa

09:00-10:40	Plenary Session 3	Agrobiodiversity for Livelihood Security and Ecosystem Services
11:00-13:15	Technical Session 4	Science-led Innovation
Concurrent Sessions (5) Plant Genetic Resources		
	4-A Trait Discovery and Enhanced Use of PGR	4-B PGR and Genomics
		4-C PGR Informatics
		4-D Animal and Aquatic GR
		4-E Microbe and Insect GR
14:15-16:40	Technical Session 5	Quarantine, Biosafety and Biosecurity Issues
14:15-16:40	Satellite Session 3	Climate Change as an Opportunity for Agrobiodiversity Management <i>(Organized by GIZ)</i>
14:15-16:40	Round Table Dialogue	Genebank Management: Challenges and Opportunities
17:00-18:30	Public Forum	Role of Stakeholders in Agrobiodiversity Management

Day Four: 9th November, 2016 NASC, Pusa

09:00-10:40	Plenary Session 4	Access and Benefit Sharing (ABS) in the Context of Regulatory Systems
11:00-13:15	Technical Session 6	IPRs, ABS and Farmers' Rights
11:00-13:15	Technical Session 7	Partnership, Networks and Capacity Building
11:00-13:15	Satellite Session 4	Crop Wild Relatives: Back to the Wild to Save the Future <i>(Organized by Bioversity International and University of Birmingham)</i>
14:15-16:40	Concluding Session	Theme-wise Reports and Delhi Declaration

NOTE:

- Technical Sessions 3, 5, 6 and 7 will run as *common sessions* across commodities
- Technical Sessions 6 and 7 will run simultaneously
- *Satellite sessions* will run parallel to the Technical Sessions
- Posters are displayed throughout on 7th, 8th and the forenoon of 9th of November. However, dedicated time for Poster Session, including discussion, will be between 18.30-19.30 on 7th and 8th of November.

6th November, 2016 (Forenoon)
Plenary Hall, Vigyan Bhawan
INAUGURAL SESSION

10:30-11:30 Inauguration by the Prime Minister of India

11:30-12:00 **TEA/COFFEE BREAK**

6th November, 2016, (Forenoon)
Plenary Hall, Vigyan Bhawan
PLENARY SESSION 1

12:00-13:30 **Agrobiodiversity for Sustainable Development Goals (SDGs)**

Co-Chairs : **M.S. Swaminathan**, MSSRF
and
Martin Kropff, CIMMYT

Convener : **R.K. Tyagi**, NBPGR

Rapporteurs : **Anjula Pandey**, NBPGR; **B. Sarath Babu**, NBPGR

12:10-12:40 **Plenary Lecture**

We Manage What We Measure:
an Agrobiodiversity Index to
Help Deliver the Sustainable
Development Goals

M. Ann Tutwiler,
Bioversity International

12:40-13:10 **Plenary Lecture**

Managing Agrobiodiversity through
Use: Changing Paradigms

R.S. Paroda,
ISPGR & TAAS

13:10-13:30 *Discussion and Concluding Remarks*

13:30-14:30 **LUNCH**

6th November, 2016 (Afternoon)
Plenary Hall, Vigyan Bhawan

TECHNICAL SESSION 1-A
Food, Nutrition and Environmental Security

14:30-17:30 Concurrent Session: Plant Genetic Resources

Co-Chairs : **David Bergvinson**, ICRISAT
and
Nikolay Dzyubenko, VIR

Convener : **Prem Mathur**, Bioversity International

Rapporteurs : **Kalyani Srinivasan**, NBPGR;
Kamala Venkateswaran, NBPGR

14:30-14:40 Introduction

14:40-15:05	Why We Need Effective Partnerships and Agrobiodiversity to Feed 9-Billion People?	Martin Kropff , CIMMYT
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15:05-15:30	Indian Agrobiodiversity Management System	Trilochan Mohapatra , ICAR
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15:30-15:55	Reducing Mineral and Vitamin Deficiencies through Biofortification: Progress under HarvestPlus	Howarth Bouis , HarvestPlus
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15:55-16:20	From Industrial Agriculture to Diversified Agroecological Systems	Emile Frison , IPES-Food
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16:20-17:00 **Rapid Presentations (From Abstracts)**

Masatoshi Funabashi, Sony Computer Science Laboratories, Inc., Japan
Synecological farming for mainstreaming biodiversity in smallholding farms and foods: Experiments in Japan and Burkina Faso (#1391)

I.S. Bisht, NBPGR, India

Traditional land and food systems: a case of Uttarakhand state in north-western Indian Himalayas (#54)

W.L.G. Samarasinghe, Plant Genetic Resources Center, Sri Lanka
Strategies for conservation and sustainable use of biodiversity for food and nutrition in Sri Lanka (#1468)

Mani Vetriventhan, ICRISAT, India

Little millet, *Panicum sumatrense*, an under-utilized multipurpose crop (#1448)

17:00-17:30 *Discussion and Concluding Remarks*

17:30-18:00 **TEA/COFFEE BREAK**

6th November, 2016 (Afternoon)
Hall No. 6, Second Floor, Vigyan Bhavan

TECHNICAL SESSION 1-B
Food, Nutrition and Environmental Security

14:30-17:30 Concurrent Session: Animal, Aquatic, Insect and Microbial Genetic Resources

Co-Chairs : S. Ayyappan, NAAS

and

Purvi Mehta, BMGF

Convener : Anil Kumar Saxena, NBAIM

Rapporteurs : Monica Sodhi, NBAGR; **S. Renu**; NBAIM

14:30-14:40 Introduction

14:40-15:05	Animal Genetic Resources (AnGR) for Food Security	Olivier Hanotte , ILRI
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15:05-15:30	Insect Biodiversity, Ecosystem Services and Sustainable Agriculture	N.K. Krishna Kumar , Bioversity International
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15:30-15:55	Conservation and Management Approaches of Fish Genetic Resources in India: Present Status and Future Outlook	J.K. Jena , ICAR
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15:55-16:20	Microbial Diversity of Extreme Regions: An Unseen Heritage and Wealth	Anil Kumar Saxena , NBAIM
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16:20-17:00 **Rapid Presentations (From Abstracts)**

C. Lavina Vincent, Central Marine Fisheries Research Institute, India
Partial gene characterization of candidate functional gene MSTN encoding growth and muscle development in *Trachinotus mookalee* and *Trachinotus blochii* (#1659)

Sijun Zheng, Yunnan Academy of Agricultural Sciences, China
Innovative integrated systems for intensification of banana, pig and cattle production in Yunnan province of southwest China (#825)

K. Vinod, ICAR-CMFRI, India

Conservation and Sustainable Management of Seahorses in the Gulf of Mannar and Palk Bay, South-East Coast of India (#1761)

Rajesh Kumar Vaid, National Centre for Veterinary Type Cultures Collection, India
Role of Veterinary Type Culture Collection in capturing equine microbial biodiversity (#852)

17:00-17:30 *Discussion and Concluding Remarks*

17:30-18:00 **TEA/COFFEE BREAK**

6th November, 2016 (Evening)
Plenary Hall, Vigyan Bhavan

EVENING LECTURE

18:00-19:00 **Evening lecture**

Co-Chairs : Ann Tutwiler, Bioversity International
and
S. Rajaram, RSM

Convener : Anuradha Agrawal, NBPGR

Rapporteurs : D.B. Parakh, NBPGR; Chithra Devi Pandey,
NBPGR

18:00-18:10 Introduction

18:10-18:50 Agrobiodiversity and Achieving the Zero **M.S. Swaminathan,**
Hunger Challenge MSSRF

18:50-19:00 *Concluding Remarks*

6th November, 2016 (Evening)
Podium Lawns, NASC Complex, Pusa

19:30-21:30 **Congress Dinner**

7th November, 2016 (Forenoon)
AP Shinde Hall (live stream available at Basement Dining Hall, NAAS Lecture Hall, NAAS Committee Room-1 and NAAS Committee Room-2)

PLENARY SESSION 2

09:00-10:40	Conservation through Use	
	Co-Chairs : R.S. Paroda, ISPGR & TAAS and Cristian Samper, Bioversity International Convener : Kuldeep Singh, NBPGR Rapporteurs : Radhamani J., NBPGR; Rakesh Bhardwaj, NBPGR	
09:00-09:10	Introduction	
09:10-09:35	Plenary Lecture Agrobiodiversity Use for Food Security	Gurdev S. Khush, University of California
09:35-10:00	Plenary Lecture Exploring the Benefits of a Systems Based Approach to PGR Conservation	Toby Hodgkin, Platform for Agrobiodiversity Research
10:00-10:40	Panel Discussion	
	Panelists : S. Rajaram, RSM; Marie Haga, Crop Trust; Calvin Qualset, University of California; Usha Zehr, Mahyco	
10:40-11:00	TEA/COFFEE BREAK	

7th November, 2016 (Forenoon)
AP Shinde Hall

TECHNICAL SESSION 2-A

Conservation Strategies and Methodologies

11:00-13:15 Concurrent Session: Seed Genebanks

Co-Chairs : B.S. Dhillon, PAU

and

R.S. Hamilton, IRRI

Convener : Hari D. Upadhyaya, ICRISAT

Rapporteurs : Sherry Jacob, NBPGR; Veena Gupta, NBPGR

11:00-11:05 Introduction

11:05-11:25 Building a Global System for the *Ex situ* Conservation of Crop Diversity **Marie Haga,**
Crop Trust

11:25-11:45 Germplasm Management for Enhanced Genetic Gains **Hari D. Upadhyaya,**
ICRISAT

11:45-12:00 ICARDA Efforts to Promote *In Situ* On-Farm Conservation of Dryland Agrobiodiversity **Mariana Yazbek,**
ICARDA

12:00-12:15 Genebanks: Management of Genetic Erosion in *Ex Situ* Collections **N. Murthy Anishetty,**
Ex-FAO

12:15-12:30 Conservation of PGR for Effective Utilization: New Initiatives at NBPGR **Rishi K. Tyagi,**
NBPGR

12:30-12:45 **Rapid Presentations (From Abstracts)**

Arnab Gupta, Bioversity International, India

Low Carbon footprint seed conservation technique: The Desiccated-Ambient storage system using Zeolite beads (#1623)

Manisha Thapliyal, Forest Research Institute, India

Conservation of Forest Genetic Resources: Need and Challenges (#1835)

Narendra Singh, DIHAR, DRDO, India

Phytodiversity and its conservation strategies in permafrost conditions at extreme altitude of trans-Himalaya in Leh-Ladakh (#1845)

12:45-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

7th November, 2016 (Forenoon)
NAAS Lecture Hall

TECHNICAL SESSION 2-B

Conservation Strategies and Methodologies

11:00-13:15 Concurrent Session: <i>In Situ</i> and On-farm Conservation		
Co-Chairs : Stephan Weise, Bioversity International and H.S. Gupta, Ex-BISA Convener : Shailendra Rajan, CISH Rapporteurs : Joseph John K., NBPGR; A.K. Misra, NBPGR		
11:00-11:10	Introduction	
11:10-11:30	Agrobiodiversity: Key to Agricultural Productivity	Calvin Qualset, University of California
11:30-11:50	How Informal and Formal Seed Systems Can Work Together for the Conservation and Use of Agrobiodiversity?	Coosje Hoogendoorn, Royal Tropical Institute
11:50-12:10	Impacts of Changing Climate on Conservation Priorities for CWRs	Nigel Maxted, University of Birmingham
12:10-12:30	On-farm/ <i>In Situ</i> Conservation of Tropical Fruit Tree Diversity: Emerging Concepts and Practices	V. Ramanatha Rao, GRSV
12:30-12:45	Conservation Dynamics of Root and Tuber Crops under On-Farm Management	Stefan De Haan, CIAT
12:45-13:00	Rapid Presentations (From Abstracts) Nelli Hovhannisyan, Yerevan State University, Armenia The role of Monastic gardens in sustainable conservation of grape (<i>Vitis vinifera</i> L.) genetic diversity in Armenia (#1477) Shailendra Rajan, CISH, India On-farm Conservation of Mango Diversity through Community Based Organization: A Case Study (#1819) S.R. Maneesha, CCARI, India ‘Kulagar’ – A Potential System to Conserve the Crop Diversity (#1786) S.D. Kumbhar, MPKV, India Farmers’ Participatory Conservation of Rice Landrace Champakali (#148) Yun-Yue Wang, Yunnan Agricultural University, Yunnan, China Innovative Biodiversity Management and Community Development: Yunnan Yuanyang Hani Rice Terraces Case (#1929)	
13:00-13:15	<i>Discussion and Concluding Remarks</i>	
13:15-14:15	LUNCH	

7th November, 2016 (Forenoon)
NAAS Committee Room-1

TECHNICAL SESSION 2-C
Conservation Strategies and Methodologies

11:00-13:15 Concurrent Session: *In Vitro*, Cryo, and DNA Banking

Co-Chairs : P.L. Gautam, Ex-NBA and PPV&FRA
and
Emile Frison, IPES-Food

Convener : Neelam Sharma, NBPGR

Rapporteurs : P. Rajasekharan, IIHR; Sandhya Gupta, NBPGR

11:00-11:10 Introduction

11:10-11:30 Priority Science for the Preservation of
Priority Crops **Hugh Pritchard,**
RBG

11:30-11:50 Plant DNA Resources in RIKEN BRC to
Bridge the Gap between Gene Function
and Phenotype **Hiroshi Abe,**
RIKEN

11:50-12:10 Securing Plant Genetic Resources for
Perpetuity through Cryopreservation **Bart Panis,**
Bioversity International

12:10-12:25 Expanding Applications of Cryobanking
for Genetic Resources Conservation **Rekha Chaudhary,**
NBPGR

12:25-12:40 *In Vitro* Propagation and Conservation of
Tropical RTBs **Badara Gueye,**
IITA

12:40-13:00 **Rapid Presentations (From Abstracts)**

R. P. Kaur, Central Potato Research Station, India
Pollen cryopreservation in aid to conservation of potato genetic resources
(#298)

Neelam Sharma, NBPGR, India
Application of *In vitro* techniques for Conservation of Indian Medicinal Plants
– A Case Study (#1285)

S. Uma, ICAR-NRC for Banana, India
Success story of rejuvenation of near extinct fragrant banana, cv.
Manoranjitham through inter-institutional and public-private partnership
(#1305)

13:00-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

7th November, 2016 (Forenoon)
ICAR Lecture Hall

TECHNICAL SESSION 2-D
Conservation Strategies and Methodologies

11:00-13:15 Concurrent Session: Animal and Aquatic Genetic Resources

Co-Chairs : **M. Vijay Gupta**, Ex-World Fish
and
H. Rahman, ICAR

Convener : **Arjava Sharma**, NBAGR

Rapporteurs : **R. S. Kataria**, NBAGR; **V.S. Basheer**, NBFGR

11:00-11:10 Introduction

11:10-11:25	Complementary Strategies for AnGR Conservation and for Global Innovation Challenges	S.J. Hiemstra , CGN
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11:25-11:40	Experiences on Conservation of Indian Dairy Animal Biodiversity	S.B. Gokhale , BAIF
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11:40-11:55	Aquatic Genetic Resources and Technologies for Food and Environmental Security	Devin M. Bartley , FAO and K.K. Lal , NBFGR
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11:55-12:10	Conservation and Responsible Fisheries and Fisheries Technology	C.N. Ravishankar , CIFT
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12:10-12:25	Farm Animal Genetic Resources: Evaluation and Conservation in India	Arjava Sharma , NBAGR
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12:25-13:00 **Rapid Presentations (From Abstracts)**

S.K. Singh, CIRG, India

Impact of structured breed improvement programmes on genetic improvement and conservation of Indian goat (#39)

A.K. Thiruvankadan, VCRI, India

Options and strategies for the conservation of sheep and goat genetic resources in India (#1890)

S.K. Majhi, NBFGR, India

Germ cell transplantation into adult recipient fish for speedy propagation of endangered germplines (#675)

13:00-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

7th November, 2016 (Afternoon)
NAAS Committee Room-2

TECHNICAL SESSION 2-E
Conservation Strategies and Methodologies

11:00-13:15 **Concurrent Session: Microbial and Insect Genetic Resources**

Co-Chairs : **N.K. Krishna Kumar**, Bioversity International
and

B. Venkateswarlu, VNMKV

Convener : **Sushil K. Sharma**, NBAIM

Rapporteurs : **Ram Nageena Singh**, IARI; **Ankita Gupta**, NBAIR

11:00-11:10 Introduction

11:10-11:30 Birds and Insectivory: Agrobiodiversity
Implications in Sustainable Agriculture

A. Verghese
GPSIAM

11:30-11:50 Biodiversity of Fleshy Fungi, their
Conservation and Applications for Human
Welfare

R.C. Upadhyay,
DMR

11:50-12:10 Re-portraying the Green Canvas: Needs
for Heterogenizing Agroecosystems for
Conserving the Ecological Services

**Priyadarsanan Dharma
Rajan**,
ATREE

12:10-12:30 Conservation of Pollinator Biodiversity in
the Era of Neonicotinoids

V.V. Belvadi,
UASB

12:30-12:50 Microbial Conservation Strategies and
Methodologies: Status and Challenges

Sushil K. Sharma,
NBAIM

12:50-13:00 **Rapid Presentations (From Abstracts)**

Pradeep Mehta, Earthwatch Institute, India
Reviving Traditional Bee Keeping Practices and Restoration of Landscape
for Sustainable Agriculture in Indian Himalaya (#700)

Preeti S. Virkar, Wildlife Institute of India, India
Natural habitats support benefits of organic farming for rich wild bee
diversity (#1524)

13:00-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

7th November, 2016 (Afternoon)
AP Shinde Hall (live stream available at ICAR Lecture Hall)

TECHNICAL SESSION 3

14:15-16:40 Adaptation and Mitigation to Climate Change

Co-Chairs : J.S. Sandhu, ICAR

and

Ravinder Kaur, IARI

Convener : J.C. Rana, NBPGR

Rapporteurs : K. Pradheep, NBPGR; **T. V. Prasad**, NBPGR

14:15-14:25 Introduction

14:25-14:45 Global Crop Origins and Shifts in the Geography of Global Food Crops into the Future	Andy Jarvis , CIAT
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14:45-15:00 Fighting Climate Stress with Orphan Legumes	Ed Southern , Kirk House Trust
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15:00-15:15 Climate Change and Agricultural Biodiversity: Rethinking the Role of Science	Jacob van Etten , Bioversity International
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15:15-15:30 Use of Agrobiodiversity in Adapting to Climate Change	J.C. Rana , NBPGR
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15:30-15:40 Post-disaster Revival of Local Seed System for Climate Change Adaptation	Devendra Gauchan , Bioversity International
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15:40-16:25 Rapid Presentations (From Abstracts)

D.C. Putri Hendrawan, ICRAF, Indonesia

Increasing Resilience to Climate Change in Rural Livelihoods: to Diversify or Not? (#1434)

B.K. Joshi, Bioversity International, Nepal

Policy framework for adaptation to climate change (#1846)

B.N. Motagi, ICRISAT, Nigeria

Germplasm Enhancement for Increasing Groundnut Productivity and Production in West and Central Africa (#1055)

Ganga Rao NVPR, ICRISAT, Kenya

Effective Utilization of Local Genetic Diversity of pigeonpea, sorghum and finger millet in Eastern and Southern Africa: Impacts and Prospects (#1641)

M.P. Paulton, CMFRI, India

Indian edible oyster, a promising bivalve for aquaculture amidst the challenges of climate change as revealed through thermos-tolerance studies (#1720)

Hamidou Falalou, ICRISAT, Niger

Abiotic stresses tolerance and nutrients contents in groundnut, pearl millet and sorghum mini core collections for food and nutrition security (#1742)

Manyasa Eo, ICRISAT, Kenya

Exploiting genetic diversity for adaptation and mitigation of climate change: A case of finger millet in East Africa (#1773)

16:25-16:40 *Discussion and Concluding Remarks*

16:40-17:00 **TEA/COFFEE BREAK**

7th November, 2016 (Afternoon)
NAAS Lecture Hall

SATELLITE SESSION 1

14:15-16:40	Harnessing Biodiversity for Food Security and Sustainable Development (CIMMYT)	
14:15-14:25	Opening remarks: Harnessing Biodiversity for Food Security and Sustainable Development	Martin Kropff
14:25-14:45	The Seeds of Discovery Initiative: A Learning Model Towards Effective and Equitable Use of Genetic Resources (#1938)	Kevin Pixley
14:45-14:55	Global Challenges and Urgency for Partnerships to Apply Genetic Resources	Sukhwinder Singh
14:55-15:05	Impact of SeeD Project in Mexico	Gilberto Salinas
15:05-15:20	What you did, Why, Main Result, Personal Statement about the Value of this Project (#1936)	Cynthia Ortiz, Laura Bouvet and Prashant Vikram
15:20-15:30	Present and Future Opportunities for Using Biodiversity for Wheat Improvement	Anthony Hall
15:30-15:40	Linking and Leveraging SeeD Resources in Indian Wheat Breeding Program-Prospects and Future (#1937)	Navtej Bains
15:40-16:10	Panel Discussion: How to enhance the value of SeeD and like-minded initiatives; How to secure funding for such critical, long-term, but often considered 'non-urgent' research	T. Mohapatra, M. Kropff, S. Visscher, Mohd. Aslam, B.S. Dhillon, J.S. Sandhu and B.S. Sidhu
16:10-16:30	Words of Wisdom: G.S. Khush, S. Rajaram, R.S. Paroda and R. Chand	
16:30-16:40	<i>Concluding Remarks and Vote of thanks by Session Chair</i>	
16:40-17:00	TEA/COFFEE BREAK	

