

Preface

Prof. Hiromichi TOYODA, Conference Chair, on behalf of the Organizer

Almost one year had passed since we held the 1st International Conference on Arid Land (ICAL1) in Narita, Japan. Although it was just immediately after the great East Japan earthquake (Mar. 11, 2011), the conference was truly fruitful and productive. Continuous efforts are being taken on for reconstruction from the unheard-of disaster. Even in this one year, the world has been changed with great rapidity. Particularly, countries located in desert and arid areas receive considerable attention. Therefore, importance of studies on desert and arid land nowadays is much more realized.

The Conferences on Desert Technologies have been held for 9 times since 1990 addressing to natural characteristics of desert and desertification area (e.g., climate, hydrology, and vegetation), mechanism of the desertification, and its prevention methods. Although the conferences have been a great source of learning for researchers from relevant countries contributing various knowledge and technologies with fruitful discussions, issues of desertification remain a main global concern resulting in necessity of further and continuous researches. Furthermore, the previous conferences have often focused on technological aspects of the desertification and arid regions. Therefore, based on previous experience and accomplishment, and on the occasion of the 10th anniversary, the 10th Conference on Desert Technologies (DT10) offered an opportunity of comprehensive discussion and extents fields of research including natural, technological, human and social sciences towards overcoming constraints of the desertification. The DT10 was held as the 1st International Conference on Arid Land (ICAL1). A record of DTs is listed the end of this preface. The conference welcomes researchers who associate with deserts and arid regions from diverse aspects of sciences including natural science and the humanities.

In this conference, there were 142 participants from 29 countries, while having 55 oral presentations and 46 poster presentations. As we could have the significant time and perform useful discussion with making a good friendships. As well as past DT conferences, we could be together in participation in various events and there could be sufficient free time for informal discussions within the week. The friendship must have been deepened throughout these discussions. Also the mind must have been refreshed, the purpose could be sufficiently accomplished.

We hope, ICAL1 (DT10) would be the start of a new arid land research and interchange between natural science and the humanities.

We would like to thank you all for your participation in this conference and we would especially like to extend our appreciation to all sponsors, co-operators and co-organizers.

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- Japan International Cooperation Agency (JICA)
- Japan Society for Desert Greening, Tokyo University of Agriculture
- The Alliance for Research on North Africa, University of Tsukuba
- Chiba Convention Bureau and International Center

Co-organizers

- Japan Science and Technology Agency (JST), Science and Technology Research Partnership for Sustainable Development (SATREPS), “Valorization of Bio-resources in Semi-Arid and Arid Land for Regional Development”
- Grants-in-Aid for Scientific Research (KAKENHI), Scientific Research Type A for Overseas Research, “Carbon (CO₂) recirculation and fixation by biomass production and afforestation of arid land with poor grain productivity”

Organizer

- The Japanese Association for Arid Land Studies (JAALS)

The International Advisory Board members, who helped provide direction and suggestions on the form this conference should take, are T. Kojima (Japan), H. Isoda (Japan), F. Watanabe (Japan), H. Toyoda (Japan), T. Maki (Japan), Y. Abe (Japan), K. Yoshikawa (Japan), W. Payne (USA), M.J. Jacobs (USA), R. Harper (Australia), S. Kumar (India), S. Sinha (India), S. Sayadi (Tunisia), M. Harrabi (Tunisia), K.N. Toderich (Uzbekistan), T.U. Rakhimova (Uzbekistan), H.A. El-Shemy (Egypt), M.M. Abu-Zreig (Jordan), R. Misak (Kuwait), Z. Hussain (Pakistan), and O.A. Bouya Ahmed (Mauritania).

We are very grateful to the local organizing committee who worked relentlessly in order for the participants to have all the facilities and the appropriate environment for a successful meeting.

Local Organization Committee members are T. Kojima (Seikei Univ.), H. Isoda (Univ. of Tsukuba), F. Watanabe (Tokyo Univ. of Agri.), T. Maki (Univ. of Tsukuba), Y. Abe (Univ. of Tsukuba), H. Toyoda (Tokyo Univ. of Agri.), T. Ishiyama (Chiba Univ.), Y. Shinoda (Chiba Inst. of Technol.), J. Suzuki (IDEA Inc.), Sa. Takahashi (Tokyo Univ. of Agri.), T. Nakamura (Univ. of Tsukuba), H. Sohma (Nara Women’s Univ.), Si. Takahashi (Tokyo Univ. of Agri.), H. Takahashi (Tokyo Univ. of Agri.), H. Shiwachi (Tokyo Univ. of Agri.), T. Morio (Univ. of Tsukuba), Y. Sakai (Kogakuin Univ.), H. Suganuma (Seikei Univ.), Y. Ishikawa (Akita Pref. Univ.), M. Ozaki (Maebashi Inst. of Technol.), Y. Yazawa (Chiba Inst. of Technol.), K. Yoshikawa (Okayama Univ.), Y. Kawabata (Tokyo Univ. of Agri. & Tech.), T. Saitoh (Tottori Univ.), K. Kurosawa (Seikei Univ.), S. Suzuki (Tokyo Univ. of Agri.), S. Shimada (Tokyo Univ. of Agri.), K. Tajima (Tokyo Univ. of Agri.), M. Irie (Univ. of Tsukuba), K. Kawata (Univ. of Tsukuba), K. Kashiwagi (Univ. of Tsukuba), and A. Yahata (Univ. of Tsukuba).

Finally, I really appreciate our secretariats from Tokyo Univ. of Agriculture : Sawahiko Shimada and Shinji Suzuki. Also, I would like to say many thanks to all staffs for organizing the conference.

The proceedings of the conference were published as a series of two issues of Journal of Arid Land Studies. The first publication was published on Vol. 21-2, 2011 and consisted of keynote lectures and joint symposium with JAALS. The second one (current issue) includes the 85 proceedings of general presentations as refereed article.

Chronological Table of the International Conference on Desert Technology (DT)

	Year	Site (country)	Conference chair (Affiliation)
1st	Aug. 1991	Santa Barbara, California (USA)	Kennith E. FOSTER (The University of Arizona)
2nd	Dec. 1993	Kona, Hawaii (USA)	Isao ENDO (RIKEN)
3rd	Oct. 1995	Fuji-motosuko (Japan)	Toshinori KOJIMA (Seikei University)
4th	Sep. 1997	Kalgoorlie (Australia)	Adrian R. WILLIAMS (Curtin University of Technology)
5th	Oct. 1999	Reno, Nevada (USA)	James A. YOUNG (USDA-Agricultural Research Service)
6th	Sep. 2001	Urumqi (China)	Xuncheng XIA (Xinjiang Institute of Ecology and Geography)
7th	Nov. 2003	Jodhpur (India)	Sanjay KUMAR (BRA Bihar University)
8th	Nov. 2005	Nasu (Japan)	Yukuo ABE (University of Tsukuba)
9th	Nov. 2008	Douz (Tunisia)	Moncef HARRABI (National Institute of Agronomy of Tunis)
10th (1st ICAL*)	May 2011	Narita (Japan)	Hirromichi TOYODA (Tokyo University of Agriculture)

* ICAL : International Conference on Arid Land