## International Symposium on Drylands Ecology and Human Security (ISDEHS 2006)

Perspectives, Policy Responses and Sustainable Development in the Arab Region - Challenges and Opportunities

> Dubai, December 4-7, 2006 United Arab Emirates

An initiative in recognition of the United Nations "International Year of Deserts and Desertification"



## Tentative Technical Program (to be revised)

	December 4, 2006
9:00	Registration
9:30	Opening Ceremony Speakers XXXXX XXXX Dr. Mohammed Ziad Al Kawadri <i>ISDEHS Local Organization</i> Department of Culture and Information, Sharjah, Unted Arab Emirates Prof. Dr. Yahya Hassan Bajwa <i>ISDEHS Intercultural Dialogue Chair</i> Lucerne University of Applied Sciences and Arts - FHZ, Luzern, Switzerland Dr. Zamir Libohova <i>ISDEHS 2006 Co-Chair</i> Natural Resources Conservation Service United States Department of Agriculture, United States

	Plenary Lectures				
10:30	The Challenge of Water Scarcity for Agriculture in the Dry Areas Prof. Dr. Mohan C. Saxena Senior Advisor to DG, International Center for Agricultural Research in the Dry Areas (ICARDA) Arid Land Research Center, Tottori University, Japan				
10:50	to Promoting	An Institutional and Legislative Approach to Promoting Sustainable Holistic Development and Human Security Dr. Kwadwo Appiagyei-Atua Faculty of Law, University of Ghana, Accra, Ghana			
11:10	Islam, Education and Environmental Ethics: Traditional Responses to Contemporary Challenges in Drylands Ecosystems Prof. Dr. Yahya Hassan Bajwa Lucerne University of Applied Sciences and Arts - FHZ, Luzern, Switzerland				
11:30	Meet your colleagues – Tea and Coffee Break				
12:00		Parallel Sessions (Dhuhr 12:09)			
	S1a	S1a S3a S7a S13			
	Session 1a Impact of Hydrological Changes on Ecological Conditions in Arid Zones Convenor: Prof. Dr. S. Saied Eslamian School of Engineering and Applied Sciences, Princeton University, USA				
12:00	The Role of Geological Factors in Surface Water Quality and Secondary Salinization in Gazvin Plan Asghar Tahmasebi Senior Expert of UNCCD National Focal Point Office Forest Range and Watershed Organization Tehran, Iran				
12:15	Assessment of Groundwater Resources in Taiz Area, Yemen Ahmed A. Abdulqader Geology Department, Taiz University, Yemen				
12:30	Sustainable Exploitation Assessment and Management of Groundwater Resources in Arid Zones: A Case Study of Yazd Province Mohammad Abbaspour Department of Mechanical Engineering, Sharif University of Technology, Tehran, Iran				

12:45	Physical and Chemical Soil Properties Under Forest Tree Planted in Arid Region of Semnan Province Hamid Jalilvand Department of Forestry, Mazandaran University, Iran
	Session 3a Meeting the Challenge of Water Scarcity for Agriculture in the Dry Areas Convenor: Prof. Dr. Mohan C. Saxena Arid Land Research Center, Tottori University, Japan
12:00	Using Protected Agriculture for Improved Water and Nutrient Use Efficiency in the Dry Areas Regional Coordinator Arabian Peninsula Regional Program (APRP) ICARDA Dubai, United Arab Emirates
12:15	Improvement in Safe Use of Low Quality Water in Drip Irrigation Systems Hossein Dehghanisanij Agricultural Engineering Research Institute, Karaj, Iran
12:30	<b>Effects of Dry Farming Development on Surface Runoff Characteristics</b> Shahram Khalighi Faculty of Natural Resources, University of Tehran, Karaj, Iran
12:45	Humic Acid-based Soil Conditioners for Soil Cultivation in Arid and Semiarid Climates - Potential for the Economization of Water and Fertilizers Nicole Merkl Hoogen Bodensanierung GmbH, Senftenberg, Germany
	Session 7a Biodiversity Uses and Conservation in the Arab World Convenors: Dr. Arif S. A. Al-Hammadi Department of Biology, Faculty of Science, University of Sana'a, Yemen Dr. Abu Muhammad Shajaat Ali Department of Social Sciences, The University of Texas, United States
12:00	<b>Genetic Diversity of Some Faba Bean Landraces</b> Arif S. A. Al-Hammadi Department of Biology, Faculty of Science, University of Sana'a, Yemen