7th November, 2016 (Afternoon)
NAAS Committee Room-1

SATELLITE SESSION 2

14:15-16:40	Agrobiodiversity for Nutrition and Health (Bioversity International and NIN)	
	Chair : Soumya Swaminathan, ICMR	
14:15-14:20	Introduction	
14:20-14:40	Rediscovering our future: How neglected and Underutilized Biodiverse Foods Can Nourish the Planet	Gina Kennedy, Bioversity International
14:40-14:55	Agrobiodiversity and Wild Foods for Improving Nutrition, Health and Well Being	T. Longvah, National Institute of Nutrition
14:55-15:10	Harnessing Traditional Foods for Nutrition and Health	S. Muranaka, JIRCAS
15:10-15:25	Utilizing Agrobiodiversity to Scale Up Nutrition: The Kenyan Experience (#1930)	Gladys Mugambi, Ministry of Health, Kenya
15:25-15:40	Medicinal Plant Diversity for Health, Wellness and Livelihood in Indian Perspective	Jitendra Kumar, DMAPR
15:40-15:55	Community Health and Nutrition: A Practitioner's Perspective	S. Subhanandhan, TPSVMS
15:55-16:25	Rapid Presentations (From Abstracts)	
	Veena Gupta, ICAR-National Bureau of Plant Genetic Resources, India Curative Agro-biodiversity and Indigenous Knowledge Case Studies on conservation through farming communities (#551)	
	V.K. Vikas, ICAR-IARI Regional Station, Wellington, India <i>Triticum dicoccum</i> : A low GI food for the diabetics (#221)	
	A.R. Mohd Nazri, Faculty of Food Science and Nutrition, Universiti Malaysia Sabah, Malaysia Nutritional composition and antioxidant capacity of peels, pulp and arils of spiny gourd (<i>Momordica Cochinchinensis</i>) fruits grown in Malaysia (#944)	
	Julia Boedecker, Bioversity International, Kenya Participatory approach to improve dietary diversity in Vihiga County, Western Kenya (#1186)	

T.R. Suma, MS Swaminathan Research Foundation, India
 Micro level politics of land use impacts agro-biodiversity and rural food and nutritional security: A case study from Wayanad, Kerala (#1287)

K.T. Hoang, HealthBridge Foundation of Canada, Vietnam
 Linkage Between Child Nutrition and Agrobiodiversity, Gender Role in Home Gardening in North West of Vietnam (#1457)

16:25-16:40 *Discussion and Concluding Remarks*

16:40-17:00 **TEA/COFFEE BREAK**

7th November, 2016 (Afternoon)
Basement Dining Hall (below AP Shinde Hall)

FARMERS' FORUM

14:15-16:40 Farmers' Role in Conservation of Genetic Resources

Moderators : R.R. Hanchinal, PPV&FRA; A.K. Singh, ICAR
 and
 Vipin Kumar, NIF

Convener : R.C. Agrawal, PPV&FRA

14:15-14:30 **Objectives and Expectations**

14:30-15:50 **Farmers' representing various Biodiversity Hotspots**

Shri Sundaram Verma, Smt. Santosh Pachar, Sh. Biharilal Sharma,
 Shri Prakash Singh Raghuvansi, Sh. Potshangbam Devakanta, Smt.
 Anjamma, Mr. Sanjay Patil, Mr. Sharma, Gokarn, Mr. Subhاناudan,
 Mr. P. Narayan Unny, Tribal Farmers of Meghalaya and Chhattisgarh
 and Gladys Mugmbi, Kenya

15:50-16:15 **Open Forum**

16:15-16:40 *Concluding Remarks*

16:40-17:00 **TEA/COFFEE BREAK**

7th November, 2016 (Evening)
**AP Shinde Hall AP Shinde Hall (live stream available at
Basement Dining Hall, NAAS Lecture Hall, NAAS Committee
Room-1 and NAAS Committee Room-2)**

EVENING LECTURE

17:00-18:00 **Evening Lecture**

Co-Chairs : V.L. Chopra, Central University of Kerala
and

Ronnie Coffman, Cornell University

Convener : G.J. Randhawa, NBPGR

Rapporteurs : Sunil Neelam, DMR; Anitha Pedapati, NBPGR

17:00-17:10 Introduction

17:10-17:50 Biodiversity, Food, and the Future **Peter Raven**, MBG

17:50-18:00 *Concluding Remarks*

7th November, 2016 (Evening)
Poster Hanger

POSTER SESSION

18:00-19:30 **Poster Session and Visit to Exhibitions**

7th November, 2016 (Evening)
Podium Lawns, NASC Complex, Pusa

19:30-21:30 **CIMMYT50 Celebration: Reception Dinner**

8th November, 2016 (Forenoon)
AP Shinde Hall (live stream available at Basement Dining Hall, NAAS Lecture Hall, NAAS Committee Room-1 and NAAS Committee Room-2)

PLENARY SESSION 3

09:00-10:40	Agrobiodiversity for Livelihood Security and Ecosystem Services	
	Co-Chairs : Ramesh Chand, Niti Ayog and T. Mohapatra, ICAR and DARE Convener : S. C. Dubey, NBPGR Rapporteurs : Kavita Gupta, NBPGR; K. C. Bhatt, NBPGR	
09:00-09:10	Introduction	
09:10-09:35	Plenary Lecture Agrobiodiversity, Livelihoods and Climate Change	Kamal Bawa, University of Massachusetts
09:35-10:00	Plenary Lecture Grassroots Innovations for Market Mediated Livelihoods and Value Chain Development	Anil Gupta, NIF and IIMA
10:00-10:40	Panel Discussion Panelists : Gerry Jayawardena, SCARP; Coojse Hoogendoorn, KIT; Marieta Sakalian, UNEP; Nikolay Dzyubenko, VIR	
10:40-11:00	TEA/COFFEE BREAK	

8th November, 2016 (Forenoon)
AP Shinde Hall

TECHNICAL SESSION 4-A
Science-led Innovation

11:00-13:15 **Concurrent Session: Trait Discovery and Enhanced Use of PGR**

Co-Chairs : **G.S. Kush**, University of California
and
Calvin Qualset, University of California

Convener : **M. K. Rana**, NBPGR

Rapporteurs : **M. Elangovan**, IIMR; **V. Vikas**, IARI

11:00-11:05 Introduction

11:05-11:25	Utilizing Genetic Diversity in CIMMYT Global Wheat Breeding Program	Ravi Singh , CIMMYT
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11:25-11:45	Challenges and Opportunities for Value Capture from Plant Genetic Resources	Andreas Graner , IPK
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11:45-12:05	Indian Wild Rice- Diversity, Population Structure, Trait Value and Relation with Cultivated Rice	N.K. Singh , NRCPB
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12:05-12:25	Introgression of Yield Component Traits and Biotic Stress Resistance Genes in Rice Following Interspecific Hybridization	Kuldeep Singh , NBPGR
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12:25-12:45 **Rapid Presentations (From Abstracts)**

Zhang Zongwen, Bioersity International, China
Managing the biodiversity of neglected and utilized crops in China (#1941)

S. Gopala Krishnan, IARI, India
Genetic enhancement of rice (*Oryza sativa* L.) through inter-specific crosses
involving *Oryza rufipogon* and their potential in improving heterosis (#1694)

Sundeep Kumar, ICAR-National Bureau of Plant Genetic Resources, India
Identification of stable heat tolerant wheat germplasm lines under extreme late
sown condition (#1123)

12:45-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

8th November, 2016 (Forenoon)
NAAS Lecture Hall

TECHNICAL SESSION 4-B
Science-led Innovation

11:00-13:15 Concurrent Session: PGR and Genomics

Co-Chairs : **Ed Southern**, Kirk House Trust
and

Akhilesh Tyagi, University of Delhi

Convener : **Rakesh Singh**, NBPGR

Rapporteurs : **Lalit Arya**, NBPGR; **Manjusha Verma**, NBPGR

11:00-11:10 Introduction

11:10-11:30	Application of Genomics to Enhanced Utilization of Plant Genetic Resources	Robert Henry , QAAFI
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11:30-11:50	Sears to Sequencing: Deciphering the Potential of Wheat for Hunger-Free World	Bikram Gill , Kansas State University
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11:50-12:10	Genome Analysis of Rice Genetic Resources for the Identification of Novel Genes and Alleles for Biotic Stress Resistance	T.R. Sharma , NRCPB
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12:10-12:25	Genome Sequencing to Unlock the Potential of African Indigenous Tree Species	Alice Muchugi , ICRAF
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12:25-12:45 Rapid Presentations (From Abstracts)

Rakesh Singh, NBPGR, India

SNP marker based genetic diversity study in rice germplasm of Arunachal Pradesh (#1166)

Tilak Sharma, CSK Himachal Pradesh Agricultural University, India

Population genetic structure and phylogenetic relationships in lentil species as revealed by morphological and SSR markers (#509)

N. Anuradha, IARI, India

Molecular Diversity in Pearl millet Association Mapping Panel revealed by Genomic and EST SSR Markers (#1783)

12:45-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

8th November, 2016 (Forenoon)
NAAS Committee Room-1

TECHNICAL SESSION 4-C
Science-led Innovation

11:00-13:15 Concurrent Session: PGR Informatics

Co-Chairs : Stefano Diulgheroff, FAO
and
Bhag Mal, APAARI

Convener : Sunil Archak, NBPGR

Rapporteurs : D. P. Semwal, NBPGR; Rajeev Gambhir, NBPGR

11:00-11:10 Introduction

11:10-11:30	Spatial Variation in Crop Diversity: from Genes to Landscapes	Robert Hijmans, University of California
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11:30-11:50	Towards the Third Global Assessment on the State of PGRFA Conservation and Use	Stefano Diulgheroff, FAO
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11:50-12:10	Digital Technologies to Modernize Effective and Efficient Use of Plant Genetic Resources	Eric Huttner, ACIAR
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12:10-12:25	Accessing Information for Effective Discovery and Deployment of PGR	Michael Mackay, University of Queensland
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12:25-12:45 Rapid Presentations (From Abstracts)

Sunil Archak, NBPGR

India as a Crucible to Develop Integrated Information Systems (#202)

R.S.S. Ratnayake, National GEF Secretariat, Ministry of Mahaweli, Sri Lanka
Modelling Distribution of Neglected and Underutilized Fruit Species in Sri Lanka for Sustainable Utilization (#1182)

V. Girish Naik, Central Sericultural Research and Training Institute, India
Mulberry Genome Network: an interactive web platform for Morus specific genetic and genomic resources (#600)

12:45-13:15 Discussion and Concluding Remarks

13:15-14:15 LUNCH

8th November, 2016 (Forenoon)
ICAR Lecture Hall

TECHNICAL SESSION 4-D

Science-led Innovation

11:00-13:15 **Concurrent Session: Animal and Aquatic Genetic Resources**

Co-Chairs : Olivier Hanotte, ILRI

and

J.K. Jena, ICAR

Convener : Kuldeep K. Lal, NBFGR

Rapporteurs : Rajeev K. Singh, NBFGR; Rekha Sharma, NBAGR

11:00-11:10 Introduction

11:10-11:30	Genetic Improvement of Production and Adaptive Traits in Livestock	J.M. Reecy, Iowa State University
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11:30-11:50	Genomic Resource Development for Aquaculture Species in India	Vindhya Mohindra, NBFGR
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11:50-12:10	Advanced Reproductive Biotechnologies for Animal Multiplication, Genetic Improvement and Conservation	A.K. Srivastava, NDRI
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12:10-12:30	Molecular Traceability of Spatial Genetic Diversity for sustainability of Fish Genetic Resources	Kuldeep K. Lal, NBFGR
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12:30-12:50 **Rapid Presentations (From Abstracts)**

Atul K. Singh, ICAR-Directorate of Coldwater Fisheries Research, India
 Status, potential and challenges to the important fish germplasm *vis-a-vis* aquaculture and fishery management in cold water regions of India (#288)

M.M. Chanda, NIVEDI, India

Habitat mapping of Deccani breed of sheep using remote sensing variables: Implications for breed conservation and disease resistance (#604)

Ravinder Singh, NBAGR, India

Cytogenetic and mitochondrial D-loop sequence based characterization of buffaloes of Odisha state in India (#845)

Grinson George, Central Marine Fisheries Research Institute, India

Biodiversity *vis-a-vis* Oceanography: few case studies indicate ecosystem responses as a major factor governing fish distribution in space and time (#1626)

12:50-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

8th November, 2016 (Forenoon)
NAAS Committee Room-2

TECHNICAL SESSION 4-E
Science-led Innovation

11:00-13:15 Concurrent Session: Insects and Microbial Genetic Resources

Co-Chairs : S.N. Puri, Ex-CAU

and

Anupam Verma, NAAS

Convener : Chandish Ballal, NBAIR

Rapporteurs : Sanjay Gupta, NBAIM; Richa Varshney, NBAIR

11:00-11:10 Introduction

11:10-11:30	Insect Genetic Resources - Innovation for Utilization	Chandish Ballal, NBAIR
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11:30-11:50	Exploiting the Essence of the Microbial Diversity of the Rann of Kutch for Devising Strategies for Salinity and Drought Tolerance	K.K. Pal, DGR
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11:50-12:10	Innovations in Insect Pest Management: Interventions Using Insect Derived Volatiles	Bakthavatsalam N., NBAIR
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12:10-12:30	Insights from Genome and Genome Based Informatics of Agriculturally Important Microorganisms	Alok Srivastava, NBAIM
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12:30-12:50 **Rapid Presentations (From Abstracts)**

Ruchira Kodithuwakku, Department of Export Agriculture, Sri Lanka

A Preliminary Study on Abundance of Selected Soil Organisms in Prominent Landuse Systems at Mid Country of Sri Lanka (#759)

Sanjay Kumar Gupta, ICAR-NBAIM, India

Soil Metaproteomics: A novel tool for deciphering functional diversity from environmental samples (#1491)

Ram Nageena Singh, ICAR-Indian Agricultural Research Institute, India

Draft Genome and mining of genes from a phosphate solubilizing bacterium *Burkholderia cenocepacia* PS27 (#1688)

12:50-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

8th November, 2016 (Afternoon)
AP Shinde Hall (live stream available at Basement Dining Hall)

TECHNICAL SESSION 5

14:15-16:40 **Quarantine, Biosafety and Biosecurity Issues**

Co-Chairs : **Swapan K. Datta**, Viswa Bharati
and
A.K. Srivastava, NDRI

Convener : **Ravi Khetrpal**, CABI

Rapporteurs : **Celia Chalam**, NBPGR; **Bharat Gawde**, NBPGR

14:15-14:20 **Introduction**

14:20-14:40 Converging Provisions of CBD and WTO to Ensure Biosecurity	Ravi Khetrpal , CABI
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14:40-15:00 Invasive species and International Trade	Kenza Le Mentec , STDF (WTO)
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15:00-15:15 Biosecurity Issues in Germplasm Exchange: African Experience	P. Lava Kumar , IITA, Nigeria
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15:15-15:45 **Panel Discussion**

Biosecurity and Biosafety provisions *vis-à-vis* Agrobiodiversity

Moderator : **J.L. Karihaloo**, APAARI

Panelists: **S. R. Rao**, DBT; **Gurinder J. Randhawa**, NBPGR; **S.C. Dubey**, NBPGR; **Vibha Ahuja**, BCIL, **Neeraj Sood**, NBFGR

15:45-16:20 **Rapid Presentations (From Abstracts)**

Shashi Bhalla, NBPGR, India

Biosecuring import of transgenic crops germplasm into India under quarantine umbrella (#1451)

V. Celia Chalam, NBPGR, India

Role of viral diagnostics in quarantine for plant genetic resources and preparedness (#1515)

M. Mohan, NBAIR, India

Tuta absoluta: A new invasive alien insect pest of Solanaceous crops in India threat assessment and management options (#1219)

Kavita Gupta, NBPGR, India

Biosecurity policies influencing international exchange of PGR (#1218)

C. S. Kariyawasam, Ministry of Environment, Sri Lanka

Comparative study of the reproductive biology of gorse (*Ulex europaeus*) in the mount lofty ranges of South Australia and Central highlands of Sri Lanka (#1527)

Pravata K. Pradhan, NBFGR, India

Cyprinid herpesvirus-2: Widespread occurrence in goldfish populations in India (# 1767)

16:20-16:40 *Discussion and Concluding Remarks*

16:40-17:00 **TEA/COFFEE BREAK**

8th November, 2016 (Afternoon)
NAAS Lecture Hall

SATELLITE SESSION 3

14:15-16:40	Climate Change as an Opportunity for Agrobiodiversity Management (GIZ and NEHU)	
14:15-14:20	Introduction	
14:20-14:30	Setting the Scene: Climate Change Winners and Losers	Uwe Scholz and Indrani Phukan, GIZ CCA NER Project
14:30-14:50	Climate Change: Major Winners and Losers in Respect to Agriculture Production and Crops Migration	N. H. Ravindranath, IISC
14:50-15:10	Changes in Agrobiodiversity and Arising Opportunities in the North Eastern Region of India (#1934)	S. K. Barik, NEHU
15:10-15:30	GIZ Agrobiodiversity Portfolio (#1933)	Friederike Kraemer, GIZ
15:30-15:45	Traditional Knowledge of Tribal People of Meghalaya in Adaptation to Climate Change: Integrating Traditional Knowledge of the Indigenous People with the Computer Model Output in Vulnerability Assessment and Adaptation Actions (#1931)	S. Ashutosh, Government of Meghalaya
15:45-16:00	Importance and new utilization opportunities for Bamboo in northeast India under the angle of climate change and inclusive agro-economic development (#1932)	Werner Kosemund, INBAR
16:00-16:15	Advocating for Shifting Cultivation in the context for Climate Change in the Eastern Himalayas - Lessons and Issues (#1935)	Amba Jamir, Sustainable Development Forum Network
16:15-16:40	<i>Discussion and Concluding Remarks</i> How can opportunities arising due to Climate Change be optimally tapped by rural communities?	
16:40-17:00	TEA/COFFEE BREAK	

8th November, 2016 (Afternoon)
**ICAR Lecture Hall (live stream available at NAAS
Committee Room-1 and NAAS Committee Room-2)**

ROUND TABLE DISCUSSION

14:15-16:40	Genebank Management: Challenges and Opportunities
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Co-Chairs : Marie Haga, Crop Trust

and

Kuldeep Singh, NBPGR

Moderators : H.D. Upadhyaya, ICRISAT and **R.K. Tyagi, NBPGR**

14:15-14:25	Objectives and Expectations
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14:25-14:40	Background and Highlighting the Issues	Prem Mathur, Bioversity International
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14:40-16:30	Round Table Discussion	Representatives of National and CGIAR Genebanks
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16:30-16:40	<i>Concluding Remarks</i>
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16:40-17:00	TEA/COFFEE BREAK
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8th November, 2016 (Afternoon)
AP Shinde Hall (live stream available at Basement Dining Hall, NAAS Lecture Hall, NAAS Committee Room-1 and NAAS Committee Room-2)

PUBLIC FORUM

17:00-18:30 Role of Stakeholders in Agrobiodiversity Management

Co-Chairs : M.S. Swaminathan, MSSRF
and
R.S. Paroda, ISPGR & TAAS

17:00-17:20 Objectives and Expectations

17:20-18:00 Panel Discussion

Panelists : Adel El-Beltagy, IDDC; Anil Gupta, NIF; Ajay Jakhar, BKS; Suman Sahai, Gene Campaign; Paresh Verma, Bioseed SE Asia; Sunita Sreedharan, SKS Law

18:00-18:20 Open Forum

18:20-18:30 Concluding Remarks

8th November, 2016 (Evening)
Poster Hanger

POSTER SESSION

18:30-19:30 Poster Session and Visit to Exhibitions

8th November, 2016 (Evening)
AP Shinde Hall

19:30-20:15 Cultural Program

8th November, 2016 (Evening)
Podium Lawns, NASC Complex, Pusa

20:15-21:30 Dinner

9th November, 2016 (Forenoon)
AP Shinde Hall (live stream available at Basement Dining Hall, NAAS Lecture Hall, NAAS Committee Room-1 and NAAS Committee Room-2)

PLENARY SESSION 4

09:00-10:40 **ABS in the Context of Regulatory Systems**

Co-Chairs : Adel El-Beltagy, IDDC

and

B. Meena Kumari, NBA

Convener : Sanjeev Saxena, ICAR

Rapporteurs : Shashi Bhalla, NBPGR; Vandana Tyagi, NBPGR

09:00-09:10 Introduction

09:10-09:35 **Plenary Lecture**

Rust, Risk, and Germplasm Exchange: The
Borlaug Global Rust Initiative

Ronnie Coffman,
Cornell University

09:35-10:00 **Plenary Lecture**

Regulating Access to Genetic Resources
and Benefit Sharing: International Treaties
and Indian Experience

Rai S. Rana,
NBA and Ex-NBPGR

10:00-10:40 **Panel Discussion**

Panelists : R.S. Hamilton, IRRI; Sudhir Kochhar, Ex-ICAR;

Neeti Wilson, Anand and Anand

10:40-11:00 **TEA/COFFEE BREAK**

9th November, 2016 (Forenoon)
AP Shinde Hall (live stream available at
Basement Dining Hall)

TECHNICAL SESSION 6

11:00-13:15 IPRs, ABS and Farmers' Rights

Co-Chairs : **R.B. Singh**, Central Agricultural University
and
Lim Eng Siang, ITPGRFA

Convener : **Pratibha Brahmi**, NBPGR

Rapporteurs : **Poonam J. Singh**, NBFGR; **Shakti Khera**, NBPGR

11:00-11:10 Introduction

11:10-11:30	Indian Initiatives on Farmers' Rights	R.R. Hanchinal , PPV&FRA
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11:30-11:50	The Role of ITPGRFA in Agrobiodiversity Management: Future Strategies and Actions	Lim Engsiang , ITPGRFA
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11:50-12:10	Access and Benefit-Sharing of Animal Genetic Resources	Ilse Köhler-Rollefson , League for Pastoral Peoples
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12:10-12:30	Commercial use of Genetic Resources and IPR issues	Sanjeev Saxena , ICAR
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12:30-12:55 **Rapid Presentations (From Abstracts)**

Pratibha Brahmi, NBPGR, India

Alternative options for benefit sharing under ITPGRFA (#33)

C. Thomson Jacob, National Biodiversity Authority, India

Mainstreaming biodiversity into the agricultural sector (#756)

Sherry Rachel Jacob, NBPGR, India

The global conservation status of Indian germplasm and its implications (#732)

Prabha S. Nair, National Biodiversity Authority, India

Germplasm exchange from India under the multilateral system *vis-a-vis* the Biological Diversity Act, 2002: A critical appraisal (#1580)

