

Twelfth International Dryland Development Conference **“Sustainable Development of Drylands in the Post 2015 World”**

21-24 August 2016, Alexandria, Egypt

Organised by

International Dryland Development Commission

Hosted by

Bibliotheca Alexandrina, Alexandria, Egypt

Co-sponsored by

**ALARI (Ain Shams University, Egypt), ALRC (Japan), ICARDA,
CAREERI (CAS, China), CIHEAM, JICA (JAPAN), JIRCAS (Japan)**

Supported by

IFAD, FAO, COMSTECH, Shoura Foundation and ECOSF

Program



International Dryland Development Commission
August 2016

International Dryland Development Commission

The International Dryland Development Commission (IDDC) is an autonomous nongovernmental nonprofit organization established in 1987 by the individuals and institutions interested in and concerned about the sustainable development of dry areas. It is promoting all aspects of dryland studies by fostering cooperation, collaboration and networking between various international, regional and national organizations. One of the important *modus operandi* of the networking of IDDC has been to hold a major scientific conference every two to three years to provide opportunity to participants from around the world to exchange research results and experiences in dryland development and combating desertification. In pursuance of this objective the IDDC has organized in the past eleven international conferences, which were held in China (Beijing), Egypt (Alexandria & Cairo), Iran (Tehran), Mexico (Mexico City), USA (Texas), the countries that have large dryland areas.

Themes of 12th Conference:

1. Application of new technologies for the improvement of stress (drought, heat, cold and salinity) resistance of crops for dry areas.
2. Sustainable management of scarce water resources.
3. Agronomic and crop improvement interventions for sustainably enhancing agricultural productivity of small-holder farmers in dry areas.
4. Soil health and land use constraints for agricultural productivity in dry areas and their management.
5. Soil erosion and desertification processes and control.
6. Biodiversity conservation, and prevention of deforestation.
7. Sustainable management of productivity of rangeland and livestock in dry areas.
8. Arid lands communities, their indigenous knowledge and heritage, and socio-economic studies. Poverty alleviation, creation of job opportunities and minimizing outmigration.
9. Renewable energy resources (wind, solar, biogas) for sustainable arid land community settlement.

Twelfth International Dryland Development Conference
“Sustainable Development of Drylands in the Post 2015 World”

21-24 August 2016, Alexandria, Egypt

20 August, Saturday

15:00 – 19:00 *Registration (Venue: BibAlex Conference Centre.)*

21 August, Sunday

08:00 – 10:00 *Registration continued (Venue: BibAlex Conference Centre)*

09:00 – 10:00 **Inaugural Session**
(Venue: Great Hall)
Chair: Adel El-Beltagy, Chair IDDC

Welcome – Adel El-Beltagy, IDDC Chair

Homage to late Prof. Adli Bishay

Statements by Co-sponsors:

- BibAlex- *Ismail Serageldin*
- FAO - *Pasquale Steduto*
- IFAD - *Abdelhaq Hanafi*
- ALRC, JIRCAS & JICA - *Atsushi Tsunekawa*
- ICARDA - *Mahmoud Solh*
- CAS - *Wang Tao*
- ALARI - *Ayman Abou Hadid*
- Shoura Foundation - *Hamed El-Shiaty*
- ECOSF- *Manzoor H. Soomro*

10:00 – 10:30 *Group Photograph and Refreshments*

11:00 – 13:00 **Plenary Session 1**
(Venue: Great Hall)

Co-chairs: Mahmoud Solh and Don Slack

- 11:00 – 11:30** **1. Achieving Sustainable Development Goals (SDG) in the dry areas a myth or a real possibility - *Adel El-Beltagy***
- 11:30 – 12:00** **2. Strengthening resilience and adaptive capacity of NENA dryland agricultural systems to climate change and related shocks: FAO contribution - *Pasquale Steduto***
- 12:00 – 12:30** **3. Innovating sustainable land management for dryland development toward the Post 2015 World - *Atsushi Tsunekawa***
- 12:30 – 13:00** **4. Oasis and oasisification in China - *Wang Tao***