12:15	Responses of an Arid-land Plant Community to Simulated Changes in Rainfall Pattern Mohammad Jankju Borzelabald Department of Range and Watershed Management Faculty of Natural Resources, Ferdowsi Mashhad University, Mashhad, Iran
12:30	Distribution of Hair among <i>Acacia tortilis Forssk</i> (Hayne) Complex Growing in the Red Sea Hills, South Eastern Egypt and North Eastern Sudan Howaida Faisal AbdElRahman Department of Biology, University of Bergen, Bergen, Norway
12:45	Documenting and Comparing Plant Species Diversity by Using Numerical and Parametric Methods in Khaje Kalat, Northeastern Iran Hamid Ejtehadi Department of Biology, Faculty of Sciences Ferdowsi University of Mashhad, Mashhad, Iran
	Poster for Session 7
	Predicting the Geographical Distribution of Plant Species in Poshtkouh Rangelands of Yazd Province-Iran M. A. Zare Chahouki Faculty of Natural Resources, Tehran University, Karaj, Iran
	Session 13 Assessing the Security Implications of Desertification - Recognizing and Coping with Increasing Regional Tensions and Social Instability in Relation to Progressive Resource Scarcity Convenors: Dr. Anna Dluzewska Dean of Tourism Department SWPR, Warsaw, Poland Dr. Amin Al-Amin Department of Geography, Nigerian Defence Academy, Kaduna, Nigeria
12:00	Desertification in the Drylands of Nigeria and its Consequences on the Social Stability of the Region Amin Al-Amin Department of Geography, Nigerian Defence Academy, Kaduna, Nigeria
12:15	Moslem Law and Water Relations in Central Asia Rysbekov Yusup Khaidarovich Director Assistant Scientific-Information Center

	of Interstate Coordination Water Commission (SIC ICWC) of Central Asia. Tashkent, Republic of Uzbekistan
12:30	Climate Change and Human Security in the GCC: Implications for Vulnerability, Policy Response and Sustainable Development of the Affected Populace to Hydrological Changes in Saudi Arabia Andy S. Spiess GCC Network for Drylands Research and Development (NDRD) University of Hamburg Department of Economics and Policy -Center for International Relations
12:45	Desertification in the Context of Human Domestication: The Endangering Endeavor of Endangered Humans Regarding Drylands Oscar Carvajal University of Toronto, Kitchener, Ontario, Canada
13:00	Lunch Break
14:00	Keynote: Introducing the Watermark Initiative Adam Rix Watermark Initiative, LLC, Stillwater MN, United States
	Plenary Lectures
14:20	Operationalizing Sustainabilty in Arid Regions through Adaptive Planning Prof. Dr. Jerry Kolo Department of Urban and Regional Planning, Florida Atlantic University, United States Currently Visiting Professor: American University of Sharjah, United Arab Emirates
14:40	A Direct and Indirect Impact of Tourism Industry on Drylands: An Example of Southern Tunisia Dr. Anna Dluzewska Dean of Tourism Department SWPR, Warsaw, Poland
15:00	Coffee Break / (Asr 15:09)
	Plenary Lectures
15:20	An Integrated Approach to the Efficient Management of Scarce Freshwater Resources in Northwest and West Africa: The IMPETUS-Project Prof. Dr. Peter Speth