12:55-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

9th November, 2016 (Forenoon)
ICAR Lecture Hall

TECHNICAL SESSION 7

11:00-13:15 Partnership, Networks and Capacity Building

Co-Chairs : Gurbachan Singh, ASRB
and

H. S. Dhaliwal, Eternal University

Convener : S. P. Ahlawat, NBPGR

Rapporteurs : S. K. Yadav, NBPGR; Anurag Khanujia, NISCAIR

11:00-11:10 Introduction

11:10-11:30	International PGR networks on commodity crops – Lessons learned and success stories	Stephan Weise, Bioversity International
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11:30-11:45	Capacity Building in Application of Biotechnology for Germplasm Enhancement	Darshan Brar, PAU
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11:45-12:00	Implementation of SUWON Declaration	Raghunath Ghodake, APAARI
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12:00-12:15	Transforming Indian Agriculture for National and Global Environmental Benefits and Biodiversity Conservation	Shyam Khadka, FAO
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12:15-12:30	From Individual Glory to Collective Excellence and Prosperity	Dilip Kumar, ex-CIFE
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12:30-12:45	A Resource Box for Resilient Seed Systems	Ronnie Vernooy, Bioversity International
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12:45-12:55	Plant Diversity to Improve Food Security and Livelihoods of Local Communities	Tiziana Ulian, Royal Botanic Gardens
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12:55-13:15 *Discussion and Concluding Remarks*

13:15-14:15 **LUNCH**

9th November, 2016 (Forenoon)
NAAS Lecture Hall

SATELLITE SESSION 4

11:00-13:15	Crop Wild Relatives: Back to the Wild to Save the Future (Bioversity International and University of Birmingham)	
11:00-11:05	Introductory remarks by Co-Chairs : Ehsan Dulloo , Bioversity International and Bikram Gill , Kansas State University	
11:05 -11:20	Utilization of Crop Wild Relatives in the Indian Breeding Programs: Progress, Impact and Challenges	J.S. Sandhu , ICAR
11:20-11:35	Conservation Planning for Crop Wild Relative Diversity in the SADC Region (#645)	Joana Magos Brehm
11:35-11:45	A strategic approach to crop wild relative conservation in mega-diverse Mexico (#286)	Aremi Contreras Toledo
11:45-11:55	Identification and collection of priority crop wild relatives in three provinces of South Africa (#1002)	Nkat Lettie Maluleke
11:55-12:05	Re-collection to assess temporal variation in wild barley diversity in Jordan (#988)	Imke Thormann
12:05-12:15	Conservation planning and climate change mitigation of Global CWR Diversity	Nora Patricia Castañeda Álvarez
12:15-12:25	Spatial analyses of CWR occurrence data as tools for selection of sites for conservation of priority CWR in Zambia (#921)	Dickson Ng'uni
12:25-12:35	Exploring the wilds: Harnessing genetic potential for crop improvement (#1096)	N.C. Gupta
12:35-12:45	Genetic variability for nutritional traits among wild relatives of pearl millet conserved at ICRISAT Genebank (#1059)	Santosh K. Pattanashetti
12:45-13:15	White board policy priorities for next 10 years. Discussion and closing remarks	Nigel Maxted , Univ. of Birmingham - facilitator
13:15-14:15	LUNCH	

9th November, 2016 (Afternoon)
AP Shinde Hall (live stream available at Basement Dining Hall, NAAS Lecture Hall, NAAS Committee Room-1 and NAAS Committee Room-2)

CONCLUDING SESSION

14:15-16:40	Concluding Session
14:15-14:25	Introductory Remarks
14:25-15:25	Presentation of Congress Recommendations
15:25-15:45	Delhi Declaration on Agrobiodiversity Management
15:45-16:00	Discussion on IAC2020
16:00-16:40	Concluding Remarks by the Organizers/Co-Chairs

PLENARY SESSION 1

Agrobiodiversity for Sustainable Development Goals (SDGs)

06.11.2016; 12.00-13.30
Plenary Hall, Vigyan Bhavan



Prof. M.S. Swaminathan

Co-Chair

Prof. M.S. Swaminathan, a plant geneticist by training, is one of the twenty most influential Asians of the 20th century. He is the Chair of International Agrobiodiversity Congress 2016. Recipient of prestigious Padma Shri, Padma Bhushan and Padma Vibushan, he currently holds the UNESCO Chair in Ecotechnology at the M S Swaminathan Research Foundation in Chennai, India. He was the scientific leader of the green revolution movement. He has served in prestigious positions in ICAR, Ministry of Agriculture, Planning Commission, National Academy of Agricultural Sciences, National Commission on Farmers. He served in international organizations like UN, FAO, etc. He has received 73 honorary doctorate degrees from universities around the world and has bagged many prestigious awards -Ramon Magsaysay Award, Albert Einstein World Science Award, Tyler and UNEP Sasakawa Prize, the Indira Gandhi Prize for Peace, Disarmament and Development, Franklin D Roosevelt For Freedoms Medal, the Mahatma Gandhi Prize, the Lal Bahadur Sastri National Award.



Dr Martin Kropff

Co-Chair

Dr Martin Kropff is the Director General of CIMMYT. He has served successive roles at Wageningen UR, including as Director General of the Plant Sciences Group and has been on the executive board. As systems agronomist at the International Rice Research Institute (IRRI) in the Philippines, he led an international program with National Agricultural Research Systems and Universities in nine Asian countries on systems research and simulation for rice production. He has also been member of the board of directors of the CGIAR, the 15-member consortium of international agricultural researchers.



Dr R.K. Tyagi

Convener

Dr R.K. Tyagi is the Principal Scientist and Head, Division of Germplasm Conservation, ICAR-NBPGR, New Delhi, India. He has been working in the areas of collection, conservation, characterization, evaluation and documentation of plant genetic resources for the last 30 years. His current focus of research is on conservation of PGR employing various conventional and modern methods. He has successfully completed several inter-institutional and international projects and conducted many trainings on management of PGR. Dr Tyagi has served as Vice President and Editor-in-Chief of

Indian Society of Plant Genetic Resources (ISPGR). Currently, he is General Secretary of ISPGR and Co-organizing Secretary of International Agrobiodiversity Congress 2016. He is also Fellow of ISPGR and Indian Society of Seed Technology. He is the faculty of PG School, IARI, New Delhi. Dr Tyagi has published 150 research papers, book and book chapters related to PGR management.



Ms M. Ann Tutwiler

Plenary Lecture

Ms M. Ann Tutwiler, the Director General of Bioversity International, is leading Bioversity International, forging effective research partnerships and overseeing the organization's strategic priorities and research agenda. Tutwiler has 30 years of experience in agricultural policy and development working in the public and private sectors. She has also served as Deputy Director General, Knowledge, at FAO, as the Secretary for the U.S. Department of Agriculture (USDA), as Senior Advisor of International Affairs for the U.S. Agency for International Development. Tutwiler was Government Relations Director for a multinational agribusiness firm for ten years and co-founded a global think tank in agricultural trade policy.



Dr R. S. Paroda

Plenary Lecture

Dr R. S. Paroda, is the Chairman of the TAAS, President of the ISPGR and the Co-Chair of International Agrobiodiversity Congress 2016. Recipient of the prestigious Padma Bhushan, he is an accomplished plant breeder and geneticist by profession and an able research administrator. He has made significant contributions in the field of crop science research. He is known for modernization and strengthening of the national agricultural research system (NARS) in India as well as in Central Asia and the Caucasus. He is the main architect of one of the world's largest National Gene Bank in New Delhi, India. He has received 15 D.Sc. (Honoris Causa) degree from universities around the world. He is the recipient of numerous awards and recognitions, including Rafi Ahmad Kidwai Award, ICAR Team Research Award, FICCI Award, Om Prakash Bhasin Award, BP Pal Gold Medal, Borlaug Award, Mahendra Shiromani Award etc. Founder chairman of Global Forum on Agricultural Research (GFAR), he was also the President of Indian Science Congress and the National Academy of Agricultural Sciences, India.

TECHNICAL SESSION 1-A

Food, Nutrition and Environmental Security

Concurrent Session: Plant Genetic Resources

06.11.2016; 14.30-17.30
Plenary Hall, Vigyan Bhawan



Dr David Bergvinson

Co-Chair

David Bergvinson is the Director General of ICRISAT in Hyderabad, India. He has 20 years of experience in maize biochemistry, pathology and entomology. As Senior Scientist at CIMMYT (Entomologist) he coordinated the entomology research for both maize and wheat and provided technical support to regional offices. Later as Senior Program Officer, Science and Technology, Agricultural Development, he has also been involved in the development and management of crop improvement grants at the Bill & Melinda Gates Foundation.



Dr Nikolay Dzyubenko

Co-Chair

Dr Nikolay Dzyubenko is the Director General of N.I. Vavilov Research Institute of Plant Industry (VIR) St. Petersburg, Russia. VIR is one of the largest existing gene banks in the world. It includes 350,000 samples from more than 2,500 food species that are or may be useful to human feeding.



Dr Prem Mathur

Convener

Dr Prem Mathur, Co-organizing Secretary of International Agrobiodiversity Congress 2016, has been working at Bioversity International for the past 17 years and is a part of several Bioversity International global and regional project activities including promoting the use of plant genetic resources, plant genetic resources information management and documentation and the use of Geographic Information System (GIS) tools for assessing and locating diversity and the use of crop diversity for climate change adaptation. He coordinates plant genetic resources networking activities in South Asia and the Pacific.



Dr Martin Kropff

Speaker

Dr Martin Kropff is the Director General of CIMMYT. He has served successive roles at Wageningen UR, including as Director General of the Plant Sciences Group and has been on the executive board. As systems agronomist at the International Rice Research Institute (IRRI) in the Philippines, he led an

international program with National Agricultural Research Systems and Universities in nine Asian countries on systems research and simulation for rice production. He has also been member of the board of directors of the CGIAR, the 15-member consortium of international agricultural researchers.



Dr T. Mohapatra

Speaker

Dr Trilochan Mohapatra is Secretary, Department of Agricultural Research and Education & Director General, ICAR, New delhi, India. Formerly, Director-cum-Vice Chancellor of the prestigious Indian Agricultural Research Institute, New Delhi and the Director of National Rice Research Institute (formerly CRRRI), Cuttack, he also served National Research Centre on Plant Biotechnology, IARI, New Delhi as a researcher and a teacher for about 20 years. He is a Fellow of the Indian National Science Academy, National Academy of Sciences-India, Allahabad and the National Academy of Agricultural Sciences, New Delhi. He also received the recognition Award of the National Academy of Agricultural Sciences for the biennium 2013-14. A scientist of International repute, he worked in the area of molecular genetics and genomics. Dr Mohapatra has over 145 research papers in national and international journals and several book chapters. His research accomplishments include development of the first high yielding Basmati rice variety resistant to bacterial leaf blight and, physical mapping and genome sequencing of rice and tomato. He has the distinction of receiving several honours and awards in recognition of his excellent academic and research contributions.



Dr Howarth Bouis

Speaker

Howarth Bouis is the Founder and Director of the Harvest Plus program, which is coordinated by CIAT and the IFPRI. For his pioneering work in ending global hidden hunger through biofortification, he will be one of the recipients of the 2016 World Food Prize. He coordinates an interdisciplinary, global effort to breed and disseminate micronutrient-rich staple food crops to reduce hidden hunger among malnourished populations. He has worked to promote biofortification within the CGIAR consortium, among national agricultural research centers, and in the international agriculture and nutrition communities.



Dr Emile Frison

Speaker

Dr Emile Frison is the Vice-Chair of the Board of Directors of Ecoagriculture Partners and Extraordinary Professor at the Catholic University of Leuven, Belgium and Chair, International Scientific Committee on Sustainable Food Systems, Daniel and Nina Carasso Foundation. With specialization in international agricultural research for development, he worked in Africa for six years on agricultural research and development. Formerly, as Director General of Bioversity International, he developed a strategy entitled "Diversity for Well-being" focusing on the contribution that agricultural biodiversity makes to the sustainability, resilience and productivity of smallholder agriculture and to the nutritional quality of diets. Dr Frison has over 175 scientific, technical and policy papers to his credit.

TECHNICAL SESSION 1-B

Food, Nutrition and Environmental Security

Concurrent Session: Animal, Aquatic, Insect and Microbial Genetic Resources

06.11.2016; 14.30-17.30

Hall No. 6, Second Floor, Vigyan Bhawan



Dr S. Ayyappan

Co-Chair

Dr S. Ayyappan, is the President, National Academy of Agricultural Sciences, India and has worked extensively in areas of fisheries, limnology, and aquatic microbiology. He has served in various capacities including Secretary DARE and DG ICAR, Member, Board of Trustees, International Rice Research Institute. He is a Fellow of National Academy of Agricultural Sciences, India, Society of Nature Conservators, India, Bioved Society, India, Inland Fisheries Society of India, Zoological Society of India, etc. He has received many awards like Zahoor Qasim Gold Medal, Special ICAR Award, ICAR Award for Team Research, Zoological Society of India Gold Medal, Recognition Award (Animal Sciences) of the National Academy of Agricultural Sciences, Dr V.G. Jhingran Gold medal, etc.



Dr Purvi Mehta-Bhatt

Co-Chair

Dr Purvi Mehta-Bhatt, is the Senior Advisor and Head of agriculture for South Asia - the Bill & Melinda Gates Foundation, India. Trained as an agriculture biotechnologist, she has been working on developmental projects with farmers organizations to high-level policy impact and technology transfers across Asia and Africa. She has expertise and interest in bringing synergies among the sub-sectors of agriculture (crop and livestock) and across sectors (agriculture, health, nutrition and overall rural development). She has also worked with the CGIAR institutions like ILRI, IFPRI and USAID. She is on board of several organizations, including IAEH, ICRA, Wageningen etc.



Dr Anil Kumar Saxena

Convener

Dr Anil Kumar Saxena is the Director of ICAR- NBAIM, Mau, India. Dr Saxena contributed immensely in the area of plant-microbe interactions and molecular diversity of bacteria. He developed bacterial inoculants, including novel biofilmed formulations, Zn and K solubilizers and NPK providing formulations for integrated pest and nutrient management of various crops. He has deposited more than 1900 gene sequences to NCBI GenBank. He has to his credit more than 20 book chapters and 120 research publications. A fellow of NAAS and Indian Academy of Microbiological Sciences, he is

the recipient of several prestigious awards including XIV Shri Hari Krishna Shastri Memorial award, Distinguished Scientist award of Asian PGPR Society and Prof G. Rangaswami award of AMI.



Dr Oliver Hanotte

Speaker

Olivier Hanotte, molecular geneticist with specialization in the field of livestock and wildlife genetic diversity, is currently leading the ILRI “Improving Animal Genetics Resource Characterization” project. He has contributed to several AnGR characterization courses both in Africa and Asia organized by ILRI, regional organizations like ASARECA and international ones, like the joint FAO/IAEA division of Nuclear Techniques in Food and Agriculture. His research interests also include the understanding of mechanism of adaptation in livestock, disease tolerance-resistance, with a particular on trypanosomosis in cattle, gastro-intestinal nematode parasites in small ruminants and avian influenza viral infection.



Dr N. K. Krishna Kumar

Speaker

Dr N. K. Krishna Kumar, is Country Representative of India office, Bioversity International, providing scientific leadership for research activities on the management and use of agricultural biodiversity being implemented in Central and South Asia. He is a renowned vector entomologist. He has over 150 research papers and many patents to his credit and has led commercialization of nearly 40 technologies in horticulture. He has worked extensively on vegetables from identifying the resistance sources to chilli thrips, brinjal leafhopper and fruitborer to developing integrated pest management. Dr Kumar is the person referred for vector transmission of plant viruses. He pioneered the work on vector components (aphids) in the epidemiology of papaya ring spot virus in south India, He is the recipient of many awards and honours including INSA Young Scientist Award, NAAS-Tata Award, DBT Bio-science Award, etc. .



Dr J.K. Jena

Speaker

Dr J. K. Jena is Deputy Director General, Fisheries at ICAR, New Delhi, India. His research intrests have been Freshwater aquaculture and Conservation genetics. He has received several prestigious awards and honours including ICAR Award for the Team Research in Fisheries, Prof. H.P.C. Shetty Award for Excellence in Fisheries Research and/or Development, Special One Time Award by ICAR, Best Young Scientist Award of the Dr Hiralal Choudhuri Fisheries Foundation. He has over 180 publications to his credit.



Dr Anil Kumar Saxena

Speaker

Dr Anil Kumar Saxena is the Director of ICAR- NBAIM, Mau, India. Dr Saxena contributed immensely in the area of plant-microbe interactions and molecular diversity of bacteria. He developed bacterial inoculants, including novel biofilmed formulations, Zn and K solubilizers and NPK providing formulations for

integrated pest and nutrient management of various crops. He has deposited more than 1900 gene sequences to NCBI GenBank. He has to his credit more than 20 book chapters and 120 research publications. A fellow of NAAS and Indian Academy of Microbiological Sciences, he is the recipient of several prestigious awards including XIV Shri Hari Krishna Shastri Memorial award, Distinguished Scientist award of Asian PGPR Society and Prof G. Rangaswami award of AMI.

EVENING LECTURE

06.11.2016; 18.00-19.00
Plenary Hall, Vigyan Bhawan



Dr M. Ann Tutwiler

Co-Chair

Ms M. Ann Tutwiler, the Director General of Bioversity International, is leading Bioversity International, forging effective research partnerships and overseeing the organization's strategic priorities and research agenda. Tutwiler has 30 years of experience in agricultural policy and development working in the public and private sectors. She has also served as Deputy Director General, Knowledge, at FAO, as the Secretary for the U.S. Department of Agriculture (USDA), as Senior Advisor of International Affairs for the U.S. Agency for International Development. Tutwiler was Government Relations Director for a multinational agribusiness firm for ten years and co-founded a global think tank in agricultural trade policy.



Dr S. Rajaram

Co-Chair

Dr Rajaram is the Director at Biodiversity and Integrated Gene Management (BIGM) Program at ICARDA, Aleppo, Syria. He has lead collaboration on wheat germplasm between CIMMYT and ICAR (India). His leadership has resulted into prodigious release of more than 481 cultivars of bread wheat in 51 countries over 30 years of his scientific career at CIMMYT, Mexico. These varieties occupied more than 58 million hectares in the developing countries. A recipient of several prestigious awards and honors including Padma Shri Award, Monsanto Distinguished Career Award, U.S.A., Golden Summit Award, The Rank Prize Award, U.K, Borlaug Award, India, Crawford Fund Derek Tribe Award, Australia, King Bedouin Award, CGIAR, he has Honorary Doctorate Degrees from Oregon State University, U.S.A., G.B. Pant University, India and Agricultural University, Faizabad, India.



Dr Anuradha Agrawal

Convener

Dr Anuradha Agrawal is a Principal Scientist in Tissue Culture and Cryopreservation Unit at ICAR-NBPGR, New Delhi. She has been associated

with establishment of National Facility for Plant Tissue Culture Repository at ICAR- NBPGR and has been working on in vitro conservation and cryopreservation of banana over 25 years. She has contributed immensely towards Banana conservation, Banana diversity, Banana cryopreservation, Plant genetic resources management, Conservation of germplasm using in vitro and cryopreservation techniques, aquatic plant biology studies. She is the recipient of Boycott fellowship and was awarded Punjab Rao Deshmukh Best Woman Agricultural Scientist Award of ICAR. She has been a faculty and resource person during International, Regional and National trainings organized by NBPGR in collaboration with FAO/PGRI (Bioversity International) under Centre of Excellence (COE). She has more than 100 research publications including research papers in National and International journals of repute. She is the Member Secretary, Core Organizing Committee of International Agrobiodiversity Congress 2016.



Prof. M.S. Swaminathan

Speaker

Prof. M.S. Swaminathan, a plant geneticist by training, is one of the twenty most influential Asian of the 20th century. He is the Chair of International Agrobiodiversity Congress 2016. Recipient of prestigious Padma Shri, Padma Bhushan and Padma Vibushan, he currently holds the UNESCO Chair in Ecotechnology at the M S Swaminathan Research Foundation in Chennai, India. He was the scientific leader of the green revolution movement. He has served in prestigious positions in ICAR, Ministry of Agriculture, Planning Commission, National Academy of Agricultural Sciences, National Commission on Farmers. He served in international organizations like UN, FAO, etc. He has received 73 honorary doctorate degrees from universities around the world and has bagged many prestigious awards -Ramon Magsaysay Award, Albert Einstein World Science Award, Tyler and UNEP Sasakawa Prize, the Indira Gandhi Prize for Peace, Disarmament and Development, Franklin D Roosevelt For Freedoms Medal, the Mahatma Gandhi Prize, the Lal Bahadur Shastri National Award.

PLENARY SESSION 2

Conservation through Use

7.11.16; 9.00-10.40

AP Shinde Hall



Dr R. S. Paroda

Co-Chair

Dr R. S. Paroda, is the Chairman of the TAAS, President of the ISPGR and the Co-Chair of International Agrobiodiversity Congress 2016. Recipient of the prestigious Padma Bhushan, he is an accomplished plant breeder and geneticist by profession and an able research administrator. He has made significant contributions in the field of crop science research. He is known for modernization and strengthening of the national agricultural research system (NARS) in India as well as in Central Asia and the Caucasus. He is the main architect of one of the world's largest National Gene Bank in New Delhi, India. He has

received 15 D.Sc. (Honoris Causa) degree from universities around the world. He is the recipient of numerous awards and recognitions, including Rafi Ahmad Kidwai Award, ICAR Team Research Award, FICCI Award, Om Prakash Bhasin Award, BP Pal Gold Medal, Borlaug Award, Mahendra Shiromani Award etc. Founder chairman of Global Forum on Agricultural Research (GFAR), he was also the President of Indian Science Congress and the National Academy of Agricultural Sciences, India.



Dr Cristian Samper

Co-Chair

Dr Cristian Samper, is Chair, Bioversity International Board of Trustees, President and CEO of the Wildlife Conservation Society in New York. Dr Samper is currently a member of the Board of Overseers of Harvard University and the Carnegie Institution for Science. He was also the founder and first director of the Alexander von Humboldt Institute, Colombia. He is a Fellow of the National Academy of Sciences of Colombia and the Academy of Sciences for the Developing World. He has been awarded the Derek Bok prize for excellence in teaching.



Kuldeep Singh

Co-Chair

Dr Kuldeep Singh, Director of ICAR- NBPGR, New Delhi, India. His field of specialization include Plant Breeding, Molecular Breeding, Molecular Genetics, Genomics and Wide Hybridization. He has more than 200 publications including 94 in refereed journals. Dr Kuldeep is involved in development of three varieties of wheat and five of rice (all involving MAS). He has led 28 externally funded projects at PAU including Wheat Genome Sequencing Project.