- 13:00 – 14:00 *Lunch Break*
- 1400 – 1600** **Plenary Session 2**
(Venue: Great Hall)
Co-chairs Pasquale Steduto and Kauser Malik
- 14:00 – 14:30 1. The contribution of innovative agricultural research to the sustainable development goals (SDGs) in dry areas – **Mahmoud Solh**
- 14:30 – 15:00 2. Sustaining water for desert agriculture – **Don Slack**
- 15:00 – 15:30 3. Towards second green revolution by making grey areas green – **Raj Paroda**
- 15:30 – 16:00 4. Development of salinity and drought tolerant plants through biotechnology– **Kauser Malik**
- 16:00 – 16:30 *Refreshments*
- 16:30 – 18:30** **Three Concurrent Sessions**
- 1. Genomics of Stress Tolerance in plants**
(Venue: Great Hall)
Co-chairs: Magdy Madkour & Hisashi Tsujimoto
1. Use of RNA-Seq for detection of stress-related genes and transcription factors in plants - **Ahmed Bahieldin.**
 2. Field evaluation of transgenic wheat (*Triticum aestivum* L.) Overexpressing barley chitinase gene conferring resistance to wheat rusts and powdery mildew - **Hala Eissa.**
 3. Metabolomic response of *Calotropis procera* growing in desert to changes in water availability - **Sameh E. Hassanein.**
 4. Development of transgenic wheat (*Triticum aestivum* L.) expressing *AtMDAR1* gene conferring salt tolerance - **M. A. Teima.**
 5. Optimization of regeneration conditions and transformation of sorghum genotypes for drought stress tolerance - **Shireen Assem**
- 2. Paddy Cultivation in the Dry Areas**
(Venue: Small Theater)
Co-chairs: Tsugihiko Watanabe & Waleed Hassan A. El Hassan
1. Developments and prospects of paddy fields in California, USA – **Sadao Nagasaka et al (Presented by T. Watanabe)**
 2. Impact of climate change towards irrigation operations in Central and Northeast Thailand and its adaptation towards SDG - **Sucharit Koontanakulvong and Thongplew Kongchan**

3. Paddy rice irrigation and water requirements with upland crop rotation system in the lower Ili River Basin, Kazakhstan - ***Katsuyuki Shimizu et al.***
4. Cross-scale hydro-dynamics and effects of paddy cultivation on water management and productivity - ***Waleed Hassan Abou El Hassan et al.***

3. Soil health and land use constraints for agricultural productivity in dry areas and their management (Theme 4)

(Venue: Delegates Hall)

Co-chairs: Abdel Aziz Sheta and Ch. Srinivas Rao

1. Approaches for the integrated agriculture management of salt affected environments in marginal regions of the Middle East - ***Abdullah J. Al-Dakheel and Hassan M. El-Shaer***
2. Evaluation of soil quality under organic agriculture systems in irrigated arid lands - ***Safaa S Khedr, A.S. Sheta and A. El-Beltagy***
3. Organic sources of nutrients as climate smart management strategies for soil temperature and moisture stresses for sustainable wheat production in drylands - ***Patrick A. Ooro, Joyce Malinga and Rhoda Birech***
4. Testing and up-scaling sustainable technologies for soil salinity reduction in Taveta irrigation schemes - ***P. Kathuli et al.***
5. Impacts of Land Reclamation and Urbanization on Agriculture Land use in Egypt - ***A.S. Sheta et al.***
6. Assessment of the aftermath of informal irrigation practices under the arid climate east of Suez Canal using Hyperion and multispectral remote sensing data - ***Nagwan M. Afify et al.***
7. Rainfed agriculture impact on the hydrological system of Wadi El Raml in the North Western Coast, Egypt - ***Ashraf El-Sadek et al.***
8. Using information communication technologies in development and sustainable management of drylands - ***Ahmed Rafea et al.***

22 August, Monday

Poster Display open from 08:00 to 18:30 (*Venue: Exhibition hall*)

08:30 – 10:30

Plenary Session 3

(*Venue: Great Hall*)

Co-chairs: Wang Tao and Adel El Beltagy

08:30 – 09:00

1. Building a sustainable community in the Egyptian desert –
Ibrahim Abouleish

09:00 – 09:30

2. IBSE for sustainable dryland development – *Manzoor H. Soomro*

09:30 – 10:00

3. Rainwater harvesting in drier environments: Role in ecosystems
restoration and resilience to climate variability and change –
Theib Oweis

10:00 – 10:30

4. Drought Proofing through Implementation of District Agriculture
Contingency Plans in India – *Ch. Srinivasrao*

10:30 – 11:00

Refreshments

11:00 – 13:00

Plenary Session 4

(*Venue: Great Hall*)