Institute for Geophysics and Meteorology, University of Cologne, Germ			gne, Germany	
15:40	The Value of Water- Integrated Water Resources Management in Drylar Prof. Dr. Armin Rieser Institute of Agricultural Water Engineering and Land Improvement, University of Bonn, Germany Currently Visiting Professor: University of Jordan, Amman			provement,
16:15		Parallel S	essions	
	S1b	S3b	S13b	S 14
		Sessio	on 1b	1
16:15	Contemporary Development of Dune Fields - A Chance for Local Economic Growth? The Example of Southern Morocco Maciej Dluzewski Department of Geomorphology Faculty of Geography and Regional Studies, Warsaw University, Warsaw, Poland			
16:30	Using Multiple Regression Models to Investigate Effectiveness of Watersheds Properties on Suspended Sediment Yield (SSY) Hamid Jalilvand Department of Forestry, Mazandaran University, Iran			
16:45	Rainfall Estimation in Hamedan Province Using Geostatistical Methods Kourosh Mohammadi Faculty of Agriculture, Tarbiat Modarres University, Iran			
Biosorption of Stable Strontium and Strontium-90 (Radioactive Using Cystoseira Indica Brown Alga in the Environmental Pollution R Reza Dabbagh Faculty of Environment, University of Tehran, Iran and Nuclear Research Center, Atomic Energy Organization of Iran		ollution Removal		
		Poster for S	Session 1	
	Contribution to Study the Comparison of Vulnerability of Hydraulic Basins in Morocco to Impacts of Climate Change Hind Salama Faculté des Sciences, Université Hassan II, Casablanca, Morocco			
	Biocrusts Influence on Soil Infiltration in Aridlands Ali Tavili			

	Estimation of Monthly Discharge Based on Thornthwait Water Balance Model in Semi-arid Region of Iran Maryam Azarakhshi
	Watershed Management, Natural Resources Faculty, Tehran University, Iran
	Session 3b
16:15	Using Marginal-quality Water Resources for Crop Production, Agroforestry and Aquaculture Manzoor Qadir
	ICARDA, Aleppo, Syria International Water Management Institute (IWMI), Colombo, Sri Lanka
16:30	Water Allocation for Agricultural Production in the Hormozgan Province in Southern Iran Abdoulkarim Esmaeili
	Department of Agricultural Economics College of Agriculture, Shiraz University, Shiraz, Iran
16:45	A Comprehensive Overview of Soil Salinization in Pakistan Muhammad Irshad
	Arid Land Research Center, Tottori University, Tottori, Japan
17:00	Agronomic Manipulations Can Sustain Yield and Improve Quality and Water Use Efficiency Hassan Ibrahim Ali
	Department of Research and Development, The Gum Arabic Company Limited, Khartoum, Sudan
	Poster for Session 3
	Technical Evaluation of Sprinkler Irrigation Systems in Arak Region, Iran Saeed Boroomand Nasab
	Faculty of Water and Sciences Engineering, Shahid Chamran University, Ahwaz, Irar
	Effects of Wind Velocity, Operating Pressure and Sprinklers Spacing on Distribution Uniformity in a Sprinkler Irrigation System Saeed Boroomand Nasab
	Faculty of Water and Sciences Engineering, Shahid Chamran University, Ahwaz, Irar

	Session 13b
16:15	Drought, the Collapse of Resource Access Regulation Mechanisms and Impact on Human Security Sudan's Darfur Case Dr. Khalid Ali El Amin The University of Khartoum, Development Studies and Research Institute, Sudan
16:30	Water Depression, Population Growth and Sustainable Development Mohammad Abbaspour Department of Mechanical Engineering, Sharif University of Technology, Tehran, Iran
16:45	<b>Guidelines and Tools for Evaluating Household Food Security</b> <b>in Drylands, North Kordofan-Sudan</b> Tarig E. Mahmoud Gum Arabic Research Centre, University of Kordofan, Sudan
17:00	Discussion
	Session 14 The Correlation Between Economic Decline and Social Disintegration as a Result of Desertification and Land Degradation in Drylands - New Challenges and Opportunities for Macroeconomic Reforms, Agricultural Policies and Environmental Legislation Convenors: Dr. I. Ogunlade, Department of Agricultural Extension and Rural Development University of Ilorin, Nigeria Elijah A. Obayelu Department of Agricultural Economics, University of Ibadan, Nigeria
16:15	Environmental and Socio-economic Impact of Desertification and Drylands Development: An Empirical Investigation of some Selected States of Northern Nigeria I. Ogunlade Department of Agricultural Extension and Rural Development University of Ilorin, Kwara State, Nigeria
16:30	Assessing the Costs of Environmental Degradation in the Middle East and North Africa Region Muawya Ahmed Hussein Dhofar University, Salalah, Oman
16:45	The Socio-Economic Impacts of Windbreaks as a Measure of Soil Conversation in Wadi Zabid, Yemen Alladeen M. A. Al-Sharjabi General Directorate of Forests & Desertification Control Ministry Of Agriculture and Irrigation, Sana'a, Yemen