Dr Gurdev Singh Khush

Plenary Speaker

Dr Gurdev Singh Khush, presently at University of California and the Chairman of Gurdev Singh Khush Foundation, India. A World Food Prize Laureate (1996), Dr Khush worked at International Rice Research Institute (IRRI) for 35 years. He developed High yielding and, disease and insect resistant varieties of rice, which ushered in green revolution in rice farming. With 9 books to his credit as an author/editor, Dr Khush authored 250 papers in scientific journals of international repute. For his valuable contribution to world food security, Dr Khush was awarded World Food Prize, Padma Shri, Golden sickle Award. He has received honorary doctorate degrees from twelve universities of international repute is a fellow of many academies including the Indian National Science Academy, Indian Academy of Sciences, U.S. National Academy of Sciences and Royal Society of London.



Dr Toby Hodgkin

Plenary Speaker

Dr Toby Hodgkin is the Co-ordinator for Platform for Agrobiodiversity Research and honorary research fellow at Bioversity International. An expert in the field of conservation, Plant Genetic Resources and Genetics and Evolution, and former DG Bioversity International he has been actively involved in Maintenance and use of agrobiodiversity, crop genetics resources, in situ (on farm) conservation, use of genetic diversity.



Dr S. Rajaram

Panelist

Dr S. Rajaram is the Director at Biodiversity and Integrated Gene Management (BIGM) Program at ICARDA, Aleppo, Syria. He has lead collaboration on wheat germplasm between CIMMYT and ICAR (India). His leadership has resulted into prodigious release of more than 481 cultivars of bread wheat in 51 countries over 30 years of his scientific career at CIMMYT, Mexico. These varieties occupied more than 58 million hectares in the developing countries. A recipient of several prestigious awards and honors including Padma Shri Award, Monsanto Distinguished Career Award, U.S.A., Golden Summit Award, The Rank Prize Award, U.K, Borlaug Award, India, Crawford Fund Derek Tribe Award, Australia, King Bedouin Award, CGIAR, he has Honorary Doctorate Degrees from Oregon State University, U.S.A., G.B. Pant University, India and Agricultural University, Faizabad, India.



Ms Marie Haga

Panelist

Ms Marie Haga is the Executive Director of the Global Crop Diversity Trust, Germany. With an experience from Foreign Service as a career diplomat, she had previously been member and Deputy Chair of the Global Crop Diversity Trust Executive Board. Besides various positions in the Norwegian Ministry of Foreign Affairs and three other Ministerial positions Marie Haga has also acted as Director for Renewable Energy in the Federation of Norwegian Industries and as Secretary General of the Norwegian Air Ambulance - the biggest voluntary organization in Norway. Having been on several boards, including as Chair of the Governing Board of the Norwegian Institute for Nature Research (NINA) and Chair of the Governing Board of the Industrial Development Corporation of Norway, she currently serves on the Board of Directors of the Regional Environmental Center (REC). She has published three books - one novel and two on Norwegian politics.



Prof. Calvin Qualset

Panelist

Prof. Calvin Qualset is Founding Director of the Genetic Resources Conservation Program, Professor Emeritus and research professor at the University of California, Davis, USA. His research areas include crop breeding, genetics and evolution, conservation of plant genetic resources and biotechnology policy. His team of researchers developed and released 20 varieties of wheat, oat, and triticale. Dr Qualset has served as chair of the Section on Agriculture, Food, and Renewable Natural Resources for the American Association for the Advancement of Science (AAAS), president of the American Society of Agronomy (ASA) and president of the Crop Science Society of America (CSSA). He has been honored as a fellow by the AAAS, ASA, and CSSA.



Dr Usha Zehr

Panelist

Dr Usha Zehr is the Joint Director, Research at Maharashtra Hybrid Seeds Company Limited, India wherein she is leading the research on plant biotechnology, technology transfer to farmers, utilization of new technologies and tools including biotechnology for improving the quality and productivity of seeds and agriculture.

Dr Zehr serves on a number of boards including M.S. Swaminathan Research Foundation. She has also been a member of the Technical Advisory Committee of CGIAR and other committees such as the Intellectual Property Committee of International Seed Federation. She is also involved in the founding and functioning of several charitable and educational organizations at Jalna, Maharashtra.

TECHNICAL SESSION 2-A

Conservation Strategies and Methodologies

Concurrent Session: Seed Genebanks

7.11.16; 11.00-13.15
AP Shinde Hall



Dr B. S. Dhillon

Co-Chair

Dr B. S. Dhillon is the Vice Chancellor of Punjab Agricultural University, India. An internationally renowned agricultural scientist, Dr Dhillon is the recipient of several prestigious awards and recognition including Om Prakash Bhasin Award and Rafi Ahmed Kidwai Award of ICAR. With more than 40 years of experience in research and teaching, he has been actively associated with world class institutions

including University of Hohenheim, Stuttgart, Germany, International Maize and Wheat Improvement Center, Mexico and University of Birmingham, UK. He has been a Fellow of National Academy of Agricultural Sciences, Indian National Science Academy and National Academy of Sciences, India. Known for scientific breakthroughs in maize breeding Dr Dhillon has published 340 research papers in journals of international repute and has also authored many books.



Dr R. S. Hamilton

Co-Chair

Dr R.S. Hamilton is the Head at T.T. Chang Genetics Resources Center and International Rice Genebank at Philippines. He is an evolutionary biologist providing leadership to safeguard rice genetic resources in the genebank at IRRI, facilitate their effective and responsible use, develop new approaches to improve their conservation.

He represents IRRI and the CGIAR in relevant international fora, particularly in the International Treaty on Plant Genetics Resources for Food and Agriculture. He is a member of executive committee of the "Article 15 Group of genebank managers", the International Advisory Council for the Svalbard Global Seed Vault and the Steering Committee of DivSeek.



Dr H. D. Upadhyaya

Convener

Dr H.D. Upadhyaya is the Director and Principal Scientist, Genebank at International Crops Research institute for the Semi-Arid Tropics (ICRISAT),

Patancheru, India. A well known genetic resources specialist and a successful groundnut breeder, he is the recipient of several prestigious awards and recognition including Crop Science Society of America awards, fellow of the American Society of Agronomy and Crop Science Society of America, Frank N Meyer Medal award for Plant Genetic Resources, Crop Science Research Award etc. Dr Upadhyaya's work on conceptualizing and developing mini core collection and utilizing this resource for identifying new sources of variations for climate resilient traits is laudable. As a groundnut breeder, he has developed large number of early-maturing, drought tolerant, high oil containing, and aflatoxin resistant high yielding breeding lines, of which 31 have been released as 44 cultivars in 22 countries, both in Africa and Asia. With publication of over 700 research papers in National and International journals including several in high impact factor journals, Dr Upadhyaya has been a great mentor to the scientists, students, and technicians from Asia, Africa, Europe and USA.



Ms Marie Haga

Speaker

Ms Marie Haga is the Executive Director of the Global Crop Diversity Trust, Germany. With an experience from Foreign Service as a career diplomat, she had previously been member and Deputy Chair of the Global Crop Diversity Trust Executive Board. Besides various positions in the Norwegian Ministry of Foreign Affairs and three other Ministerial positions Marie Haga has also acted as Director for Renewable Energy in the Federation of Norwegian Industries and as Secretary General of the Norwegian Air Ambulance - the biggest voluntary organization in Norway. Having been on several boards, including as Chair of the Governing Board of the Norwegian Institute for Nature Research (NINA) and Chair of the Governing Board of the Industrial Development Corporation of Norway, she currently serves on the Board of Directors of the Regional Environmental Center (REC). She has published three books - one novel and two on Norwegian politics.



Dr H. D. Upadhyaya

Speaker

Dr H. D. Upadhyaya is the Director and Principal Scientist, Genebank at International Crops Research institute for the Semi-Arid Tropics (ICRISAT), Patancheru, India. A well known genetic resources specialist and a successful groundnut breeder, he is the recipient of several prestigious awards and recognition including Crop Science Society of America awards, fellow of the American Society of Agronomy and Crop Science Society of America, Frank N Meyer Medal award for Plant Genetic Resources, Crop Science Research Award etc. Dr Upadhyaya's work on conceptualizing and developing mini core collection and utilizing this resource for identifying new sources of variations for climate resilient traits is laudable. As a groundnut breeder, he has developed large number of early-maturing, drought tolerant, high oil containing, and aflatoxin resistant high yielding breeding lines, of which 31 have been released as 44 cultivars in 22 countries, both in Africa and Asia. With publication of over 700 research papers in National and International journals including several in high impact factor journals, Dr Upadhyaya has been a great mentor to the scientists, students, and technicians from Asia, Africa, Europe and USA.



Mariana Yazbek

Speaker

Dr Mariana Yazbek is a Post-Doctoral Fellow, working at the Genetic Resources Section of ICARDA. She is an associate member of the Nature Conservation Center (AUB), where she conducted research related to biodiversity assessment and conservation in Lebanon. Her research interests include promoting *in situ* conservation of Agrobiodiversity (landraces and wild relatives of agricultural crops) as well as managing seed bank and GRS activities conducted in Lebanon. She has experience in biodiversity of Lebanon and has worked for a while on promoting public awareness about flora of Lebanon and native plants for landscape. She also had done research on Ecology and Systematics, conducting revisions, monographs and floristic studies, learning and teaching about Lebanese Plant communities and Landscapes. Dr Yazbek has published several journals and scientific papers related to peaches and almonds, Trees of Lebanon, Conservation and Sustainable Use of Dryland Agro-biodiversity in Lebanon.



Dr N. Murthy Anishetty

Speaker

Dr N. Murthy Anishetty has over 45 years of professional experience including 26 years with the Food and Agriculture Organization of the United Nations (FAO, Rome, Italy), in the area of overall agricultural development, with major emphasis on the conservation and sustainable utilization of plant genetic resources and in the development of seed sector. He also liaised with UN agencies and IARCs and was an active member in the preparation of First State of World's Report on PGRFA and First Global Plan of Action. He has participated in numerous international dialogues and negotiations related to plant genetics resources and biodiversity. He has served as Consultant to FAO, IPGRI, CFC, IFAD, and is member of several committees including National Biodiversity Authority of India (NBA) and A.P. State Diversity Board, ICAR institutions, NGOs and private seed sectors.



Dr R. K. Tyagi

Speaker

Dr R. K. Tyagi is a Principal Scientist and Head, Division of Germplasm Conservation, ICAR-NBPGR, New Delhi. His research interests include collection, conservation, characterization, evaluation and documentation of plant genetic resources with current focus being on conservation of PGR employing various conventional and modern methods. He has successfully completed several inter-institutional and international projects and conducted many trainings on management of PGR. Dr Tyagi has served in various capacities including Vice President and Editor-in-Chief of Indian Society of Plant Genetic Resources (ISPGR). Currently, he is General Secretary of ISPGR and Co-organizing Secretary of International Agrobiodiversity Congress 2016. A Fellow of ISPGR and Indian Society of Seed Technology, Dr Tyagi is the faculty of PG School, IARI, New Delhi and has over 150 research publications to his credit including research papers, book and book chapters related to PGR management.

TECHNICAL SESSION 2-B

Conservation Strategies and Methodologies

Concurrent Session: *In situ* and On-farm Conservation

7.11.16; 11.00-13.15
NAAS Lecture Hall



Dr Stephan Weise

Co-Chair

Dr Stephen Weise is the Deputy Director General Research and joined Bioversity International in 2008 as the Director of the Commodities for Livelihoods Programme, in France. Before joining Bioversity International, he worked for 16 years with the International Institute of Tropical Agriculture (IITA) on a variety of programmes related to tree crops, the environment, and farm diversification in the forest margins of West and Central Africa. He was the Regional Programme Manager of the Sustainable Tree Crops Programme - and was also the coordinator of the working group on agronomic/landscape sustainability in the ASB Partnership for the Tropical Forest Margins hosted by the World Agroforestry Centre.



Dr H. S. Gupta

Co-Chair

Dr H. S. Gupta is the Director General of the Borlaug Institute for South Asia (BISA). He was honoured with the prestigious Rao Bahadur B Viswanath Award for his outstanding research contribution in the field of plant breeding and genetics, particularly improvement of maize through marker assisted selection, in hilly areas.



Dr Shailendra Rajan

Convener

Dr Shailendra Rajan is the Director, ICAR-Central Institute for Subtropical Horticulture, Lucknow, India. His research interests include Mango and guava breeding, Genetic resource management, GIS in PGR management and Horticulture database.



Dr Calvin Qualset

Speaker

Prof. Calvin Qualset is founding director of the Genetic Resources Conservation Program, Professor Emeritus and research professor at the University of California, Davis, USA. His research areas include crop breeding, genetics and evolution, conservation of plant genetic resources and biotechnology policy. His team of researchers developed and released 20 varieties of wheat, oat, and triticale.

Dr Qualset has served as chair of the Section on Agriculture, Food, and Renewable Natural Resources for the American Association for the Advancement of Science (AAAS), president of the American Society of Agronomy (ASA) and president of the Crop Science Society of America (CSSA). He has been honored as a fellow by the AAAS, ASA, and CSSA.



Dr Coosje Hoogendoorn

Speaker

Dr Coosje Hoogendoorn is the Senior Advisor KIT. Having worked for more than 30 years in international research for agricultural development, she is an all-round innovation professional with both technical and management skills in agricultural research for development. Her expertise includes plant breeding and seed systems, agricultural value chains, climate smart forestry and south-south collaboration.



Dr Nigel Maxted

Speaker

Dr Nigel Maxted is a Senior Lecturer in Genetic Conservation, School of Biosciences, University of Birmingham, United Kingdom. His research interest includes conservation of genetic diversity in plants, largely on species of socio-economic value, working primarily in Northern Asia, Middle East, Africa, Europe and the UK. He undertakes consultancy service in relation to plant genetic conservation for major international agencies. He recently prepared a Global Strategy for Crop Wild Relative Conservation Strategy for FAO of the United Nations, provided advice on Medicinal Plant Conservation in Jordan for the Global Environment Facility and formed part of a World Bank team assessing the implementation of plant genetic conservation in Egypt.



Dr V. Ramanatha Rao

Speaker

Dr V Ramanatha Rao is a co-founder of Global Research-for-development Support Ventures (GRSV) Consultancy Services, a not-for-profit organization, to serve the needs of agricultural research and development institutions and organizations. Dr Rao worked on agricultural biodiversity initially at ICRISAT and Bioversity International. He has contributed vastly to various programs focusing on genetic diversity, conservation and use of crop and forest genetic resources, ex situ and in situ conservation for improved livelihoods of rural poor; and human resource development projects/activities. He has also contributed towards the establishment of national plant genetic resources' program in many countries of Asia.



Dr Stefan De Haan

Speaker

Dr Stefan De Haan is the Program Management Officer at CIAT, Colombia. He has experience in agricultural development, food security, participatory approaches, research on crop genetic resources, breeding, varietal dissemination and seed systems, as well as expertise in research management. He has also worked at CIP in Peru on crop improvement, in-situ conservation and as the Leader of the Global Program on Genetic Resources.

TECHNICAL SESSION 2-C

Conservation Strategies and Methodologies

Concurrent Session: *In vitro*, Cryo and DNA Banking

07-11-2016; 11.00 - 13.15
NAAS Committee Room-1



Dr P. L. Gautam

Co-Chair

Dr P. L. Gautam is currently the Vice Chancellor of Career Point University Hamirpur. Besides being a member of Executive Board of Global Crop Diversity Trust, he has held many important positions including Chairman, NBA, Chairperson, PPV&FRA, Ministry of Agriculture, Vice Chancellor, G.B. Pant University of Agriculture and Technology, Pantnagar and, National Director, National Agricultural Technology Project, ICAR. He is the recipient of many awards and honours including Agriculture Today Life Time Achievement Award and Dr Harbhajan Singh Memorial Award.



Dr Emile Frison

Co-Chair

Dr Emile Frison is the Vice-Chair of the Board of Directors of Ecoagriculture Partners and Extraordinary Professor at the Catholic University of Leuven, Belgium and Chair, International Scientific Committee on Sustainable Food Systems, Daniel and Nina Carasso Foundation. With specialization in international agricultural research for development, he worked in Africa for six years on agricultural research and development. Formerly, as Director General of Bioversity International, he developed a strategy entitled "Diversity for Well-being" focusing on the contribution that agricultural biodiversity makes to the sustainability, resilience and productivity of smallholder agriculture and to the nutritional quality of diets. Dr Frison has over 175 scientific, technical and policy papers to his credit.



Dr Neelam Sharma

Convener

Recipient of ISCA Young Scientist award, Dr Neelam Sharma, is the Principal Scientist in Tissue Culture and Cryopreservation Unit at ICAR-NBPGR, New Delhi, India. She has an experience of working on PGR conservation using biotechnological tools, with special reference to medicinal, aromatic, rare and endangered plants and tuber crops. She has been associated with establishment of National Facility for Plant Tissue Culture Repository at ICAR- NBPGR and also the National In Vitro Genebank for Medicinal and Aromatic Plants at NBPGR. She has been actively involved as resource person and organizer for International, Regional and National trainings organized by ICAR- NBPGR in collaboration with FAO/PGRI (Bioversity International) under Centre of Excellence (COE) and NATP.



Prof. Hugh Pritchard

Speaker

Prof. Hugh Pritchard is the Senior Research Leader in the Department of Comparative Plant and Fungal Biology at Royal Botanic Garden, Kew. He leads research on comparative seed biology, with special interests in stress biology (desiccation, low temperature, oxidative), threshold models and global change, and seed storage stability. An Honorary Professor at Chinese Academy of Sciences, and University of Sussex, he is also Fellow – Society of Biology (FSB) and Linnean Society (FLS), trustee of Society for Low Temperature Biology and Assistant Editor, CryoLetters. He also provides international coordination of Kew's collaborative science with the Chinese Academy of Sciences, China and ICAR, India.



Dr Hiroshi Abe

Speaker

Dr Hiroshi Abe, a Senior Research Scientist, is a core member of Experimental Plant Division at RIKEN BioResource Center which has been selected as a National Core Institution of the Arabidopsis, plant cultured cells and DNA resources by the Japanese government. He is involved in Development of novel technologies for the preservation and characterization of wild-type *Arabidopsis* and plant cultured cells.



Dr Bart Panis

Speaker

Dr Bart Panis, Senior Scientist, Banana Conservation at Bioversity International and currently responsible for the banana collection conserved in liquid nitrogen. In the framework of the CGIAR Research Program on Roots, Tubers and Bananas, he is involved in the development of conservation technologies with a focus establishing cryopreservation protocols for a wide variety of plant species in collaboration with CG Centers like CIP, CIAT and IITA. He is involved in research aiming at developing storage protocols for banana botanical seed and also aiming at unravelling drought tolerance mechanisms in banana using phenotyping and proteomics.



Dr Rekha Chaudhary

Speaker

Dr Rekha Chaudhary is Principal Scientist and Officer-in-charge, Tissue Culture and Cryopreservation Unit, ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi. She has been involved in establishment of National Cryogenebank and has been working in the area of cryopreservation of seeds for over thirty years. Recipient of Punjab Rao Deshmukh Best Woman Agricultural Scientist Award of ICAR, she has been involved in International, Regional and National trainings organized by NBPGR in collaboration with FAO/PGRI (Bioversity International) under Centre of Excellence (COE).



Dr Badara Gueye

Speaker

Dr Badara Gueye is the head of the *in vitro* genebank/*in vitro* lab of IITA Genetic

Resources Center, Nigeria. He is a cell biologist/physiologist and has specialization in in vitro culture of tissues and organs and, hormonal physiology. He has conducted research on tissue and organ in vitro culture, hormonal physiology, cell biology/imaging, and plant genetic resources conservation. He also has experience in molecular biology (RNA and protein analysis), biochemistry and genetic transformation via *Agrobacterium tumefaciens*. He has participated in several Date Palm R4D projects in developing countries (Senegal, Mauritania, Djibouti, and Algeria) in collaboration with local and international partners.

TECHNICAL SESSION 2-D

Conservation Strategies and Methodologies

Concurrent Session: Animal and Aquatic Genetic Resources

07-11-2016; 11.00 - 13.15

ICAR Lecture Hall



Dr Modadugu Vijay Gupta

Co-Chair

Dr Modadugu Vijay Gupta is an Indian biologist and fisheries scientist, formerly ADG at World Fisheries Centre. A pioneer in the blue revolution of Southeast Asia, Dr Gupta has worked in Laos, Vietnam, Bangladesh, the Philippines, Thailand pursuing his belief that the aqua technology can provide food security and improve livelihoods of rural poor. He is the recipient of World Food Prize. He has been

awarded World Food Prize and also Sunhak Peace Prize, for development and dissemination of low-cost techniques for freshwater fish farming (using tilapia species) by the rural poor creating an aquaculture system for the poor, rural populations in Asia, Africa and the Pacific.



Dr H. Rahman

Co-Chair

Dr H. Rahman is the Deputy Director General, Animal Sciences at ICAR, New Delhi, India. He coordinates and monitors research activities at ICAR's 19 Research Institutes and their Regional Centers/Stations. The Division coordinates 7 All India Coordinated Research Projects and 6 Network Research Programmes. In addition, 4 Outreach Programmes and 3 Mega Seed Projects (poultry, sheep and

pig) are also being operated in different parts of the country at different ICAR institutes, State Agricultural / Veterinary Universities/ State Animal Husbandry Departments and Non-Governmental Organizations.



Dr Arjava Sharma

Convener

Dr Arjava Sharma is the Director of ICAR- National Bureau of Animal Genetic

Resources (NBAGR), Karnal, Haryana, India. With a rich experience of working in about a dozen laboratories of North America and Europe, he is presently leading research programmes aimed at characterization and conservation of indigenous livestock and poultry genetic resources. He is also the Project Co-ordinator for executing Network Programme on Animal Genetic Resources. He has many awards, three patents and several publications to his credit. Dr Sharma has published about 130 research articles, 110 conference presentations, 4 laboratory manuals, 6 books and several popular articles.



Dr Devin Bartley

Speaker

Dr Devin Bartley is the Robin Welcomme Scholar at Michigan State University (USA) while also functioning as a private consultant for FAO and a senior scientist at the World Fisheries Trust (Canada). Earlier at FAO, he dealt with genetic resource management issues in fisheries and aquaculture, specializing in genetic resources management, use of alien species, stock enhancements and habitat rehabilitation.