Co-chairs: Raj Paroda and Ismail Abdel Galil

11:00 – 11:30

1. Crop diversity - a prerequisite for food security –*Marie Haga*

11:30 – 12:00

2. Exploitation of useful genes in wheat-wild species
for sustainable agriculture in dry areas to achieve
SDGs – *Hisashi Tsujimoto*

12:00 – 12:30

3. Paddy cultivation in dry regions - Implication and future
directions– *Tsugihiko Watanabe*

12:30 – 13:00

4. Can selection in pasture grazing systems reduce methane
production from ruminants? – *William Erskine*

13:00– 14:00

Lunch Break

14:00 – 16:00

Plenary Session 5

(*Venue: Great Hall*)

Co-chairs: Atsushi Tsunekawa and William Erskine

14:00 – 14:25

1. The role of Sinai University in achieving sustainable development
in dry land ecosystem of in Sinai– *Hassan Rateb*

14:25 – 14:50

2. Greater Central Asia as the new frontier in the Twenty-first
century–*Victor Squires*.

14:50 – 15:15

3. Breeding wheat and barley for the drought-prone conditions in the
Kyrgyz Republic– *Dzamin Akimaliev*

- 15:15 – 15:50 4. The nanotechnological approaches for 2030 Sustainable Agriculture Development Strategy – **Taher A. Salaheldin**
- 15:50 – 16:15 5. The role of the Sustainable Development Center for Matrouh Resources in the Development of Drylands at Matrouh Governorate– **Ismail Abdel Galil**
- 16:15 – 16:30 *Refreshments*
- 16:30 – 19:30 **Special Session: Restoration of Degraded Dry Ecosystems: beyond conventional approaches**
(Venue: Great Hall)
Conveners: ICARDA and IPDRE
Co-chairs: M.B. Solh & Atsushi Tsunekawa
1. Introduction - **Theib Y. Oweis**
 2. Panel Discussion: Panelists
Adel El Beltagy, Mahmoud Solh, Victor Squares, Pasquale Steduto, Atsushi Tsunekawa
 3. Six presentations:
 - Aeolian desertification and its control in northern China - **Wang Tao**
 - From degradation to sustainable management: Policies for ground water use in dry ecosystems - **Aden Aw-Hassan et al.**
 - Revegetation of degraded ecosystems in dry environments: Experiences from China -**T. Taniguchi and N. Yamanaka**
 - Dry ecosystems services; approaches for valuation and ensuring public support -**V. Nangia and K. Clifton**
 - Dust storms from degraded drylands of Asia: dynamics and health impacts - **S. Otani et al.**
 - Role of rainwater harvesting in the restoration of the degraded badia of Jordan and Syria - **T. Oweis**

Poster Display open from 10:00 to 18:30 (Venue: Exhibition Hall)

23 August, Tuesday

Poster Display open from 08:00 to 18:30 (Venue: Exhibition Hall)

08:30 – 11:00 Three Concurrent Sessions

1. Application of new technologies for the improvement of stress (drought, heat, cold and salinity) resistance of crops for dry areas (Theme 1)

(Venue: Great Hall)

Co-chairs: Magdy Madkour & Hisashi Tsujimoto

1. Wheat breeding for multiple stress tolerance at ICARDA: Achievements and prospects - *W. Tadesse et al.*
2. Genome wide association study of adaptive traits under high temperature environments - *Awad Ahmed Elawad Elbashir et al.*
3. Increasing wheat productivity under heat stress conditions through utilization of wild relatives cytoplasms - *Yasir Yasir S. A. Gorafi and Hisashi Tsujimoto*
4. Biosafety considerations in the development of drought tolerant and insect protected maize under the Water Efficient Maize for Africa project in Kenya - *Murenga Mwimali et al.*
5. Flowering and fruiting of some new Valencia orange cultivars budded on sour orange and Volkamer lemon rootstocks - *A.Z. Bondok et al*
6. Effect of nano-calcium and nano-silicon compounds on salinity tolerance for green bean plants - *R.M. Gomaa et al.*
7. Towards high quality seed production of corn under predicted water scarcity in Egypt - *Mohamed M.S. Soliman & K.I. Khalifa*
8. Current status of wheat production in Egypt - *Sami Reda Sabry*