17:00	The Intelligent Tutors Applied to the Computer Assisted Learning to Enhance Knowledge as the Framework to Implement the United Nations Convention to Combat Desertification in the Arab World Abdelkrim Khireddine Faculty of Sciences, University A/Mira, Bejaia, Algeria
	Poster Session 14
	Water Resources Scarcity and Problems in Implementing Sustainable Development in the Cameroonian Sudano-sahelian Milieu Wakponou Anselme, Frédéric Dumay & Monique Mainguet Department of Geography, University of Ngaoundéré, Cameroon (in absentia)
	Appropriate Policy Options for Sustainable Agriculture As Perceived by Farmers of Hamadan Province, Iran Karim Naderi Mahdei Department of Agriculture Extension and Education Faculty of Economy and Agricultural Development, University of Tehran, Iran
17.15	
17:15	Coffee Break / (Maghrib 17:29)
	Roundtable 1
	Water and the Future of the Gulf Region: What is NOW and what TOMORROW may mean
17:45	Can the current trends in land and water use resources guarantee a long term sustainable society in the Gulf Region?
	Organized and moderated by Dr. Zamir Libohova <i>ISDEHS 2006 Co-Chair</i> Natural Resources Conservation Service United States Department of Agriculture, United States
19:00	Closing / (Isha 18:59)
19:30	Arabian Welcome Reception

		Decembe	er 5, 2006	
9:30	Opening Keynote: Consolidated Strategy and Enhanced Approach (CSEA) GM UNCCD, Rome			CSEA)
		Plenary	Lectures	
10:00		Prof. Dr. Ali C	Management of Dryla hafai Elalaoui onal School of Agricultu	
10:20	Best Pra	ctice Examples from I	ultural Diversity in Dr East Africa and South ersity of Texas, Austin,	America
10:40	Drought Management: Strategies and Policy Implications Prof. Dr. Ezatollah Karami, College of Agriculture, Shiraz University, Iran			
11:00		Tea and Co	offee Break	
11:30	Parallel Sessions (Dhuhr 12:09)			
	S2	S4	<b>S6</b>	S15
	Session 2 New Approaches in the Management and Modeling of Water Resources and Water Ecosystems in Drylands Convenors: Dr. Trahel Vardanian & Christina Hakopian Department of Physical Geography, Yerevan State University, Yerevan, Armenia			
11:30	The Strategy of Integrated Management of Water Resources for Transboundary River Basin of Central Asia Inom Sh. Normatov Director of the Institute of Water Problems, Hydropower and Ecology Dushanbe, Tajikistan			
11:45	Exploration of Groundwater Resources in the Uplands of Wadi Rasyan, Taiz, Yemen Ahmed A. Abdulqader Geology Department, Taiz University, Yemen			
12:00	Pollutants Effects on the Surface Water Quality			