Dr S. J. Hiemstra

Speaker

Dr S.J. Hiemstra is programme manager of the Genetic Resources Programme at Wageningen UR and Head of the Animal Genetic Resources Group, at the Centre for Genetic Resources, the Netherlands (CGN). He is working at the interface between science, policies and practice, in particular in the areas of biodiversity, breeding and sustainable livestock sector development.



Dr S. B. Gokhale

Speaker

Dr S. B. Gokhale is the Director Research, BAIF Development Research Foundation and Head Central Research Station Uruli Kanchan, Pune. With wide experience in dealing with animals genetic resources, he has worked on more than 15 projects and has provided consultancy to many Institutes. He has authored 80 publications including five books (3 edited).



Dr C. N. Ravishankar

Speaker

Dr C. N. Ravishankar is Director, Central Institute of Fisheries Technology (CIFT), Cochin. His areas of specialization include fish processing and packaging technologies. He has developed, popularized and transferred many technologies to the seafood industry. He participated in the First Indian Antarctic Expedition and has more than 200 publications and has filed 17 patents. Recipient of Outstanding Team Research Award in the field of Fish Products Technology, from ICAR, New Delhi and K. Chidambaram Memorial Award from Fisheries Technocrats Forum, he has been instrumental in establishing Business Incubation Centre with office and pilot plant facility for the entrepreneurship development in fish and other food products.



Dr Arjava Sharma

Speaker

Dr Arjava Sharma is the Director of ICAR- National Bureau of Animal Genetic Resources (NBAGR), Karnal, Haryana, India. With a rich experience of working in about a dozen laboratories of North America and Europe, he is presently leading research programmes aimed towards characterization and conservation of indigenous livestock and poultry genetic resources. He is also the Project Co-ordinator for executing Network Programme on Animal Genetic Resources. He has many awards, three patents and several publications to his credit. Dr Sharma has published about 130 research articles, 110 conference presentations, 4 laboratory manuals, 6 books and several popular articles.

TECHNICAL SESSION 2-E **Conservation Strategies and Methodologies**

Concurrent Session: Microbial and Insect Genetic Resources

07-11-2016; 11.00 - 13.15
NAAS Committee Room-2



Dr N. K. Krishna Kumar

Co-Chair

Dr N. K. Krishna Kumar, is Country Representative of India office, Bioversity International, providing scientific leadership for research activities on the management and use of agricultural biodiversity being implemented in Central and South Asia. He is a renowned vector entomologist. He has over 150 research papers and many patents to his credit and has led commercialization of nearly 40 technologies in horticulture. He has worked extensively on vegetables from identifying the resistance sources to chilli thrips, brinjal leafhopper and fruitborer to developing integrated pest management. Dr Kumar is the person referred for vector transmission of plant viruses. He pioneered the work on vector components (aphids) in the epidemiology of papaya ring spot virus in south India, He is the recipient of many awards and honours including INSA Young Scientist Award, NAAS-Tata Award, DBT Bio-science Award, etc. .



Dr B. Venkateswarlu

Co-Chair

Dr B. Venkateswarlu is a Vice-Chancellor, VNMKV, Parbhani and Ex-Director, Central Research Institute of Dryland Agriculture (ICAR-CRIDA). His current areas of research include, rainfed agriculture, rural livelihoods, NRM and climate change. He is Fellow of NAAS and member of several Academic and Professional Societies in India. He has more than 100 research papers, 10 books and one patent to his credit.



Dr Sushil K. Sharma

Convener

Dr Sushil K. Sharma is the Principal Scientist at ICAR-NBAIM, Mau, India. His research interests include PGPR with special reference to phosphorus and zinc, solubilizing and mobilizing bacteria, and organic phosphorus mobilization through phytase producing rhizobacteria. He has several important publications related to PGPR.



Dr A. Verghese

Speaker

Dr Abraham Verghese Ex-Director, ICAR-NBAIR., Project Coordinator AICRP (Biocontrol) and Fellow of Royal Entomological Society, London is presently associated with GPSIAM. He is recipient of several awards and honours including Insect Environment and Biodiversity Award, Fellow, Confederation of Horticultural Association of India, Fellow, Royal Entomological Society, London (UK), Life time

Award, World Biodiversity Congress, GSRF and University of Colombo, DBT Award - Process Development and Commercialization.



Dr R. C. Upadhyay

Speaker

Dr R. C. Upadhyay is Principal Scientist from ICAR-Directorate of Mushroom Research, Solan. He is a Plant Pathologist working on Genetic Improvement in mushrooms.



Dr Priyadarsanan Dharma Rajan

Speaker

Dr Priyadarsanan Dharma Rajan is a Senior Fellow and Program Leader (Ecosystems & Global Change) at Ashoka Trust for Research in Ecology and in Environment (ATREE). His Research and Conservation interests include insect taxonomy, ecology and conservation, Conservation Policies and Deliberative democratic approaches in conservation. He is actively involved in research and teaching.



Prof. V.V. Belvadi

Speaker

Prof. V.V. Belvadi is the Professor of Entomology at University of Agricultural Sciences, Bangalore., For over two decades, he has been working in the area of pollination biology. He has completed two projects on Pollination biology of small cardamom and coffee.



Dr Sushil K. Sharma

Speaker

Dr Sushil K. Sharma is the Principal Scientist at ICAR-NBAIM, Mau, India. His research interests include PGPR with special reference to phosphorus and zinc, solubilizing and mobilizing bacteria, and organic phosphorus mobilization through phytase producing rhizobacteria. He has several important publications related to PGPR.

TECHNICAL SESSION 3

Adaptation and Mitigation to Climate Change

Common Session

7-11-2016; 14.15-16.40

A.P. Shinde Hall



Dr J.S. Sandhu

Co-Chair

Dr J.S. Sandhu is the DDG, Crop Sciences at ICAR, New Delhi, India. Widely known as a pulse breeder, Dr Sandhu is the recipient of several prestigious awards and honours. A fellow of NAAS, he has been instrumental in developing 22 varieties of different pulse crops including 10 of chickpea, five of mungbean, two of pigeonpea, four of urdbean and one of soybean. His commendable

work on inter-specific hybridization in chickpea and Vigna has been widely recognized. He has played a vital role in drafting germplasm exchange guidelines and has efficiently carried forward three mega programmes including National Food Security Mission, Bringing Green Revolution in Eastern India and Crop Diversification. He has published 215 research papers including 101 research articles, 3 books authored/edited, 13 book chapters etc. in journals of national and international repute.



Dr Ravinder Kaur

Co-Chair

Dr Ravinder Kaur is the Acting Director of IARI, New Delhi, India. She has developed several novel indigenous technologies such as (a) IMPASSE© and Usar© – the environmental impact assessment tools for assessing short/ long term impacts of a range of geo-hydrologic conditions/resource management plans on the environmental degradation and productivity of salt-affected agricultural lands.

She has a number of copyrights and patents to her credit and has also been honoured with several prestigious awards such as ICAR Young Scientist Award, Jawahar Lal Nehru Award, ICAR Punjab Rao Deshmukh Women Agricultural Scientist Award and Bharat Jyoti Award.



Dr J. C. Rana

Convener

Dr J. C. Rana, Head, Division of Germplasm Evaluation at ICAR-NBPGR, New Delhi, has an experience of more than 28 years in the management of plant genetic resources including in situ on farm conservation and climate change. He has released 12 varieties and one mutant for commercial cultivation of different crops.

He has standardized the propagation and production technology for the commercial cultivation of eight crops and refined olive oil extraction technology. He has to his credit, 6 US patents, 13 registered genetic stocks and 6 farmer's varieties. He is the recipient of ICAR MS Swaminathan

National Award for outstanding Research on Hill Agriculture and Dr RB Ekbote National Prize. A Fellow of National Academy of Agricultural Sciences, India, he has 170 publications to his credit.



Dr Andy Jarvis

Speaker

Dr Andy Jarvis is the Director of the Decision and Policy Analysis Area in the International Centre for Tropical Agriculture (CIAT) and is a Flagship Leader on the CGIAR Research Program for Climate Change, Agriculture and Food Security (CCAFS), based in Cali, Colombia. Dr Jarvis has 10 years experience of cutting edge scientific research in developing countries to support the goals of alleviating poverty and protecting essential ecosystem services of importance to humanity. His focus of research has been on the use of spatial analysis and environmental modeling to address issues such as agricultural biodiversity conservation, adaptation to climate change and maintenance of ecosystem services. He has also worked as a consultant to FAO, Rome, European Union and Global Environment Facility. A recipient of Crop Science Society of America (CSSA) C-8 Genetic Resources award and Ebbe Nielsen award, he has 70 publications to his credit.



Prof. Sir Edwin M. Southern

Speaker

Prof. Sir Edwin M. Southern, FRSE is the Chair of the Kirk House Trust. He founded the charity in 2000 using royalties from licencing microarray technology, which were donated from Oxford Gene Technology, a company he founded in 1995. Sir Edwin is Emeritus Professor of Biochemistry at the University of Oxford and an honorary fellow of Trinity College, Oxford. He is best known for his invention of the Southern blot, now a common laboratory procedure.



Dr Jacob van Etten

Speaker

Dr Jacob van Etten, is a Senior Scientist and a Theme Leader for Adaptation to Climate Change at Bioversity International. He has been instrumental in bringing together insights and methods from the social, environmental and plant sciences to study plant genetic resources and agricultural development. He has developed quantitative and geospatial methods to study crop diversity and environmental change. He has a specific interest in using information and communication technology in farmer-participatory crop improvement for speeding up adaptation to climate change. He has also worked for FAO in Mali and for the International Rice Research Institute in the Philippines.



Dr J. C. Rana

Speaker

Dr J. C. Rana, Head, Division of Germplasm Evaluation at ICAR-NBPGR, NewDelhi, has an experience of more than 28 years in the management of plant genetic resources including in situ on farm conservation and climate change. He has released 12 varieties and one mutant for commercial cultivation of different crops. He has standardized the propagation and production technology for the

commercial cultivation of eight crops and refined olive oil extraction technology. He has to his credit, 6 US patents, 13 registered genetic stocks and 6 farmer's varieties. He is the recipient of ICAR MS Swaminathan National Award for outstanding Research on Hill Agriculture and Dr RB Ekbote National Prize. A Fellow of National Academy of Agricultural Sciences, India, he has 170 publications to his credit.



Dr Devendra Gauchan

Speaker

Dr Devendra Gauchan is currently National Project Manager based at Bioversity International's Nepal office in Kathmandu. He has a specialization in policy and economics of agricultural biodiversity conservation. He has worked and served in agricultural research and development sector in various capacities in Nepal for over 20 years. He has been active in Seed System and Agricultural Biodiversity Policy research in Nepal and one of the core team members involved in drafting the recently implemented Nepal's long term 'National Seed Vision 2025'.

SATELLITE SESSION 1

Harnessing Biodiversity for Food Security and Sustainable Development (CIMMYT)

07-11-2016; 14.15-16.40
NAAS Lecture Hall



Dr Martin Kropff

Speaker

Dr Martin Kropff is the Director General of CIMMYT. He has served successive roles at Wageningen UR, including as Director General of the Plant Sciences Group and has been on the executive board. As systems agronomist at the International Rice Research Institute (IRRI) in the Philippines, he led an international program with National Agricultural Research Systems and Universities in nine Asian countries on systems research and simulation for rice production. He has also been member of the board of directors of the CGIAR, the 15-member consortium of international agricultural researchers.



Dr Kevin Pixley

Speaker

Dr Kevin Pixley is the Director of the Genetic Resources Program of the CIMMYT. His current responsibilities include oversight of research to characterize and facilitate use of genetic resources, as well as biosafety related to transgenic maize and wheat research at CIMMYT. Dr Pixley is also an adjunct associate professor at the University of Wisconsin. He has over 50 publications including book chapters.



Dr Sukhwinder Singh

Speaker

Dr Sukhwinder Singh is leading CIMMYT-SeeD Wheat project and has expertise in improving crop productivity under biotic and abiotic stresses through integration of basic and applied research. He has experience in managing projects, supervising scientists, mentoring students, and administering extramural grants. He is a Rockefeller Foundation Biotechnology Career Fellow (IRRI) and has more than 55 publications to his credit.



Dr Gilberto E. Salinas Garcia

Speaker

Dr Gilberto E. Salinas Garcia is a Plant Genetic Resource Researcher at CIMMYT - International Maize and Wheat program. He heads Capacity Development at Seeds of Discovery (SeeD) initiative. His research work is related to unlocking the genetic potential of maize and wheat genetic resources.



Ms Cynthia Ortiz

Speaker

Ms Cynthia Ortiz is a Graduate student in Biotechnology at the Center for Research and Advanced Studies of the National Polytechnic Institute (CINVESTAV) in Mexico city. Ms Ortiz is conducting research for her Master of Science thesis mentored by SeeD scientist Dr Sukwinder Singh, who is helping her map the quantitative trait loci for phenological and grain yield related traits in wheat varieties created by crossing synthetic wheat varieties with elite lines.



Ms Laura Bouvet

Speaker

Ms Laura Bouvet is a Graduate student and BBSRC DTP student at Department of Plant Sciences, University of Cambridge. She is working under Dr James Cockram on molecular genetics and genomics aspect of biotic and abiotic tolerance in wheat.



Dr Prashant Vikram

Speaker

Dr Prashant Vikram is working on Genomics approach to explore and unlock potential from wheat genebanks. He is a wheat genetics Postdoc from International Maize and wheat Improvement Center (CIMMYT), Mexico. He completed his doctoral programme from IRRI, Philippines. He worked at two ICAR institutions IIPR, Kanpur and NRCPB, New Delhi. He has worked as a visiting scientist at IRRI, Philippines.



Dr Anthony Hall

Speaker

Prof Anthony Hall is working at the Institute of Integrative Biology, University

of Liverpool. He is working on a genomic project to accelerate the breeding of new drought tolerance wheat varieties and is aiming to characterize the wheat epigenome. Under a prestigious BBSRC Senior Research Development Fellowship he developed next generation genetic tools for wheat which led to bridge the gap between fundamental work in Arabidopsis and applied wheat research.



Dr Navtej Bains

Speaker

Dr Navtej Bains, is a Senior Wheat Breeder at Department of Plant Breeding and Genetics, PAU, Ludhiana, India. His research focus is on development of climate resilient wheat varieties using an efficient accelerated breeding system, developing protocol for doubled haploidy in wheat and marker-assisted selection for faster wheat breeding. He has published 36 scientific papers in national and international journals.

SATELLITE SESSION 2

Agrobiodiversity for Nutrition and Health **(Bioversity International and NIN)**

07-11-2016; 14.15-16.40
NAAS Committee Room-1



Dr Soumya Swaminathan

Co-Chair

Dr Soumya Swaminathan, is currently positioned as Secretary, Department of Health Research - Ministry of Health and Family Welfare, Government of India, and DG, ICMR, the apex body in India for the formulation, coordination and promotion of Biomedical research. A Pediatrician by profession with specialization in Pediatric Pulmonology, she is known for her work in Tuberculosis as a Clinical Scientist. She has been a member of various National and International committees. She has several awards and honours to her credit including Lifetime Achievement Award by Indian Association of Applied Microbiologists.



Dr Gina Kennedy

Speaker

Dr Gina Kennedy is the Theme leader, Diet Diversity for Nutrition and Health at Bioversity International. She leads a research programme to understand the role of agricultural biodiversity in improved nutrition and health and serves as the Bioversity International focal point for the CGIAR Research Program on Agriculture for Nutrition and Health. Her activities also include research design, implementation and analysis of

primary research questions related to the role of agricultural biodiversity, nutrition and sustainable diets. She also identifies and pursues opportunities for funding and provides technical assistance to other CGIAR Research Program leaders working on the diet diversity and diet quality cross-cutting Intermediate Development Objective. She has the experience of working for FAO, GIZ in Guinea, West Africa and the public health system in the Republic of Kiribati.



Dr T. Longvah

Speaker

Dr T. Longvah is Deputy Director and Head of Food Chemistry Division at the National Institute of Nutrition, Hyderabad, India. His current research focus is on food composition, biodiversity, indigenous foods and micronutrient deficiencies. His group is responsible for the Indian Food Composition database and he is currently the regional coordinator of SAARCFOODS. He is a member of the IUNS task force on “Traditional, Indigenous and Cultural Food and Nutrition” as well as the IUNS task force on “Food Biodiversity”.



Dr S. Muranaka

Speaker

Dr S. Muranaka is currently a researcher at JIRCAS working on the evaluation and utilization of genetic resources of cowpea and yam, important regional crops of West Africa. Dr Muranaka worked as a plant physiologist at the Arid Land Research Center, Tottori University, Japan, and the International Institute of Tropical Agriculture, Nigeria.



Dr Gladys Mugambi

Speaker

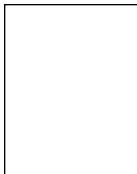
Dr Gladys Mugambi is a registered nutritionist working with the Ministry of Health in Kenya and also the Scaling up Nutrition focal person for Kenya. She has 19 years of experience working with the government as a nutritionist, 10 years at implementation level and 9 years at policy level. With experience in both clinical and public health nutrition. She has worked as a program manager for MIYCN, Micronutrient prevention and Food Fortification. She is also a member of the committee for Implementation of Comprehensive Africa Agriculture Development Program in Kenya.



Dr Jitendra Kumar

Speaker

Dr Jitendra Kumar is Director, Directorate of Medicinal and Aromatic Plant Research, Borjavi, Anand, Gujarat, India. He has made significant contribution in the area of agrochemical formulations, botanicals and nanotechnology. His work has led to the development of several patented technologies. He has over 350 scientific publications including 13 patents / patent applications, 115 research papers and 9 books. A fellow of National Academy of Agricultural Sciences (NAAS), India, he is the recipient of several awards and recognitions including ICFRE Neem Award, Dr Ram Nath Singh Award, SPSS Outstanding Scientist Award, 2013 etc.



Dr S. Subhanandhan

Speaker

Dr S. Subhanandhan is The present General Secretary of Tamilnadu Parambariya Siddha Vaidhya Maha Sangam (TPSVMS) at Sri Puttru Maharishi Social and Medical Service Center, Vell-ore, The prime motive of TPSVMS is to bring all the traditional healers in Tamilnadu State under one umbrella. All the traditional healers practicing across the state were registered and orientation classes were conducted for them at regional levels. Taluk Level Associations were formed to help the healers to find remedies at Taluk Level itself.

FARMERS' FORUM

Farmers' Role in Conservation of Genetic Resources

07-11-2016; 14.15-16.40

Basement Dining Hall (Below AP Shinde Hall)



Dr R. R. Hanchinal

Moderators

Dr R. R. Hanchinal is Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, Government of India. He has served at important positions at National and International level including Vice Chancellor, UAS, Dharwad and advisor to Indonesia government for the development of Food Crop Research. He has made significant contributions in the area of Wheat Improvement for hot to very hot dry environments. His work relates to both basic and applied aspects. In wheat he developed 17 varieties which include the world's first semi-dwarf dicoccum wheat varieties DDK-1001 and DDK-1009.



Dr A. K. Singh

Moderators

Dr A. K. Singh, is Deputy Director General (Extension), ICAR, India. He is heading all extension activities of ICAR particularly of Krishi Vigyan Kendras across the country.



Dr Vipin Kumar

Moderators

Dr Vipin Kumar is the Director and Chief Innovation Officer at the National Innovation Foundation at Ahmedabad. His area of interest is incubation and promotion of green grassroots innovations and outstanding traditional knowledge, intellectual property protection, business development, commercialization and social diffusion. He has keen interest in developing open source technologies, which can be used

for generation of employment opportunities for many, reduce cost and/or improve environmental conditions. He commercialized over 25 products based on grassroots innovations through various companies. A member of various prestigious committees including DBT, PPV&FRA, CSIR, ICMR, NBA, he has published over 50 research papers in the journals of international repute.



Dr R. C. Agrawal

Convener

Dr R. C. Agrawal is the Registrar General, PPV&FRA, Ministry of Agriculture, Government of India. As a Senior Consultant and Member Secretary of the Development of Plant Variety Information System of the PPV&FRA, he has contributed significantly to establish the Plant Variety Information System (PVIS) of this Authority. He has also worked as National Co-ordinator of Component-1 of World Bank funded programme National Agricultural Innovation Project (NAIP) at ICAR. He was primarily responsible for establishing a National Information Sharing Mechanism (NISM) on the implementation of Global Plan of Action for the conservation and sustainable utilization of plant genetic resources for food and agriculture in India. Many online databases related to PGR and plant varieties developed by Dr Agrawal are in use by researchers in India. He has more than 55 publications including two edited books and crop catalogues to his credit.

FARMERS' FORUM Evening Lecture

**07-11-2016; 17.00-18.00
AP Shinde Hall**



Prof. V. L. Chopra

Co-Chair

Prof. V. L. Chopra is the chancellor of Central University of Kerala. A renowned Indian biotechnologist, geneticist and agriculturalist has served as DG, ICAR, and member of the Planning Commission of India. He is elected fellow of several science academies such as Indian Academy of Sciences, Indian National Science Academy, National Academy of Agricultural Sciences, National Academy of Sciences, India, European Academy of Sciences and Arts and The World Academy of Sciences (TWAS). He is the recipient of a number of honors including prestigious Padma Bhushan, Borlaug Award, FAO World Food Day Award and Om Prakash Bhasin Award.



Prof. Ronnie Coffman

Co-Chair

Professor Ronnie Coffman is the International Professor of Plant Breeding and Director of International Programs of the College of Agriculture and Life Sciences at Cornell University. He is also the Principal Investigator of the Agricultural

Biotechnology Support Project (ABSPII), the Durable Rust Resistance in Wheat Project, the Agricultural Innovations Partnership, and the NextGen Cassava Project. His area of interest include Agricultural biotechnology and crop improvement. His work has been important for the development of improved rice varieties grown on several million hectares throughout the world.



Dr Gurinder Jit Randhawa

Convener

Dr Gurinder Jit Randhawa is a Principal Scientist in Division of Genomic Resources at ICAR-NBPGR, New Delhi, India. Dr Gurinderjit Randhawa, Commonwealth Fellow, has established a GM detection laboratory of international standards and developed cost-effective and robust DNA-based diagnostics for 15 GM crops. She has to her credit three granted patents and is an expert member of international and national committees and is the recipient of Agriculture Leadership Award and Best Scientist Award by Science and Technology and has more than 70 publications in journals of National and International repute.