2. Sustainable management of scarce water resources (Theme 2)

(Venue: Small Theater)

Co-chairs: Fawzi Karajeh and Abdel-Ghany M. El-Gindy

1. Water harvesting in the dry-lands of North Africa: Opportunities and challenges - *Mohamed Ouessar and Houcine Khatteli*
2. New irrigation techniques for optimizing water use in New Land development in Egypt (The first priority - 1.5 million Feddans - *Abdel-Ghany M. El-Gindy*
3. Coping with the water scarcity issues through improving water productivity: the case of the irrigated cereal activity in Tunisia - *Fraj Chemak et al.*
4. Improvement of rain water productivity of wheat by supplemental irrigation and advanced agronomic scenarios in upper Karkheh River Basin - *Hossein Dehghanisanij et al.*

5. Deficit irrigation optimization for improving water productivity of sugar beet with AquaCrop: A case study of southern Urmia Lake basin - *Amir Nourjou et al.*
6. Impact of technology on sustainable water resource management on farm scale - *Fereshteh Batoukhteh and Hossein Dehghanisanij*
7. Rainfall fluctuation at the central dry zone, Myanmar - *Hiroshi Yasuda et al.*
8. Characteristics of individual rainfall events and its dependency on the minimum inter-event time in a dry desert area in north China - *Xin-ping Wang et al.*
9. An overview of the GCC Unified Water Strategy 2016-2035 - *Waleed Khalid Zubari*

3. Arid lands communities, their indigenous knowledge and heritage, and socio-economic studies (Theme 8-I)

(Venue: Great Hall)

Co-chairs: Houcine Khatteli and Saad Nassar

1. Rural development in dryland areas of the Qinghai-Tibet Plateau of China: problems and prospects - *Haiying FENG*
2. Added value from industries introduced in villages, reclaimed lands and oases - *Hamed El-Mously*
3. Response of rangeland communities to land use changes and climate change: the case of pastoral farmers of Narok County, Kenya - *P.N. Katiku et al.*
4. Adobe architecture – between tradition and innovation – *Adel Fahmi*
5. Economics and high value cultivation in the drylands – *Mohamed Alaa Diab*
6. Supplementary sources of income for farmers ameliorating salt-infested soils in Port Said Governorate - *Salah A. Tahoun et al.*
7. Assessment of impacts, adaptation and vulnerability to climate change in North Sinai region, Egypt - *Sherine Mansour and H.M. El-Shaer*
8. Measuring rural women’s empowerment in a dry land community: A comparison study in the New Valley governorate, Egypt - *Ahmed M. Diab and Hend M. Diab*

11:00 – 11:30

Refreshments

11:30 – 13:00

Plenary Session 6

(Venue: Great Hall)

Co-chairs: Abdel Nabi Fardous and Victor Squire

1. Vegetative landscaping of desert - *Mohamed Adel El-Ghandour*
2. Potential of agroforestry in drylands - *Zaved Rizvi*

3. Role of farm level water harvesting in drought mitigation in smallholder dryland farms in India - **Bandi Venkateswarlu**
4. African holistic worldview paradigm for interdisciplinary climate change science - **Chidi G Osuagwu**

13:00 – 14:00 *Lunch Break*

14:00 – 16:00 **Three Concurrent Sessions**

1. **Agronomic and crop improvement interventions for sustainably enhancing agricultural productivity of small-holder farmers in dry areas (Theme 3)**

(Venue: Delegate Hall)

Co-chairs: Mohan Saxena and Sami Reda Sabry

- Agronomic improvements can make future cereal systems in South Asia far more productive and result in a lower environmental footprint - **Yashpal Singh Saharawat**
- Effect of irrigation intervals and antitranspirants on vegetative growth, fruit and seed yield of summer squash (*Cucurbita pepo* L.) - **Hamdino M. I. Ahmed et al.**
- Determination of irrigation depths for potato using a process model and quantitative weather forecast - **Hassan Abd El Baki et al.**
- Use of biosensor for estimating abiotic stresses and technical management of the olive groves - **Boujnah Dalenda et al.**
- Changes in essential oil yield and composition of dill (*Anethum graveoloens* Linn.) in response to climate conditions - **Seham M.A. El-Gamal and Hamdino M. I. Ahmed**
- Carnation production using different soilless culture systems under protected cultivation in Egypt - **Neveen. E. Metwally et al.**
- Enhancing climatic resilience of farming in arid regions of north-west India - **O.P. Yadav**
- Vision on olive industry in Egypt - **Seif El Deen Sari EL Deen**

