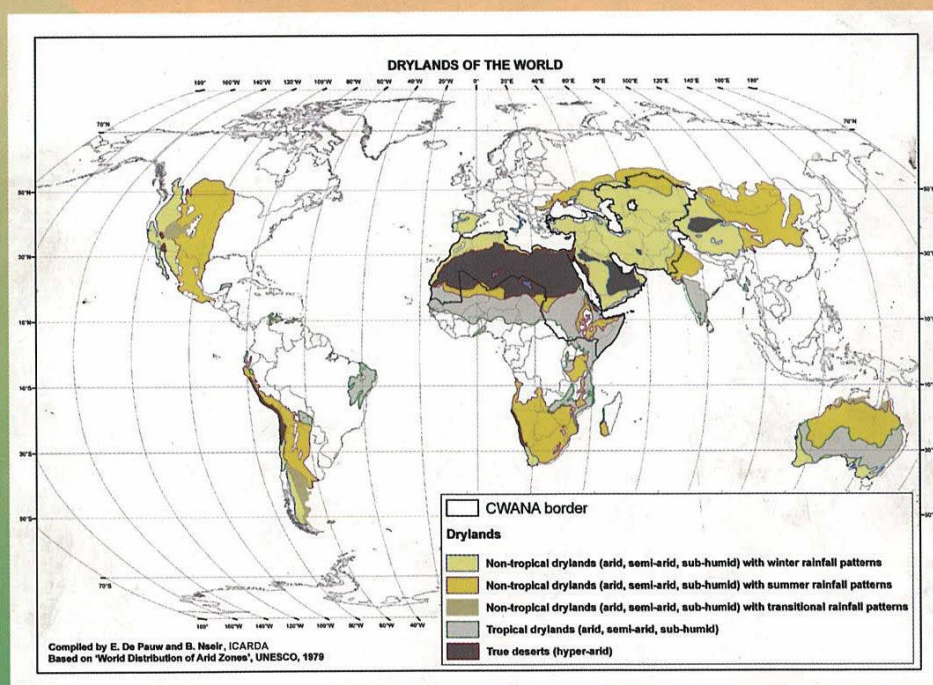


Human and Nature – Working Together for Sustainable Development of Drylands



International Center for Agricultural Research
in the Dry Areas (ICARDA)

Human and Nature – Working Together for Sustainable Development of Drylands

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Editors

Adel El-Beltagy, Mohan C. Saxena and Wang Tao



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ICARDA

P.O. Box 5466, Aleppo, Syria

Phone: (963-21) 2213433, 2213477, 2225112; Fax: (963-21) 2213490, 2225105, 5744622

E-mail: ; Web site: <http://www.icarda.org>

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Foreword

Land degradation and desertification constitute one of the severest threats to sustainable livelihoods of the people inhabiting the arid and semi-arid areas of the world. Because of harsh climatic conditions, the natural resource base in these areas is very fragile. Yet, some of these areas have been home for the domestication and evolution of some of the most important crop and animal species that provide sustenance and nourishment to billions of people the world over. The wild relatives and landraces of these species are still found there, and they continue to evolve and adapt to the harsh climatic conditions in their natural habitat. They are, thus, a valuable resource not only for increased agricultural productivity but also to cope with the challenges of global climatic change. However, these precious resources are being eroded due to demographic pressures, urbanization, overexploitation of land and water resources, and other human activities. Sustainable management of the fragile ecosystems of the dry areas, particularly to prevent land degradation and desertification, is therefore becoming an issue of increasingly global concern. This concern has been emphasized in the recent global evaluation report on desertification developed by the Millennium Ecosystems Assessment. Declaration of 2006 as the International Year of Deserts and Desertification (IYDD) by the United Nations was also aimed at enhancing global awareness of the problems of land degradation and desertification and promoting integrated international efforts to find solutions.

The International Dryland Development Commission and the International Center for Agricultural Research in the Dry Areas (ICARDA) took the initiative, in collaboration with the Arid Land Research Center (ALRC) of Tottori University, Japan; the Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI) of the Chinese Academy of Sciences, China; National Natural Science Foundation of China (NSFC); the Desert Research Institute, Nevada, USA; and the United Nations University (UNU), Japan, to mark the start of the IYDD and contribute to its objectives by organizing the Eighth International Conference on Dryland Development, 25-28 February 2006, in Beijing, China, under the theme 'Human and Nature – Working Together for Sustainable Development of Dry Areas.' Some 200 scientists and administrators from 22 countries and five international organizations participated in the Conference. Multidisciplinary oral and poster presentations were made on Soil and Water Conservation and Degradation, Dust-storm Process, Range Management, Forage and Livestock Production, Biodiversity and Ethnobotany, Stress Physiology, Renewable Energy, Indigenous Knowledge and Heritage, Sustainable Development of Oases and Desert Communities, and New Technologies and Crop Improvement in the Dry Areas. A panel of experts held discussions on the Implementation of the United Nations Convention to Combat Desertification (UNCCD). The Conference served as an extraordinary forum for dialogue, discussions and exchange of knowledge on the diagnosis and assessment of the problems of desertification and development of solutions that could help in sustainable development. During the closing session a 'Central and West Asia and North Africa Plus Partnership' (CWANA Plus) between UNU and ICARDA was launched to develop human capacity for research on developing drylands.

This volume contains the presentations made at the Eighth International Conference on Dryland Development. It is hoped that it will serve as a repository of information on the problems and prospects of sustainable management of dry areas and preventing desertification, and will thus be of interest to those involved in research, extension, development and policy formulation for the benefit of the people of the dry areas. It is our belief it would serve as an important contribution to the objectives of the IYDD.



Mahmoud Solh
Director General
ICARDA