Dr Peter Raven

Speaker

Dr Peter Raven is one of the world's leading botanists and an advocate of conservation and biodiversity. For four decades, he headed the Missouri Botanical Garden, an institution he nurtured into a world-class center for botanical research, education and horticultural display. Described by Time magazine as a "Hero for the Planet," Dr Raven champions research around the world to preserve endangered plants and is a leading advocate for conservation and a sustainable environment. An author of Biology of Plants, an internationally best-selling textbook, Raven is the recipient of numerous honours and awards, including the prestigious International Prize for Biology from the government of Japan and the U.S. National Medal of Science, the country's highest award for scientific accomplishment. He has also been a member of President Bill Clinton's Committee of Advisors on Science and Technology.

PLENARY SESSION 3

Agrobiodiversity for Livelihood Security and Ecosystem Services

08.11.2016; 09.00-10.40
AP Shinde Hall



Prof. Ramesh Chand

Co-Chair

Prof. Ramesh Chand, currently a member of NITI Aayog. With more than 30 years of experience in research and teaching in the field of agricultural economics and policy, Prof. Chand is the recipient of several prestigious awards including Jawaharlal Nehru Award and Rafi Ahmed Kidwai Award of Indian Council of

Agricultural Research. A Fellow of National Academy of Agricultural Sciences and Indian Society of Agricultural Economics, he is a consultant for FAO, UNDP, ESCAP and World Bank. He was a Visiting Professor at the University of Wollongong, NSW Australia in 2000. He has chaired important committees on Agriculture Policy set up by various Ministries, Government of India and is at present engaged in research on Food Policy, Trade and WTO, and Agricultural Growth and Development. He is also the Technical Expert for inter governmental meetings like G 20, SAARC, UN-ESCAP and FAO. He has authored seven books and published more than 100 research papers in national and international journals.



Dr Trilochan Mohapatra

Co-Chair

Dr Trilochan Mohapatra is Secretary, Department of Agricultural Research and Education & Director General, ICAR, New Delhi, India. Formerly, Director-cum-Vice Chancellor of the prestigious Indian Agricultural Research Institute, New Delhi and the Director of National Rice Research Institute (formerly CRRRI), Cuttack, he also served National Research Centre on Plant Biotechnology, IARI, New Delhi as a researcher and a teacher for about 20 years. He is a Fellow of the Indian National Science Academy, National Academy of Sciences-India, Allahabad and the National Academy of Agricultural Sciences, New Delhi. He also received the recognition Award of the National Academy of Agricultural Sciences for the biennium 2013-14. A scientist of International repute, he worked in the area of molecular genetics and genomics. Dr Mohapatra has over 145 research papers in national and international journals and several book chapters. His research accomplishments include development of the first high yielding Basmati rice variety resistant to bacterial leaf blight and, physical mapping and genome sequencing of rice and tomato. He has the distinction of receiving several honours and awards in recognition of his excellent academic and research contributions.



Dr S. C. Dubey

Convener

Dr S. C. Dubey, is the Head, Division of Plant Quarantine at ICAR-NBPGR, New Delhi, India. A scientist of repute, he has specialization in fungal plant pathogens of pulses with special reference to diversity, race profiling, diagnostics, quarantine processing of PGR, management of diseases of pulse crops using host resistance and bioagents. He has also worked in the area of development of molecular markers for diagnostics and detection of pathogenic fungi. Recipient of several awards, he is also the editorial member of various reputed journals.



Prof. Kamaljit Singh Bawa

Speaker

Prof. Kamaljit Singh Bawa, a Fellow of the Royal Society, is an evolutionary ecologist, conservation biologist and a distinguished professor of Biology at the University of Massachusetts, Boston. A Ph.D. from Panjab University, Chandigarh, India, a Post-doc from College of Forest Resources, University of Washington, he became a distinguished professor in Biology in 1996 at the Department of Biology at University of Massachusetts, Boston. An elected Fellow of the Royal Society (FRS) in 2015, Prof. Bawa is the recipient of several prestigious awards and honors including an elected fellow for The National Academy of Sciences, India, the American Association for the Advancement of

Science (AAAS), American Academy of Arts and Sciences, and the Royal Norwegian Society of Letters and Sciences. In 2012, Bawa received the first Gunnerus Sustainability Award, the world's major international award for work on sustainability. He is also the founder of Ashoka Trust for Research in Ecology and Environment (ATREE). With more than 180 academic papers in reputed journals, he is the author or editor of ten books and monographs.



Dr Anil Gupta

Speaker

Dr Anil Gupta a Professor at the Indian Institute of Management, Ahmedabad, India is a globally renowned scholar in the area of grassroots innovations. He is the founder of the Honey Bee Network and holds the Executive Vice Chair of the National Innovation Foundation. His interests include ensuring recognition, respect and reward for grassroots inventors and innovators at a local, national and global level and protection of their Intellectual Property rights. Amalgamation of formal and informal science, ethical issues in conservation and prosperity of biodiversity are some of his other research interests. Recipient of the coveted Padma Shri Award for his contributions to management education, he is also a fellow of the World Academy of Art and Science.



Dr Coosje Hoogendoorn

Speaker

Dr Coosje Hoogendoorn is the Senior Advisor KIT. Having worked for more than 30 years in international research for agricultural development, she is an all-round innovation professional with both technical and management skills in agricultural research for development. Her expertise includes plant breeding and seed systems, agricultural value chains, climate smart forestry and south-south collaboration.



Dr Nikolay Dzyubenko

Co-Chair

Dr Nikolay Dzyubenko is the Director General of N.I. Vavilov Research Institute of Plant Industry (VIR) St. Petersburg, Russia. VIR is one of the largest existing gene banks in the world. It includes 350,000 samples from more than 2,500 food species that are or may be useful to human feeding.



Dr Gerry Jayawardena

Panelist

Dr Gerry Jayawardena is SCARP and has significant experience in scientific leadership in Natural Resource and Environmental Management. He has served Department of Agriculture over a period of 33 years and has focussed on research in rice, fruits, vegetables and root crops. He has also served at regional level and national level as a research officer and has led a team of scientists in achieving national food production targets. He has also served the plantation sector covering Tea, Rubber, Coconut, Oil Palm and Sugar in Sri Lanka.



Dr Marieta Sakalian

Panelist

Dr Marieta Sakalian is the UNEP/DGEF Senior Programme Management /Liaison

Officer (CGIAR/FAO), Biodiversity. She has developed and overseen implementation of a large number of GEF projects in more than 30 countries worldwide dealing with agricultural biodiversity and ecosystem management in partnership with organizations, such as FAO, UNESCO and the Consultative Group on International Agricultural Research (CGIAR) as well as NGOs. Before joining UNEP, she worked for a wide variety of international institutions, organizations and consulting companies including Association For Rural Development, Inc. (ARD) and Bioversity International.

TECHNICAL SESSION 4-A

Science led Innovation

Concurrent Session: Trait Discovery and Enhanced use of PGR

08.11.2016; 11.00-13.15
AP Shinde Hall



Dr G. S. Khush

Co-Chair

Dr G. S. Khush is presently at University of California and the Chairman of Gurdev Singh Khush Foundation, India. Dr Khush worked at International Rice Research Institute (IRRI) for 35 years. High yielding, disease and insect resistant varieties of rice developed by Dr Khush, ushered in green revolution in rice farming. With nine books to his credit as an author/editor, Dr Khush authored 250 papers in scientific journals of international repute. For his contribution to world food security, Dr Khush received World Food Prize in 1996, Padma Shri in 2000 and Golden Sickle Award in 2007. He has received honorary doctorate degrees from twelve universities of international repute and is a fellow of many academies including the Indian National Science Academy, Indian Academy of Sciences, U.S. National Academy of Sciences and Royal Society of London.



Dr Calvin Qualset

Co-Chair

Dr Calvin Qualset is the Founding Director of the Genetic Resources Conservation Program, Professor Emeritus and Research Professor at the University of California, Davis. His research areas include crop breeding, genetics, and evolution, conservation of plant genetic resources and biotechnology policy. Dr Qualset has served as chair of the Section on Agriculture, Food and Renewable Natural Resources for the American Association for the Advancement of Science (AAAS), president of the American Society of Agronomy (ASA) and president of the Crop Science Society of America (CSSA). He has been honored as a fellow by the AAAS, ASA, and CSSA. He was a Fulbright Senior Research Scholar and Fulbright Senior Research Lecturer.



Dr M. K. Rana

Convener

Dr M. K. Rana is a Principal Scientist at ICAR-NBPGR, New Delhi, India. He is actively involved in the DNA fingerprinting of Indian crop varieties for their unique identification in number of crops including cotton, jute, rice, wheat, maize, lentil, peas and sorghum. He has identified various microsatellite markers for seed purity testing of popular cotton hybrids grown in India and also identified markers for true hybridity testing of crosses in lentil and chickpea. He has rendered DNA Fingerprinting service to public and private sector organizations.



Dr Ravi Singh

Speaker

Dr Ravi Singh is a distinguished scientist at CIMMYT and heads the wheat improvement and rust research programmes. He has been associated with CIMMYT since 1983 and the world over he is well known for release of more than 400 wheat varieties in various countries, from the germplasm developed at CIMMYT. As a scientific leader, he is credited for his efforts to forestall a global stem rust epidemic and is highly recognized for these efforts by China, Korea, Japan, USA, etc. He is a Fellow of American Association for the Advancement of Science, American Phytopathological Society, Crop Science Society of America, National Academy of Agricultural Sciences, India and American Society of Agronomy. He has authored more than 200 refereed scientific papers in journals of International repute.



Prof. Andreas Graner

Speaker

Prof. Andreas Graner is managing director of the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany and the Head of the German Federal *ex situ* genebank for agricultural and horticultural plants. His research aims at developing genomics based approaches for the valorization of plant genetics resources of barley (*Hordeum vulgare*). With a Ph.D. in Plant Breeding from Technical University Munich, Germany, his major Scientific Interests include genetic and genomic approaches to develop knowledge based strategies for an improved conservation and utilization of plant genetic resources coupled with understanding genome evolution and identifying genes involved in seed quality and disease resistance. An editorial member of several scientific societies and committees, he has been the recipient of several awards and honors including Honorary Fellow, Scottish Crop Research Institute, Gregor Mendel Innovation award and Kurt von Rümker award.



Prof. N. K. Singh

Speaker

Prof. N. K. Singh is the National Professor, B.P. Pal Chair at ICAR-National Research Centre on Plant Biotechnology, IARI, New Delhi, India. A globally known Indian scientist in the area of Plant Genetics and Breeding, Prof. Singh is credited for decoding rice, tomato, wheat, pigeonpea, mango and jute genomes and has invented internationally acclaimed new methods for the analysis of wheat seed storage proteins and discovered a new class of wheat seed storage protein

'triticin'. His gene discovery and DNA fingerprinting work on Basmati rice quality, salt tolerance and yield traits has facilitated development of early maturing, high yielding and disease resistant Basmati rice varieties at IARI, New Delhi. His scientific publications have been cited more than 8,495 times by scientists worldwide with a high H-index of 47, the highest among the Indian national agricultural scientists. Prof. Singh is fellow of major science academies of India (INSA, NAAS, NASI) and is the recipient of the highest individual award of the ICAR, Norman Borlaug Award 2015.



Dr Kuldeep Singh

Speaker

Dr Kuldeep Singh, Director of ICAR-NBPGR, New Delhi. His fields of competence are Plant Breeding, Molecular Breeding, Molecular Genetics, Genomics and Wide Hybridization. He has published more than 200 publications including 94 in refereed journals. Dr Kuldeep is involved in development of three varieties of wheat and five of rice (all involving MAS). He has led 28 externally funded projects at PAU including Wheat Genome Sequencing Project since 1998.

TECHNICAL SESSION 4-B **Science led Innovation**

Concurrent Session: PGR and Genomics

08.11.2016; 11.00-13.15
NAAS Lecture Hall



Prof. Sir Edwin Southern

Co-Chair

Prof. Southern is the Emeritus Professor of Biochemistry at University of Oxford and has done pioneering work on the organization of DNA sequences in chromosomes. Apart from studies on crab poly-AT carried out in the early 1960s, Southern was the first to determine the nucleotide sequence of a eukaryotic chromosomal DNA fraction, demonstrating that a guinea pig 'satellite' had an unexpectedly simple repetitive structure based on a sequence of six nucleotides. Southern has devised valuable methods for DNA analysis. His 'blot' technique, for the identification of specific sequences among large populations of fragments generated by endonucleases, has found extremely widespread and important applications. Prof. Southern has been the recipient of several prestigious awards including Gairdner Foundation International Award, the Royal Medal of the Royal Society of London and Albert Lasker Award for Clinical Medical Research. Inventor of the Southern blot, he has been awarded the Association of Biomolecular Resource Facilities award for outstanding contributions to Biomolecular Technologies.



Prof. Akhilesh Tyagi

Co-Chair

Prof. Akhilesh K. Tyagi is the Professor and JC Bose National Fellow at University of Delhi South Campus, New Delhi. He is one among the few Indian plant

scientists who have ventured to bring together knowledge of molecular physiology, genomics and transgenics to study, analyze and improve crop growth and yield. His major research interests include photosynthesis/phototransduction, stress/reproductive biology, genome analysis and genetic enhancement. He has been Coordinator/Team Leader of major research efforts India has undertaken in Plant Science, which include Centre for Plant Molecular Biology at Delhi University, Indian Initiative for Rice Genome Sequencing, Indian Initiative on Tomato Genome Sequencing, Network Project on Rice Functional Genomics, Next Generation Challenge Program in Chickpea Genomics etc. His dedication to higher education and to nurture leadership is well known. Being in the editorial board of several scientific journals, he has been the recipient of several awards and honours including JC Bose National Fellowship Award, National Bioscience Award, FC Steward Lecture Award of PTCA(I) etc. He is Fellow of National Academy of Sciences, India, the Indian National Science Academy, the Indian Academy of Sciences, the National Academy of Agricultural Sciences and The World Academy of Sciences. He has 250 publications including research papers in International journals of repute and also several books to his credit.



Dr Rakesh Singh

Convener

Dr Rakesh Singh is working as Principal Scientist at Division of Genomic Resources, ICAR-NBPGR, New Delhi. He is associated with DNA fingerprinting and genomic resource generation programme at NBPGR for more than eighteen years. Dr Singh has received many nationally acclaimed awards including Jawaharlal Nehru Award, ICAR, Dr R S Paroda Young Scientist Award, ISPGR, Young Scientist Award (Biotechnology) from Society for Plant Research and DBT CREST fellowship from DBT. Based on Dr Singh's expertise in the field of crop biotechnology he has been conferred Fellow of Indian Society of Plant Genetic Resources and Fellow of Indian Society of Genetics and Plant Breeding.



Prof. Robert Henry

Speaker

Prof. Robert Henry is the Professor of Innovation in Agriculture and Foundation, and Director of the Queensland Alliance for Agriculture and Food Innovation (QAAFI), a research Institute of the University of Queensland. He is particularly interested in plants of economic and social importance and his focus of research has been into genome sequencing to capture novel genetic resources for the diversification of food crops to deliver improved food products. Before being appointed QAAFI Director, he was Director of the Centre for Plant Conservation Genetics at Southern Cross University, a centre which he established. Other previous positions held by Professor Henry include Research director of the Grain Foods Cooperative Research Centre and Research Program Leader in the Queensland Agricultural Biotechnology Centre.



Dr Bikram Gill

Speaker

Dr Bikram Gill is the University Distinguished Professor at Kansas State University, USA. A visionary and a great leader, Dr Gill established the Wheat Genetics Resource Center (WGRC) at KSU. Materials and methods from the WGRC have been used by wheat workers and others from all over the world. A major

focus of his research has been into the molecular cytogenetic analysis of bread wheat. Dr Gill pioneered the use of chromosome banding and in situ hybridization techniques. The importance of his work has been recognized in many ways including the KSU Distinguished Graduate Faculty Award and Kansas Association of Wheat Growers 1997 Wheat Man of the Year Award. Dr Gill is a member of the International Wheat Genetics Organizing Committee and has been a strong force in the International Triticeae Mapping Initiative, a worldwide collaboration that is working to map the wheat genome. His laboratory was the first to develop a dense genetic linkage map of *Aegilops tauschii*, a gold mine of resistance genes for wheat improvement. Dr Gill has maintained a constantly accelerating publication pace. His publications have appeared in many journals of international repute.



Dr T. R. Sharma

Speaker

Dr T. R. Sharma is a Project Director at the ICAR-National Research Centre on Plant Biotechnology, IARI, New Delhi. He has contributed extensively for the improvement of rice for over 25 years. His most significant contributions include mapping, positional cloning and functional validation of a Rice blast (*Magnaporthe oryzae*) resistance gene Pi-kh (Pi54) from a unique source, which activates complex defense mechanism as demonstrated by microarray analysis. He has also mined many novel alleles from wild rice and land races of rice for resistance to rice blast. He has also successfully mapped and molecularly dissected a novel QTL qSBR11-1, for sheath blight of rice. He has been the recipient of several awards and honours including International World Technology Award for Biotechnology (jointly to Int. Rice Genome Sequencing Team), The World Technology Network, 2003, Rafi Ahmed Kidwai Award-ICAR and NASI-Reliance Industries Platinum Jubilee Award. He is Fellow of Indian National Science Academy, National Academy of Sciences India and National Academy of Agricultural Sciences, New Delhi. He has published more than 110 Research papers on various aspects of Molecular Biology, Genomics and Plant Disease Resistance in different national and international journals.



Dr Alice Muchugi

Speaker

Dr Alice Muchugi is a Gene Bank Manager at ICRAF, Kenya, Nairobi. She coordinates the activities of the ICRAF seedbank in Nairobi and regional field genebanks to ensure that superior tree germplasm is available for ICRAF collaborative projects and other interested users. Her main areas of interest include conservation and use of important indigenous African tree germplasm, communicating generated scientific knowledge so that informed choices can be made in implementing science-based technologies and mentoring young scientists, especially African women.

TECHNICAL SESSION 4-C

Science led Innovation

Concurrent Session: PGR Informatics

08.11.2016; 11.00-13.15
NAAS Committee Room-1



Dr Stefano Diulgheroff

Co-Chair

Dr Stephano Diulgherof is the Information management officer, seed and plant genetic resource service, FAO Rome Italy.



Dr Bhag Mal

Co-Chair

Dr Bhag Mal, a distinguished plant breeder is a Senior Consultant at APAARI. He has a wide research experience and has served in various capacities at National and International level. He had been the President, Indian Society of Range Management and Agroforestry, Indian Society of Plant Genetic Resources and Vice President of Indian Society of Genetics and Plant Breeding, Indian Society of Plant Genetic Resources and Indian Society of Plant Sciences. He has developed 16 varieties of fodder crops, cereals and pulses, published 145 research papers, 14 books/monographs and 24 book chapters. He has been the recipient of Chancellor's Medal and Dr H.B. Singh Memorial Award for his outstanding contributions.



Dr Sunil Archak

Convener

Dr Sunil Archak is a Principal Scientist at ICAR-NBPGR. He is an ICAR-National Fellow in the area of PGR Informatics. He has been working on molecular profiling of crop plants. His contributions have been in various aspects of PGR including molecular genetics, genomics, bioinformatics, PGR Informatics and IPRs. He has to his credit 45 publications, a patent and several PGR informatics databases and tools including PGR Portal. He has implemented many research projects and has organized many national and international training programs in PGR.



Dr Robert Hijmans

Speaker

Dr Robert Hijmans is a Professor of Environmental Science and Policy at the University of California, Davis, USA. He specializes in spatial analysis, ecological modeling and geo-informatics and has worked on spatial data analysis and modeling to support agricultural research for development in Africa, Asia and Latin America. He is particularly interested in the role of biodiversity in agriculture and in climate change.



Dr Stefano Diulgheroff

Speaker

Dr Stephano Diulgherof is the Information management officer, seed and plant genetic resource service, FAO Rome, Italy.

Dr Eric Huttner

Speaker



Dr Eric Huttner is the Research Program Manager for Crop Improvement and Management, ACIAR. The program aims to increase productivity, sustainability and utilisation of major crops and cropping systems of mutual importance to Australia and developing countries. Dr Huttner has worked in a range of private companies throughout his career, including founding a start-up genetic analysis service company in Canberra. He has been involved in managing public-private research initiatives in both Australia and France. He was responsible for creating a research laboratory at the Australian National University for Groupe Limagrain, a France-based multinational seed company and was a director of Gene Shears, a biotechnology company established by Limagrain and the CSIRO.



Dr Michael Mackay

Speaker

Dr Michael Mackay is the Honorary Associate Professor at Centre for Plant Science (QAAFI).

TECHNICAL SESSION 4-D **Science led Innovation**

Concurrent Session: Animal and Aquatic Genetic Resources

08.11.2016; 11.00-13.15
ICAR-Lecture Hall



Olivier Hanotte

Co-Chair

Professor of Population and Conservation Genetics at University of Nottingham, UK, Dr Olivier Hanotte is a livestock geneticist of Nottingham who formerly spent 13 years at the Nairobi-based International Livestock Research Institute (ILRI) helping to unravel the origins of a second domestication of cattle, in Africa. It was in Nairobi that Dr Hanotte first got interested in chickens. His research group is focusing on unraveling the genetic polymorphisms controlling gene expression in eukaryotes



Dr J. K. Jena

Co-Chair

Dr J. K. Jena is Deputy Director General, Fisheries at ICAR, New Delhi, India. His research intrests have been Freshwater aquaculture and Conservation genetics. He has received several prestigious awards and honours including ICAR Award for the Team Research in Fisheries, Prof. H.P.C. Shetty Award for Excellence in Fisheries Research and/or Development, Special One Time Award by ICAR, Best Young Scientist Award of the Dr Hiralal Choudhuri Fisheries Foundation. He has over 180 publications to his credit.



Dr Kuldeep K. Lal

Convener

Dr Kuldeep K. Lal is the Director of ICAR-NBFGR, Lucknow, India. His area of reseach include molecular marker development and application in intra and interspecific genetic diversity analysis, sperm cryopreservation in fishes and embryonic stem cell research in fishes. He has 60 publications including two books.