2. **Sustainable management of productivity of rangeland and livestock in dry areas (Theme 7)**

(Venue: Small Theater)

Co-chairs: A. M. Aboul-Naga & P. K. Ghosh

- Tolerance of desert sheep and goats to environmental stress, in association with their production and reproduction performance - **A.M. Aboul-Naga et al.**
- Studies on intercropping systems of some annual salt tolerant forage crops among saltbush shrubs (*Atriplex nummularia* L.) under Sinai saline conditions - **H.S. Khafaga et al.**
- Effect of alfalfa hay feeding on energy utilization of Simmental beef cattle kept in Gansu province, China - **Nobuyuki Kobayashi et al.**

- Potential of spineless cactus and lathyrus for fodder in semi-arid central India - *P.K. Ghosh et al.*
- Impact of the good rainy-year of 2015/2016 over the productivity of crops and livestock in CZWD and the livelihood of Bedouin Community - *Mona A. Osman et al.*
- Market chain of the imported camels from Horn of Africa to Egypt, as a cheap source of meat - *E.S. Abdel-Aal et al.*
- Case study for dryland management and rehabilitation in Jordanian Badia - *Abdel Nabi Fardous*
- The concept of integration of aquaculture and agriculture in Egypt - *Mohamed Fathy Osman and Sherif Sadek*

3. Arid lands communities, their indigenous knowledge and heritage, and socio-economic studies (Theme 8 -II)

(Venue Great Hall)

Co-chairs: Mohamed H.A. Nawar & Hamed El-Mously

- Maximizing the use of wild medicinal plants for the development of populations in the South East of Egypt - *Ahmed Abdellatif Elkhoully*
- Evaluating different policies to support organic agriculture adoption in Egypt - *Amr Radwan et al.*
- Linking farmers to market in Upper Egypt: A case study - *Wael Rafea*
- Linking small and marginalized farmers to markets; the importance and approaches - *Waheed Mogahed*
- Enhancing faba bean production and productivity through the demonstration of innovative technologies on farmers fields - *Mohamed S.M. Soliman and Rehab A.M. Abd-Elrahman*
- Agricultural cooperative development, an Egyptian Experience - *Ibrahim Siddik*

16:00 – 16:30

Refreshments

16:30 – 18:30

Three Concurrent Sessions

16:30 – 18:30

1. Soil erosion and desertification processes and control (Theme 5)

(Venue: Delegates Hall)

Co-chairs: Wang Tao & H.M. El-Shaer

- Key erodibility factors of dust emissions in the Gobi Desert – findings of the Project Asian Dust, Tottori University --

Yasunori Kurosaki et al.

- Effect of ground surface erosion and deposition distribution on spatial heterogeneity of soil grain size on nebkhas and interdune in the desert-oasis ecotone of northwest China - ***Xueqin Wang et al.***
- An unsustainable road towards sustainability: a review of anti-desertification strategies in Northern China - ***Xian Xue et al.***
- Improving erosion risk management in transboundary river basins for better regional environment: A case study of Upper Blue Nile River - ***Nigusse Haregeweyn et al.***
- Adoption of advanced techniques to improve national resilience to climate change in Lebanon – ***M. Hamze et al.***
- Diversity and distribution of bacterial species compositions in sand dunes in an Asian dust source area, the Gobi Desert - ***Kazunari Onishi et al.***
- Practical techniques for desertification control and livelihood improvement in the Sahel, West Africa - ***Ueru Tanaka and Takao Shimizu***

16:30 – 17:15

2 A. Biodiversity conservation (Theme 6)

(Venue: Small Theater)

Co-chairs: Ayman Abou Hadid & Javed Rizvi

- Weed management activities and their relation to biodiversity conservation and combating desertification - ***Mohamed A. Balah***
- Spatial-temporal variation characteristics of NPP in the Heihe River Basin, Northwestern China in a recent 10 year period calculated by CASA Model - ***Qi Feng and Zhang Fupi***
- The effect of grazing exclosure on plant community diversity and structure in arid Mediterranean steppe of Algeria - ***Merdas Saifi***

17:15 – 18:30

2 B. Renewable energy (Theme 9)

(Venue: Small Theater)