Dr J. M. Reecy

Speaker

Dr J. M. Reecy is the NRSP-8 database coordinator, where he leads national efforts to improve the computational resources available for genomics research on livestock species. In addition, he is the Director of the Office of Biotechnology, which facilitates biotechnology research at Iowa State University. During his career, Dr Reecy has worked on problems in ruminant nutrition, skeletal muscle growth and development, embryonic heart development, beef and mouse molecular and quantitative genetics, and livestock bioinformatics. Currently, he works on beef cattle molecular genetics with a focus on identifying genes involved in improving the healthfulness of beef (i.e. making the beef that consumers eat healthier to eat) and health of cattle.



Dr Vindhya Mohindra

Speaker

Dr Vindhya Mohindra is the Principal Scientist and Head, Fish Conservation Division at ICAR-NBFGR, Lucknow, India. Her current research focus is on Development of genomic resources for utilization in genetic differentiation of wild fish populations and Whole genome sequencing of important fish and fish pathogens. Dr Vindhya has research expertise in Conservation genetics and genomics resolving taxonomic ambiguities, species validation and phylogenetic relationship and bio-prospecting of genes for important traits. Recipient of M.S. Swaminathan Award for best Indian Fisheries Scientist and best scientist of ICAR-NBFGR Award, she has more than 90 research publications including research papers in journals of repute.



Dr A.K. Srivastava

Speaker

Dr A. K. Srivastava, Director, NDRI, Karnal, is an eminent Professor in the area

of Pharmacology and Toxicology, and is also the Director of the NDRI, Deemed University, Karnal. He is a member of the Central Executive Committee of the Indian Dairy Association. Dr Srivastava started his professional career as an Assistant Professor at Punjab Agricultural University, Ludhiana, where he served for 20 years in different capacities including Head, Department of Pharmacology and Controller of Examinations. He has been an active researcher and a teacher during his tenure at PAU, Ludhiana



Dr Kuldeep K. Lal

Convener

Dr Kuldeep K. Lal is the Director of ICAR-NBFGR, Lucknow, India. His area of research include molecular marker development and application in intra and interspecific genetic diversity analysis, sperm cryopreservation in fishes and embryonic stem cell research in fishes. He has 60 publications including two books.

TECHNICAL SESSION 4-E

Science led Innovation

Concurrent Session: Insects and Microbial Genetic Resources

08.11.2016; 11.00-13.15
NASS Committee Room-2



Dr S. N. Puri

Co-Chair

Dr S. N. Puri is the former Vice Chancellor of Central Agricultural University, Imphal. He has experience of working in different capacities in various educational Institutions. He is recipient of Academic Leadership award by Agriculture Today, ICAR Team Research Award and Sardar Patel ICAR Award.



Dr Anupam Verma

Co-Chair

Dr Anupam Verma is the INSA Honorary Scientist, Fellow NAAS and ICAR-IARI Adjunct Professor. He has served in various important positions in ICAR. He was associated with the FAO of the United Nations for developing a National Horticultural Research Institute at Ibadan in Nigeria. He has been Visiting Fellow at the Australian National University, Scottish Crop Research Institute, UK, and INRA, France. His research contributions include ultrastructure of several groups of plant viruses and characterization of a large number of economically important viruses, at biological and molecular level.



Dr Chandish R. Ballal

Convener

Dr Chandish R. Ballal, Director, ICAR – NBAIR, Bengaluru, India. Her research efforts have been focused on Insect Ecology with special reference to standardization of effective mass production technologies for host insects and the most potential parasitoids and predators. She is recipient of several awards including Professor T. N. Ananthakrishnan Award, Dr S. Sithanantham Bio-control Award, Scientific Excellence Award and Punjabrao Deshmukh Outstanding Woman Scientist Award of ICAR. She is credited with establishing the largest live insect repository in the world with 117 insect cultures during her tenure as Head of Division of Insect Ecology at IIHR, Bengaluru. With a professional career spanning 31 years, she has 220 publications to her credit.



Dr K. K. Pal

Speaker

Dr K. K. Pal is a Principal Scientist at Directorate of Groundnut Research (ICAR), in Junagadh, Gujarat, India. Dr Pal has a vast experience of working in the field of soil/agricultural microbiology. His research interest has been on biological nitrogen fixation, bio-inoculants, various aspects of plant-PGPR interactions, formulation and delivery systems of inoculants, microbial diversity, development of suppressive soils, bioprospecting of genes and allele mining, endophytes, extreme halophiles, bio-control of phytopathogens, etc. He has published many research papers, review articles etc. in National and International journals of repute.



Dr N. Bakthavatsalam

Speaker

Dr N. Bakthavatsalam is the Principal Scientist and Head Division of Insect Ecology at ICAR–NBAIR, Bengaluru, India. His research interests include conservation of entomophages through habitat manipulation techniques, isolation, identification and utilization of attractant chemicals for increasing the efficiency of the entomophages and development of chemical mimics for increasing the efficiency of the attractants. With 29 years of professional experience, he is recognized as a consultant in semiochemical research for insects and has 60 publications in journals of repute.



Dr Alok Srivastava

Speaker

Dr Alok Srivastava is a Senior Scientist in Plant Pathologist at ICAR-NBAIM, Mau, India. His research focus is on Genomics of AIMs based on WGS (de novo/reference), Bioprospecting of genes and allele mining for biotic and abiotic stress tolerance, development of consortia based effective microorganisms formulation for nutrient and disease management in crops. He has been associated with Reference and De Novo Draft Genome Sequencing of Potential Biocontrol, Plant Growth Promoting Organisms, Microbial Genomic Resource Repository and Development of microarray based Gene Chip for major fungal plant pathogens. He has over 20 research publications in journals of repute.

TECHNICAL SESSION 5

Quarantine, Biosafety and Biosecurity Issues

08.11.2016; 14.15-16.40
AP Shinde Hall



Prof. Swapan K. Datta

Co-Chair

Prof. Swapan Kumar Datta holding Sir Rash Behari Ghosh Chair Professor (a Vice-Chancellor (ofg.) Visva Bharati Shantiniketan. He is also at Department of Botany, University of Calcutta, Kolkata, India. He has also served as DDG-Crop Science in ICAR. A distinguished scientist of rice biotechnology, he is well known for his pioneering research on genetic engineering of Indica rice. Prof. Datta has demonstrated the development of genetically engineered Indica rice from protoplast derived from haploid embryogenic cell suspension culture. Golden Indica Rice with enriched Provitamin A and Ferritin rice with high iron content were developed by his group with a vision to meet the challenges of malnutrition in developing countries. Prof. Swapan Datta has been named as one among the top 25 Indian scientists from all fields of science by India Today.



Dr A.K. Srivastava

Co-Chair

Dr A. K. Srivastava, Director of National Dairy Research Institute, Karnal, India, is an eminent Professor in the area of Pharmacology & Toxicology. He is a member of the Central Executive Committee of the Indian Dairy Association. Dr Srivastava started his professional career as Assistant Professor at Panjab Agricultural University Ludhiana, where he served for 20 years in different capacities including Head, Department of Pharmacology and Controller of Examinations.



Dr Ravi Khetarpal

Convener

Dr Ravi Khetarpal is the Regional Advisor for Strategic Science Partnerships of CABI South Asia (India). He has served National Agricultural System for three decades of which ten years were as Head, Plant Quarantine Division, ICAR-NBPGR, New Delhi, India. His areas of interest include research and development of policy issues, capacity building in the field of plant protection, plant quarantine, seed certification for viruses and safe movement of plant genetic resources. He has served in various capacities for National Committees of Ministries of Agriculture (drafting of Agricultural Biosecurity Bill, import negotiations based on pest risk analysis), Science and Technology (approvals for working on GM crops, Project Evaluation), Environment and Forests (Biosafety, Biodiversity and Invasive Alien Species) and Home Affairs (Agricultural Biosecurity and represented the country in various relevant global platforms. He has to his credit 110 research papers, and 19 Books, 55 Book Chapters, 12 Review Articles and 3 policy papers. He has been recently nominated in the

Working Group of Standards and Trade Development Facility of WTO at Geneva for WTO-SPS matters as a Developing Country Expert to represent Asia Pacific.



Dr Kenza Le Mentec

Speaker

Dr Kenza Le Mentec is an economist at the Standards and Trade Development Facility (World Trade Organization). She has been working in the area of agricultural development at international level for over 15 years, collaborating with several international organizations including the WTO, FAO, UNEP and the World Bank. In recent years, Dr Le Mentec has been particularly focusing on building capacity of developing countries to enhance their trade. Opportunities in the Agri-food sector, thereby ensuring sustainable economic growth and alleviating poverty. Dr Le Mentec's expertise covers issues related to application of Sanitary and Phytosanitary measures as well as sustainable production patterns and market access.



Dr P. Lava Kumar

Speaker

Dr P. Lava Kumar is the Head of the Germplasm Health Unit, and Virology and Molecular Diagnostics Unit at the International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria. His current research focus is on characterization, diagnosis, surveillance and control of plant viruses affecting important food staple crops such as cassava, yam, maize, soybean, cowpea, banana, in sub-Saharan Africa. His program is also involved in the production of disease-free planting materials and surveillance of invasive transboundary pathogens; and specialized in developing diagnostic tools.

PANEL DISCUSSION

Biosecurity and Biosafety Provisions *vis-a-vis* Agrobiodiversity



Dr J. L. Karihaloo

Moderator

Dr J. L. Karihaloo is a Senior Consultant at APAARI to promote policy advocacy, capacity building and knowledge sharing in agricultural biotechnology for the benefit of stakeholders in the Asia-Pacific region. Dr Karihaloo's research interests include plant exploration, characterization, systematics and improvement. He has published over 110 research publications including research papers, review articles and chapters in books. He has been a recipient of Rafi Ahmed Kidwai Award and Prof. V. Puri award. Dr Karihaloo is a member of advisory committees on biotechnology and bioresources of national R&D and education organisations.



Dr S. R. Rao

Panelist

Dr S. R. Rao is the Adviser, Department of Biotechnology (DBT), Minister of Science and Technology, Government of India. He has been actively involved in establishment of oil palm cultivation in India, several sophisticated biotech infrastructure facilities, forging bilateral collaboration with Asian and /European countries, introduction of Golden rice for research in India, formulation of National Biotech policies, strategic planning and investment matters. Currently, he is also the coordinator in DBT for the establishment of National Biotechnology Regulatory Authority and new Biotechnology Regulatory Bill. He specializes in core and cross-sectoral policy issues of biotechnology development, regulation, safety, public-private partnership, international relations and biotech R&D Innovation and Development, and public concerns and consensus building; He has published 30 research papers in national and international Journals.



Dr Gurinder Jit Randhawa

Panelist

Dr Gurinder Jit Randhawa is a Principal Scientist in Division of Genomic Resources at ICAR-NBPGR, New Delhi, India. An Expert Member of Secretariat, CBD, UNEP, Montreal, Expert Member of FAO, Rome for GMO Testing, FAO's consultancy TDCD Expert, she has developed, patented and commercialised number of GM detection technologies. She is the recipient of Agriculture Leadership Award and Best Scientist Award by Science and Technology and has more than 70 publications in journals of National and International repute.



Dr S. C. Dubey

Panelist

Dr S. C. Dubey, is the Head, Division of Plant Quarantine at ICAR-NBPGR, New Delhi, India. A scientist of repute, he has specialization in Fungal plant pathogens of pulses with special reference to diversity, race profiling, diagnostics, quarantine processing of PGR, management of diseases of pulse crops using host resistance and bioagents. He has also worked in the area of development of molecular markers for diagnostics and detection of pathogenic fungi. Recipient of several awards, he is also the editorial member of various reputed journals.



Dr Vibha Ahuja

Panelist

Dr Vibha Ahuja is the Chief General Manager at the Biotech Consortium India Limited. She has been involved in dealing with projects related to biosafety and regulatory aspects, particularly with reference to GMOs, biodiversity conservation and environmental and industrial biotechnology. These include undertaking capacity building activities in the area of modern biotechnology related to use of GMOs, imparting training through seminars/workshops/ national and international training programs and preparing well researched publications for various stakeholders related to biosafety issues.



Dr Neeraj Sood

Panelist

Dr Neeraj Sood is the Principal Scientist at ICAR-NBFGR, Lucknow, India. He is presently working in fish disease diagnosis and fish immunology. His research interests include production and characterization of monoclonal antibodies, detection of fish pathogens using molecular techniques. He is the recipient of M.S. Swaminathan Award for the Best Indian Fisheries Scientist.

SATELLITE SESSION 3

Climate Change as an Opportunity for Agrobiodiversity Management (GIZ and NEHU)

08.11.2016; 14.15-16.40
NAAS Lecture Hall



Dr Uwe Scholz

Speaker

Dr Uwe Scholz is Project Director, German Development Co-operation (GIZ) for North eastern Region India. He is handling projects related to Climate change adaptation in rural India especially North Eastern Region.



Dr Indrani Phukan

Speaker

Dr Indrani Phukan is the Program Co-ordinator in ICSD, GIZ. She has more than eleven years of experience in integrated Natural Resources Management and Climate Change Adaptation Sector.



Dr N. H. Ravindranath

Speaker

Dr N. H. Ravindranath is the Professor at Centre for Sustainable Technologies at Indian Institute of Science, Bengaluru, India. His broad areas of research focus include forestry, rural energy, community and sustainable development, natural resource monitoring, climate change and related issues. His current research focus is on climate change – mitigation, impacts, vulnerability and adaptation in the land use and forest sector including inventory of land use sectors, Clean Development Mechanism (CDM) and Reducing Deforestation (REDD) in forest sector. He is a Member of UNFCCC expert panel on Kyoto Protocol, an UNFCCC Expert on GHG inventory of industrialized countries, Member of Science and Technology Panel of Global Environment Facility, World Bank, UNDP, Asian Development Bank and UNEP with climate change as Focal Area, Member of Climate Change Impact & Adaptation Expert Committee.



Dr S. K. Barik

Speaker

Dr S. K. Barik is Professor of Ecology, NEHU. He has published 40 research papers, 8 books and 20 technical and research reports. His research group has developed and demonstrated a workable protocol for categorization of threatened categories of species based on numeric population data. Using Ecological niche models, Population Viability Analysis models and multivariate statistical models,

his group is active in predicting the distributional range and impact of climate change on several forest species belonging to threatened categories. He developed a sustainable land use model as an alternative to shifting cultivation for the mid-elevation zone of Eastern Himalayas. He was selected as a LEAD Fellow by the Leadership in Environment and Development International, Rockefeller Foundation, USA. He is the Chairperson/Member of several national committees constituted by Government of India.



Dr Friederike Kraemer

Speaker

Dr Friederike Kraemer is research Advisor from GIZ Sustainable Agriculture Germany. She is presently working in climate adaptation in agriculture for sustainability



Dr S. Ashutosh

Speaker

Dr S. Ashutosh is serving Government of Meghalaya as Additional Principal Chief Conservator of Forests and Deputy Chief Executive Officer of Meghalaya Basin Development Authority (MBDA). He is also Nodal Officer on Climate Change for Meghalaya. He has been associated with climate change issues and has made significant contribution in the national communication (NATCOM) to UNFCCC

on GHG inventory from forestry sector. He has authored over twenty five papers including few publications in the international journals.



Dr Werner Kosemund

Speaker

Dr Werner Kosemund is Environment Sustainability Expert at International Network on bamboo and Rattan (INBAR), South Asia Regional Officer, New Delhi, India. He has Comprehensive experience in management and governance of natural resources (forest and forest-related areas) and rural development. He has profound knowledge of strategic development and process management in organizations and networks, aid effectiveness and poverty alleviation strategies, biodiversity and nature conservation in land use planning.



Mr Amba Jamir

Speaker

Mr Amba Jamir is Fellow of Sustainable Development Forum Network and Executive Director, The Missing Link (TML-India) Assam, India. He is an acclaimed grassroots trainer, facilitator and community leader with experience in the Asia

Pacific region in the areas of education, development, livelihood, and policy advocacy. He works directly with policy makers, NGOs, community leaders, farmers and the poorest of the poor. He has extensive experience working in local, national and international NGOs, the government, and with advanced regional policy and research think tanks such as the Institute for Global Environmental Strategies (IGES), Japan.

ROUND TABLE DISCUSSION

Genebank Management: Challenges and Opportunities

08.11.2016; 14.15-16.40
ICAR Lecture Hall



Ms Marie Haga

Co-Chair

Ms Marie Haga is the Executive Director of the Global Crop Diversity Trust, Germany. With an experience from Foreign Service as a career diplomat, she had previously been member and Deputy Chair of the Global Crop Diversity Trust Executive Board. Besides various positions in the Norwegian Ministry of Foreign Affairs and three other Ministerial positions Marie Haga has also acted as Director for Renewable Energy in the Federation of Norwegian Industries and as Secretary General of the Norwegian Air Ambulance - the biggest voluntary organization in Norway. Having been on several boards, including as Chair of the Governing Board of the Norwegian Institute for Nature Research (NINA) and Chair of the Governing Board of the Industrial Development Corporation of Norway, she currently serves on the Board of Directors of the Regional Environmental Center (REC). She has published three books - one novel and two on Norwegian politics.



Dr Kuldeep Singh

Co-Chair

Dr Kuldeep Singh, Director of ICAR-NBPGR, New Delhi, India. His field of specialization include Plant Breeding, Molecular Breeding, Molecular Genetics, Genomics and Wide Hybridization. He has more than 200 publications including 94 in refereed journals. Dr Kuldeep is involved in development of three varieties of wheat and five of rice (all involving MAS). He has led 28 externally funded projects at PAU including Wheat Genome Sequencing Project.



Dr H. D. Upadhyaya

Moderator

Dr H. D. Upadhyaya is the Director & Principal Scientist, Genebank at International Crops Research institute for the Semi-Arid Tropics (ICRISAT), Patancheru, India. A well known genetic resources specialist and a successful groundnut breeder,

he is the recipient of several prestigious awards and recognition including Crop Science Society of America awards, fellow of the American Society of Agronomy and Crop Science Society of America, Frank N Meyer Medal award for Plant Genetic Resources, Crop Science Research Award. Dr Upadhyaya's work on conceptualizing and developing mini core collection and utilizing this resource for identifying new sources of variations for climate resilient traits is laudable. As a groundnut breeder, he has developed large number of early-maturing, drought tolerant, high oil containing, and aflatoxin resistant high yielding breeding lines, of which 31 have been released as 44 cultivars in 22 countries, both in Africa and Asia. With publication of over 700 research papers in National and International journals including several in high impact factor journals, Dr Upadhyaya has been a great mentor to the scientists, students, and technicians from Asia, Africa, Europe and USA.



Dr R. K. Tyagi

Moderator

Dr R. K. Tyagi is Principal Scientist and Head, Division of Germplasm Conservation, ICAR-NBPGR, New Delhi. His research interests include collection, conservation, characterization, evaluation and documentation of plant genetic resources with current focus being on conservation of PGR employing various conventional and modern methods. He has successfully completed several inter-institutional and international projects and conducted many trainings on management of PGR. Dr Tyagi has served in various capacities including Vice President and Editor-in-Chief of Indian Society of Plant Genetic Resources (ISPGR). Currently, he is General Secretary of ISPGR and Co-organizing Secretary of International Agrobiodiversity Congress 2016. A Fellow of ISPGR and Indian Society of Seed Technology, Dr Tyagi is the faculty of PG School, IARI, New Delh and has over 150 research publications to his credit including research papers, book and book chapters related to PGR management.



Dr Prem Mathur

Moderator

Dr Prem Mathur, Co-organizing Secretary of International Agrobiodiversity Congress 2016, has been working at Bioversity International for the past 17 years and is a part of several Bioversity International global and regional project activities including promoting the use of plant genetic resources, plant genetic resources information management and documentation and the use of Geographic Information System (GIS) tools for assessing and locating diversity and the use of crop diversity for climate change adaptation. He coordinates plant genetic resources networking activities in South Asia and the Pacific.

PUBLIC FORUM

Role of Stakeholders in Agrobiodiversity Management

08.11.2016; 17.00-18.30
AP Shinde Hall



Prof M S Swaminathan

Co-Chair

Prof. M. S. Swaminathan, a plant geneticist by training, is one of the twenty most influential Asians of the 20th century. He is the Chair of International Agrobiodiversity Congress 2016. Recipient of prestigious Padma Shri, Padma Bhushan and Padma Vibushan, he currently holds the UNESCO Chair in Ecotechnology at the M S Swaminathan Research Foundation in Chennai, India. He was the scientific leader of the green revolution movement. He has served in prestigious positions in ICAR, Ministry of Agriculture, Planning Commission, National Academy of Agricultural Sciences, National Commission on Farmers. He served in international organizations like UN, FAO, etc. He has received 73 honorary doctorate degrees from universities around the world and has bagged many prestigious awards -Ramon Magsaysay Award, Albert Einstein World Science Award, Tyler and UNEP Sasakawa Prize, the Indira Gandhi Prize for Peace, Disarmament and Development, Franklin D Roosevelt For Freedoms Medal, the Mahatma Gandhi Prize, the Lal Bahadur Sastri National Award.



Dr R. S. Paroda

Co-Chair

Dr R. S. Paroda, is the Chairman of the TAAS, President of ISPGR and the Co-Chair of International Agrobiodiversity Congress 2016. Recipient of the prestigious Padma Bhushan, he is an accomplished plant breeder and geneticist by profession and an able research administrator. He has made significant contributions in the field of crop science research. He is known for modernization and strengthening of the national agricultural research system (NARS) in India as well as in Central Asia and the Caucasus. He is the main architect of one of the world's largest National Gene Bank in New Delhi, India. He has received 15 D.Sc. (Honoris Causa) degree from universities around the world. He is the recipient of numerous awards and recognitions, including Rafi Ahmad Kidwai Award, ICAR Team Research Award, FICCI Award, Om Prakash Bhasin Award, BP Pal Gold Medal, Borlaug Award, Mahendra Shiromani Award etc. Founder chairman of Global Forum on Agricultural Research (GFAR), he was also the President of Indian Science Congress and the National Academy of Agricultural Sciences, India.



Dr Adel El-Beltagy

Panelist

Dr Adel El-Beltagy is the Chair of the International Drylands Development Commission (IDDC), Professor, Arid Land Agricultural Graduate Studies & Research

Institute (ALARI), Ain Shams University, Egypt. He is also Board Member of the World Academy of Sciences (TWAS), Chair of the Food and Agriculture Research Council at the Egyptian Academy of Science, Member of the Technical Advisory Committee (TAC) of the Commission on Science and Technology for Sustainable Development in the South (COMSATS) and Member of the Advisory Board of the Bibliotheca Alexandrina. He has served as Minister of Agriculture and Land Reclamation, President of the Governing Board of the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM). He has authored/co-authored 187 scientific publications. He is the recipient of Commander of the Order of Agricultural Merit and The Golden Medal of the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM)



Dr Anil Gupta

Panelist

Dr Anil Gupta, a Professor at the Indian Institute of Management, Ahmedabad, India is a globally renowned scholar in the area of grassroots innovations. He is the founder of the Honey Bee Network and holds the Executive Vice Chair of the National Innovation Foundation. His interests include ensuring recognition, respect and reward for grassroots inventors and innovators at a local, national and global level and protection of their Intellectual Property rights. Amalgamation of formal and informal science, ethical issues in conservation and prosperity of biodiversity are some of his other research interests. Recipient of coveted Padma Shri Award for his contributions to management education, he is also a fellow of the World Academy of Art and Science.



Mr Ajay Jakhar

Panelist

Mr Ajay Jakhar, Chairman of the Bharat Krishak Samaj (BKS, Farmer's Forum, India), a non-political advocacy association of farmers whose aim is agricultural prosperity in a country where most are indifferent to farmers. He has launched a bi-monthly magazine called Farmers Forum, which he edits alongside the monthly newsletter that BKS sends out. The magazine, his brainchild, is a neutral platform to express views and popularise ideas on farming. He has established himself as an expert on farming and a leading voice for farmers. A columnist for many publications, he writes on farmer rights and better farm practices. Being from the farmer's family, he is an exception as he tries to make agriculture more relevant in the country by lobbying for better policies and better practices. His group holds seminars in Delhi that talk about issues that matter to farmers and try to effect positive policy changes.



Dr Suman Sahai

Panelist

Dr Suman Sahai is a member of the National Biodiversity Board and serves on the Research Advisory Committees of National Scientific Institutions, the Expert Committee on Biotechnology Policy and the Bioethics Committee of the ICMR. She is associated with the Gene Campaign, a non-governmental organization dedicated to protecting farmers' rights and food and livelihood security, in India in 1989. Dr Sahai has published extensively on science and policy issues related to food security and has been working both at the grassroots and policy levels, with great dedication and considerable impact. She is a member of several national policy forums on international trade, biodiversity and environment, biotechnology and bioethics, intellectual property rights and research and education. Dr Sahai chaired

the Planning Commission Task Force on Biodiversity and Genetically Engineered Organisms, for the Eleventh Plan. She was appointed Knight of the Golden Ark (Netherlands) for establishing Gene Campaign and for generating awareness about issues related to genetic resources and trade. She is the recipient of Borlaug Award for her outstanding contribution to agriculture and the environment.



Dr Paresh Varma

Panelist

Dr Paresh Varma is the President of Bioseed South East Asia and Research Director of Bioseed Research India at DCM Shriram Limited. He is responsible for Bioseed's Research and Product Development efforts worldwide. Dr Paresh Varma has been working in the seed industry since 1992. Prior to joining Bioseed, he was Head of Research in Proagro Seed Co Ltd (now Bayer BioScience Ltd) and was responsible for research and product development in India. Dr Varma has worked in University of Nebraska, International Sorghum and Millet Consortium (INTSORMIL) and ICRISAT.



Ms Sunita Sreedharan

Panelist

Ms Sunita Sreedharan is the legal advisor on the Central Technology Management Institute, ICAR. She has been involved in the drafting of various parliamentary bills requiring protection of various intellectual properties including the access and benefit sharing of traditional knowledge. Presently Sunita in her capacity as the Legal Advisor of the WHO, and ably assisted by the SKS Law Team is in the process of drafting of the National Health Law for Bhutan. Sunita has had the distinction of being nominated for the "IP Woman of the Year 2008" Award by the organizers of IP Summit held in Brussels. She has been recently inducted in the rosters of the International Who's Who of Professionals.

PLENARY SESSION 4

ABS in the Context of Regulatory Systems

9.11.16; 9.00-10.40

AP Shinde Hall



Prof. Adel El-Beltagy

Co-Chair

Prof. Adel El-Beltagy is the Chair of the International Drylands Development Commission (IDDC), Professor, Arid Land Agricultural Graduate Studies & Research Institute (ALARI), Ain Shams University, Egypt. He is also Board Member of the World Academy of Sciences (TWAS), Chair of the Food and Agriculture Research Council at the Egyptian Academy of Science, Member of the Technical Advisory Committee (TAC) of the Commission on Science and Technology for Sustainable Development in the South (COMSATS) and Member of the Advisory Board of the Bibliotheca Alexandrina. He has served as Minister of Agriculture and Land Reclamation, President of the Governing Board of the

International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM). He has authored/co-authored 187 scientific publications. He is the recipient of many awards such as Commander of the Order of Agricultural Merit, The Golden Medal of the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM)



Dr B. Meenakumari

Co-Chair

Dr B. Meenakumari, Chairperson, National Biodiversity Authority, India, has served in ICAR as DDG (Fy) and Director CIFT. She has done pioneering work in introducing and standardising new fishing gear materials and accessories for making fishing easier, more productive and profitable. She has also been involved in development of modern lobster traps with durable material, square mesh cod ends for the conservation of fishery resources and identifying potential fishing zones with the help of satellite imagery.



Dr Sanjeev Saxena

Convener

Dr Sanjeev Saxena is ADG (Intellectual Property & Technology Management) at ICAR, New Delhi, India. He obtained his doctoral degree in Plant Physiology from IARI, New Delhi, India. He has made significant contribution towards PGR conservation with special reference to rice germplasm.



Dr Ronnie Coffman

Speaker

Prof. Ronnie Coffman is the International Professor of Plant Breeding and Director of International Programs of the College of Agriculture and Life Sciences at Cornell University. He is also the Principal Investigator of the Agricultural Biotechnology Support Project (ABSP II), the Durable Rust Resistance in Wheat Project, the Agricultural Innovations Partnership, and the NextGen Cassava Project. His area of interest include Agricultural biotechnology and crop improvement. His work has been important for the development of improved rice varieties grown on several million hectares throughout the world.



Dr R. S. Rana

Speaker

Dr R. S. Rana is the Chairman of Bio-links, the National Working Group is a non-official member of the NBA, India and also Chair its Expert Committee on Agricultural Biodiversity. He represents the Asia & Pacific region on Compliance Committee for the Cartagena Protocol on Biosafety. As elected Co-chair of the FAO Commission on PGFRA he assisted implementing CBD in eight countries in Asia, Africa and South America. His research contributions to improving plant adaptation to saline environment and managing plant genetic resources have received wide appreciation. A Fellow of the National Academy of Sciences, India, Dr Rana has received numerous awards/recognitions including the Dr H.B. Singh Memorial Award, Indo-UK Exchange Award for Young Scientists and awards of National Fellow, Professor of Eminence.



Dr B. Meenakumari

Panelist

Dr B. Meenakumari, Chairperson, National Biodiversity Authority, India, has served in ICAR as DDG (Fy) and Director CIFT. She has done pioneering work in introducing and standardising new fishing gear materials and accessories for making fishing easier, more productive and profitable. She has also been involved in development of modern lobster traps with durable material, square mesh cod ends for the conservation of fishery resources and identifying potential fishing zones with the help of satellite imagery.



Dr R. S. Hamilton

Panelist

Dr R. S. Hamilton is the Head at T.T. Chang Genetics Resources Center and International Rice Genebank at Philippines. He is an evolutionary biologist providing leadership to safeguard rice genetic resources in the genebank at IRRI, facilitate their effective and responsible use, develop new approaches to improve their conservation. He represents IRRI and the CGIAR in relevant international fora, particularly in the International Treaty on Plant Genetic Resources for Food and Agriculture. He is a member of executive committee of the "Article 15 Group of genebank managers", the International Advisory Council for the Svalbard Global Seed Vault and the Steering Committee of DivSeek.



Dr Sudhir Kochhar

Panelist

Dr Sudhir Kochhar is a retired National Coordinator in Program Implementation Unit (PIU) of NAIP in ICAR, New Delhi, India. He coordinated implementation of the World Bank Financed Component-4 Sub-Projects on Basic and Strategic Research in Frontier Areas of Agricultural Sciences. Dr Kochhar has contributed to the development of the Indian legislations, Protection and Plant Varieties and Farmers' Rights Act, 2001, the Biological Diversity Act, 2002 and the Genetically Modified Organisms Act, 2004 of Republic of Mauritius.



Dr Neeti Wilson

Panelist

Dr Neeti Wilson is a Partner, Anand & Anand IP Law Firm, New Delhi. She practices mainly at the Patent Office and also at Plant Variety Registry, Biological Diversity Authority and IPAB. Her experience includes Drafting of patent specifications, Patent search and analysis, Giving opinions-Validity; Patentability, Infringement analysis, Freedom to Operate, Patent Prosecution and Opposition proceedings. Her main interest is in areas including compulsory licensing, IP management, patent opposition, revocation and infringement.

TECHNICAL SESSION 6

IPRs, ABS and Farmer's Rights Common Session

09-11-2016; 11.00-13.15

AP Shinde Hall



Prof. R. B. Singh

Co-Chair

Recipient of Padma Bhushan, Prof. Ram Badan Singh, currently the Chancellor, Central Agricultural University, Imphal, had held several other coveted positions both at national and international levels. He was Member of the National Commission on Farmers, Assistant Director General of FAO of the United Nations and Regional Representative for Asia and the Pacific, Chairman ASRB, Director and Vice Chancellor IARI. He possesses a career of leadership in improving agrarian livelihood, food, nutrition and ecological security, in cutting-edge research and technology development, in higher education and human resources development and in policy and programme formulation, execution and appraisal; each pursued in national, continental and global capacities.



Dr Lim Eng Siang

Co-Chair

Dr Lim Eng Siang is a Consultant, Ministry of Agriculture and Agro-based Industry, Malaysia and associated with ITPGRFA.



Dr Pratibha Brahmi

Convener

Dr Pratibha Brahmi is a Principal Scientist and Officer -in- Charge, Germplasm Exchange and Policy Unit at ICAR-NBPGR, New Delhi, India. She has been actively involved in Managing import and export of plant genetic resources, developing guidelines for exchange of germplasm under ITPGRFA, developing the procedure for filing applications of ICAR for plant variety protection with PPV&FRA Authority.



Dr R. R. Hanchinal

Speaker

Dr R. R. Hanchinal is Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, Government of India. He has served in important positions at National and International level including Vice Chancellor, UAS, Dharwad and advisor to Indonesia government for the development of Food Crop Research. He has made significant contributions in the area of Wheat Improvement for hot to very hot dry environments. His work relates to both basic and applied aspects. In wheat he developed 17 varieties which include the world's first semi-dwarf dicoccum wheat varieties DDK-1001 and DDK-1009.



Dr Lim Eng Siang

Speaker

Dr Lim Eng Siang is a Consultant, Ministry of Agriculture and Agro-based Industry, Malaysia and associated with ITPGRFA.

Dr Ilse Köhler

Speaker

Dr Ilse Köhler works for RollefsonLeague for Pastoral Peoples and Endogenous Livestock Development, Germany. Her academic background is in veterinary medicine and anthropology. She has more than 100 scientific publications in journals spanning various disciplines and published a number of monographs. She has been awarded Rolex Associate Award for Enterprise and the Trophée des femmes of the Fondation Yves Rocher in Germany.



Dr Sanjeev Saxena

Speaker

Dr Sanjeev Saxena is ADG (Intellectual Property & Technology Management) at ICAR, New Delhi, India. He obtained his doctoral degree in Plant Physiology from IARI, New Delhi, India. He has made significant contribution towards PGR conservation with special reference to rice germplasm.



TECHNICAL SESSION 7

Partnership, Networks and Capacity Building

Common Session

09-11-2016; 11.00-13.15
ICAR Lecture Hall



Dr Gurbachan Singh

Co-Chair

Dr Gurbachan Singh is the Chairman, Agricultural Scientists Recruitment Board, ICAR, India. Recipient of several National Level Awards, he has been working in different capacities in various ICAR Institutes and has also served as Agriculture commissioner, Government of India, New Delhi. During his tenure as Director, CSSRI got the prestigious ICAR Best Institute Award and also the Ground water Augmentation Award of Ministry of water Resources.



Dr H. S. Dhaliwal

Co-Chair

Dr H. S. Dhaliwal is the Vice-Chancellor, Eternal University, Sirmour, Himachal Pradesh, India. His research interest includes Introgression of genes of economic importance from wild relatives of crop plants, molecular cytogenetics and genomics of crop and medicinal plants. Genetic engineering of crop plants for improvement of resistance against biotic and abiotic stresses and quality. He is a Fellow of National Academy of Agricultural Sciences, India and has published more than 200 research papers.



Dr S. P. Ahlawat

Convener

Dr S. P. Ahlawat is Principal Scientist and Head, Division of Plant Exploration and Germplasm Collection, ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi, India. He is coordinating the plant exploration and germplasm collection programme at national level. Having >22 years of research experience in various Institutions, he has developed micropropagation techniques of forestry and biofuel tree species, propagation techniques of bamboos and nursery techniques of indigenous forestry tree species of NEH Region. He has also worked on breeding and improvement in wheat, mungbean and indigenous agroforestry species. He has received several awards including Brandis Prize.



Dr Stephan Weise

Speaker

Dr Stephen Weise is the Deputy Director General Research and joined Bioversity International in 2008 as the Director of the Commodities for Livelihoods Programme, in France. Before joining Bioversity International, he worked for 16 years with the International Institute of Tropical Agriculture (IITA) on a variety of programmes related to tree crops, the environment, and farm diversification in the forest margins of West and Central Africa. He was the Regional Programme Manager of the Sustainable Tree Crops Programme - and was also the coordinator of the working group on agronomic/landscape sustainability in the ASB Partnership for the Tropical Forest Margins hosted by the World Agroforestry Centre.



Prof. Darshan Brar

Speaker

Prof. Darshan Brar is the Adjunct Professor, School of Agricultural Biotechnology, Punjab Agricultural University, Ludhiana, India. He has served as Head of IIRI's Plant Breeding, Genetics, and Biotechnology Division. His research interest are wide hybridization involving alien gene transfer and cytogenetic, molecular characterisation of introgressed alien chromosomal segments. He is the recipient of the Koshihikari International Rice Prize and the CGIAR Outstanding Scientist Award.



Dr Raghunath Ghodake

Speaker

Dr Raghunath Ghodake during his tenure at ICRISAT has developed and applied whole farm modeling approach and applied it successfully for assessing the watershed management technologies in the semi-arid tropics. He then worked as Policy Planner and Advisor with the Department of Agriculture and Livestock, Government of PNG. He headed NARI as its Deputy Director General for 4 years and then as Director General. During his leadership of NARI, the institute not only got established and developed but also became a centre of excellence in AR4D in PNG and in the Pacific region. Since January 2015, Dr Ghodake has joined the AsiaPacific Association of Agricultural Research Institutions (APAARI) as its Executive Secretary and has been coordinating and overseeing the development of APAARI.



Mr Shyam Khadka

Speaker

Mr Shyam Khadka is FAO Representative in India since 2015. He has great experience as international fund manager with IFAD and FAO.



Dr Dilip Kumar

Speaker

Dr Dilip Kumar is the former Director and Vice Chancellor of Central Institute of Fisheries Education, Mumbai, India. He has worked towards the participatory approaches to fisheries development and management. He has also been involved in setting up the Network of Aquafarmers Associations in the Asia–Pacific region and helped develop an Asia Regional Aquatic Animal Health Certification and Quarantine System. Dr Kumar has developed model for fisheries co-management that ensures community participation in the management of coastal fisheries resources in Bangladesh.



Dr Ronnie Vernooy

Speaker

Dr Ronnie Vernooy works as Genetic Resources Policy Specialist in Bioversity International. He has worked on questions related to the conservation and sustainable use of agricultural biodiversity for more than 25 years in countries such as Bhutan, China, Colombia, Cuba, Honduras, Mongolia, Nepal, Nicaragua, South Africa and Vietnam. His current work focuses on the policy and legal aspects of the safeguarding and sustainable use of plant genetic resources, both *ex situ* and *in situ*, from local to international levels.



Dr Tiziana Ulian

Speaker

Dr Tiziana Ulian is the Senior Research Leader, Diversity and Livelihoods at Natural Capital and Plant Health at Royal Botanical Garden, Kew. She is a plant ecologist with a wide range of research interests aiming to support the conservation and sustainable use of plant genetic resources. She leads a research group developing plant diversity approaches to support communities in locations and economies where nutritional, income and biodiversity issues are of paramount importance.

SATELLITE SESSION 4

Crop Wild Relatives : Back to Wild to Save the Future

(Bioversity International and University of Birmingham)

09-11-2016; 11.00-13.15
NAAS Lecture Hall



Dr Ehsan Dulloo

Co-Chair

Dr Ehsan Dulloo is the Programme Leader for the 'Conservation and Availability Programme' Bioversity International. He provides scientific leadership for *in situ* conservation of crop wild relatives and on farm conservation and oversight on the policy and informatics work of Bioversity International. He has been a lead author for the preparation of FAO's first and second State of the World Reports on plant genetic resources and the 2005 Millennium Ecosystem Assessment report. He is also a member of the Plant Sub-Committee of IUCN/SSC and co-chair of the Crop Wild Relatives Specialist Group.



Dr Bikram Gill

Co-Chair

The founder Director of Wheat Genetics Resource Center (WGRC), Dr Bikram Gill is the University Distinguished Professor at Kansas State University, USA. A major focus of his research is the molecular cytogenetic analysis of bread wheat. He pioneered the use of chromosome banding and *in situ* hybridization techniques, which are now used worldwide in research on wheat and other crops. He is recipient of several awards/recognition such as the KSU Distinguished Graduate Faculty Award, Kansas Association of Wheat Growers 1997 Wheat Man of the Year Award, and Crop Science Societies of America Fellowship. Dr Gill is a member of the International Wheat Genetics Organizing Committee and has been a strong force in the International Triticeae Mapping Initiative.



Dr J. S. Sandhu

Speaker

Dr J. S. Sandhu is the DDG, Crop Sciences at ICAR, New Delhi. Widely known as a pulse breeder, Dr Sandhu is the recipient of several prestigious awards and honours. A fellow of NAAS, he has been instrumental in developing 22 varieties of different pulse crops including 10 of chickpea, five of mungbean, two of pigeonpea, four of urdbean and one of soybean. His commendable work on inter-specific hybridization in chickpea and *Vigna* has been widely recognized. He has played a vital role in drafting germplasm exchange guidelines and has efficiently carried forward three mega programmes including National Food Security Mission, Bringing Green Revolution in Eastern India and Crop Diversification. He has published 215 research papers including 101 research articles, 3 books authored/edited, 13 book chapters etc. in journals of national and international repute.



Dr Joana Magos Brehm

Speaker

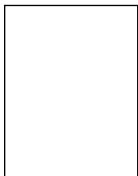
Dr Joana Magos Brehm is the Programme Officer of the IUCN SSC Crop Wild Relative Specialist Group. She has been working on different aspects of conservation of plant genetic resources, namely on *ex situ* and *in situ* conservation, and development of national conservation strategies for the conservation of crop wild relatives and landraces. She has also worked as a consultant for Bioversity International, IUCN and FAO and has also collaborated with or led several projects namely the crop wild relatives component of the “European Red List of Vascular Plants”, “Conservation and Valuation of the Threatened Endemic Flora of Portugal”, “Establishment of a new Botanical Garden in Famões, Portugal” and “SADC Crop Wild Relative project”.



Ms Aremi Contreras Toledo

Speaker

Ms Aremi Contreras Toledo works at the School of Bioscience, University of Birmingham, United Kingdom. She is working on genetic diversity of pepper landraces in Mexico using microsatellite markers.



Dr Nkat Lettie Maluleke

Speaker

Dr Maluleke is a Director of Genetic Resources, National Plant Genetic Resources Centre, South Africa. Dr. Maluleke is working on SADC Region Crop Wild Relatives.



Dr Imke Thormann

Speaker

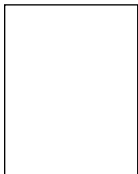
Dr Imke Thormann is a plant genetic resources conservation scientist and her current research focus is on the conservation of crop wild relatives and different techniques for conserving crop diversity *ex situ* (seed banks, field gene banks, *in vitro* storage, cryopreservation, DNA storage, botanical gardens) and *in situ* (conservation of crop wild relatives (CWR) in wild habitats and of traditional crop varieties on-farm) and the assessment and monitoring of genetic diversity.



Dr Nora Patricia Castañeda Álvarez

Speaker

Dr Nora Patricia Castañeda Álvarez, is working at International Center for Tropical Agriculture (CIAT), Colombia on *in situ* conservation, genetic diversity and potential of crop wild relatives.



Dickson Ng'uni

Speaker

Dickson Ng'uni works at Zambia Agricultural Research Institute, Zambia on capacity Building for seed testing and monitoring of germplasm accessions held in the gene bank.



Dr N. C. Gupta

Speaker

Dr N. C. Gupta is a Scientist at ICAR- NRCPB, IARI, New Delhi, India and works on use of genome engineering tools and other molecular and bioinformatics approaches for Brassica crop improvement program.



Dr Santosh K. Pattanashetti

Speaker

Dr Santosh K. Pattanashetti is a Scientist (Genetic Resources) at ICRISAT, Patancheru, Hyderabad, India and is involved in Evaluation, Characterisation and Genetic diversity analysis of crop wild relatives of arid crops.



Dr Nigel Maxted

Facilitator

Dr Nigel Maxted is a Senior Lecturer in Genetic Conservation, School of Biosciences, University of Birmingham, United Kingdom. His research interest includes conservation of genetic diversity in plants, largely on species of socio-economic value, working primarily in Northern Asia, Middle East, Africa, Europe and the UK. He undertakes consultancy service in relation to plant genetic conservation for major international agencies. He recently prepared a Global Strategy for Crop Wild Relative Conservation Strategy for FAO of the United Nations, provided advice on Medicinal Plant Conservation in Jordan for the Global Environment Facility and formed part of a World Bank team assessing the implementation of plant genetic conservation in Egypt.

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