Co-chairs: A. Mobarak & O.P. Yadav

Lead Presentation: Renewable energy in Egypt: A new horizon

Mohamed El-Sobki

- Production and water use efficiency of *Jatropha curcas* irrigated with agricultural drainage water: A case study of Ismailia, Egypt - ***Safaa A. Ghorab and Fujimaki Haruyuki***
- Development of mobile stand-alone solar driven reverse osmosis desalination plants for sustainable development in Egypt - ***Hosam A. Shawky et al.***

- Economic analysis of a stand-alone reverse osmosis desalination unit powered by photovoltaic for possible application in the North West Coast of Egypt - *Dalia E. Abo Zaid*
- Innovations for long term resilience and sustainable nexus of food, energy and water system - *Akrum H. Tamimi et al.*

16:30 – 18:30

3. Arid lands communities, their indigenous knowledge and heritage, and socio-economic studies (Theme 8-III)

(Venue: Great Hall)

Co-chairs: Mohammed Hamdy Salem & Shinji Otani

- Learned Lessons for settlement in reclaimed lands in arid zones: The case of Egypt - *Mohamed H.A. Nawar*
- Prospective role of small scale farmers in agriculture development in Egypt - *Dalia Yassin, Rania Naguib and Sahar Ahmed*
- Exploration and practice on the sustainable development of world heritage site – a case study of the Mogao Grottoes, Dunhuang, China - *Xiaoju Yang, Fasi Wu and Wanfu Wang*
- Health impacts of Asian dust on emission and downwind regions - *Shinji Otani et al.*
- Strengthening the seed industry policies in Egypt; opportunities to support the sustainable agriculture in dryland countries - *Mohamed M. Hassona*
- Supporting policies to combat desertification in Egypt - *Mohammed Hamdy Salem*

24 August, Wednesday

09:00 – 11:00

Panel Discussion

Role of private sector in sustainable development in dry areas

(Venue: Great Hall)

Moderator: Adel El-Beltagy

Panelists: Abd El Hamid El Demerdash, Amr Abou Freikha, Hamed El-Shiaty, Mamdouh Hamada, Mohamed Alaa Diab, Mohsen El-Beltagy and Tareq Tawfik

11:00 – 12:30

Concluding Session

(Venue: Great Hall)

Chair: Adel El-Beltagy

Special Address: Ismail Serageldin

- **Recommendations: Mohan Saxena**
- **Vote of Thanks**

12:30 – 13:00

Refreshments

13:00 – 18:30

Field Visit

Note:

- 1. Any changes in the conference program will be announced daily in the Conference and on IDDC website (www.drylanddevelop.org).**
- 2. Schedule of BibAlex guided tours will be available at the registration desk.**

International Scientific Committee

Chair: **Prof. Dr. Adel El-Beltagy**, Chair of IDDC; Chair of the Executive Board, Bibliotheca Alexandrina; Emeritus Professor, Arid Land Agricultural Graduate Studies & Research Institute (ALARI), Ain Shams University, Cairo, Egypt

Members: **Dr. Zafar Adeel**, Former Director, United Nations University - Institute for Water, Environment and Health (UNU-INWEH), Hamilton, Canada

Prof. Dr. Ayman Abou-Hadid, Emeritus Professor, Arid Land Agricultural Graduate Studies & Research Institute (ALARI), Ain Shams University, Egypt

Dr. Mahmoud El-Solh, Director General, International Center for Agricultural Research in the Dry Areas (ICARDA), Beirut, Lebanon

Prof. Dr. Magdy Madkour, Emeritus Professor, Arid Land Agricultural Graduate Studies & Research Institute (ALARI), Ain Shams University, Egypt

Prof. Dr. Kauser Malik, Professor (Biotechnology), Dean Postgraduate Studies, Director, Research, Innovation & Commercialization (ORIC) Chartered University, Lahore

Prof. Dr. Wang Tao, President, Lanzhou Branch of Chinese Academy of Sciences, Lanzhou, China

Prof. Dr. Atsushi Tsunekawa, Professor, ALRC, Tottori University, Tottori, Japan

Prof. Dr. Tsugihiko Watanabe, Professor Regional Planning, Graduate School of Global Environmental Studies, Kyoto University, Kyoto, Japan

Prof. Dr. Mohan Saxena, Executive Secretary, IDDC, India