	A. Khodadadi Environmental Engineering, Tehran University, Tehran, Iran			
12:15	Yemen Case Study – Assessment of Underground Water in Wadi Hadramaut by Mathematic Modeling and Exercise Offers Mikhail Kalinin			
	Central Research Institute for Complex Use of Water Resources (CRICUWR) Minsk, Belarus			
12:30	Water Resources Management: The Case of the Middle East A. H. Nazemi			
	Department of Irrigation and Drainage, Faculty of Agriculture, University of Tabriz, Iran			
12:45	From the Micro-topography Organization to Runoff Modeling and to Water Reservoir Management Jean Gassani			
	University of Angers, France			
	Posters for Session 2			
	The Issue of Modeling the Ecological Processes in Water Bodies			
	Trahel Vardanian Department of Physical Geography, Yerevan State University, Yerevan, Armenia			
	Session 4 Sustainable Agricultural Management of Drylands:			
	The Case of Arab Countries			
	Convenors: Prof. Dr. Ali Chafai Elalaoui Head, Agronomy Department, National School of Agriculture, Meknes, Morocco			
	Prof. Dr. Bahija Chaarani Department of Animal Production, National School of Agriculture, Morocco			
11:30	Drought Mitigation in Morocco: Setting an Indicator for an Early Drought Warning			
	Ali Chafai Elalaoui Agronomy Department, National School of Agriculture, Meknes, Morocco			
11:45	Impact of Drought on Livestock Productivity in Morocco Bahija Chaarani			
	Department of Animal Production, National School of Agriculture, Morocco			
12:00	Saline Water Drip Irrigated Sorghum Varieties Response for Low Available Soil Water in Dune Sand Ould			

	Ahmed Bouya Ahmed (in absentia)
	Paper will be presented by: Muhammad Irshad
	Arid Land Research Center, Tottori University, Tottori, Japan
12:15	Decomposition and Nutrient Release from Selected Agroforesty Tree Litters in the Semi-arid Tropics of Sudan Mubarak Abdelrahman Abdalla
	Desertification and Desert Cultivation Studies Institute, University of Khartoum, Sudan
12:30	Role of Soil Management in Pistachio Orchards Using Micromorphology Observations Mohammad Hady Far Poor
	Soil Science Department, Faculty of Agriculture Shahid Bahonar University of Kerman, Kerman, Iran
12:45	Sustainable Agricultural Management of Dry Regions Amir Hossein Nazemi
	Department of Irrigation and Drainage Faculty of Agriculture, University of Tabriz, Iran
	Poster for Session 4
	Can Quality of Arid Lands be Improved by Incorporation of Water Hyacinth: The Case of Sudan Mubarak Abdelrahman Abdalla
	Desertification and Desert Cultivation Studies Institute, University of Khartoum, Sudan
	Decomposition and Nutrient Release of Different Organic Residues under Sandy Soil of Western Omdurman
	Mubarak Abdelrahman Abdalla Desertification and Desert Cultivation Studies Institute, University of Khartoum, Sudan
	Economic Profitability, Comparative Advantage and International Competitiveness of Gum Arabic in Sudan Tarig E. Mahmoud
	Gum Arabic Research Centre, University of Kordofan, Sudan
	Relationship between Natural Regeneration of <i>Juniperus polycarpus L.</i> with some Physical and Chemical Soil Properties
	N. Avani <sup>1</sup> , H. Jalilvand <sup>2</sup> , M. R. Pormajidyan <sup>2</sup> , M. A. Bahmanyar <sup>2</sup> <sup>1</sup> Mazandaran University, Sari, Iran <sup>2</sup> Department of Forestry, Faculty of Natural Resources, Mazandaran University, Iran
	Session 6

	Dela of Extension Education in Osmboling Descriftigation
	Role of Extension Education in Combating Desertification
	Convenor: Prof. Dr. Mohammad Chizari
	Professor and Head of the Agricultural Extension and Education Department
	College of Agriculture, Tarbiat Modarres University, Tehran, Iran
11:30	The Analysis of Dryland Sustainability
	Mohammad Chizari
	Agricultural Extension and Education Department
	College of Agriculture, Tarbiat Modarres University, Tehran, Iran
11:45	Adoption and Abandonment of Rainfall Forecasting Reports by Farmers: A Case of Iran
	Maryam Sharifzadeh
	Department of Agricultural Extension and Education
	College of Agriculture, Shiraz University, Shiraz, Iran
12:00	Investigating Factors Associated with Farmers' Adoption Decision of New Date Varieties for Combating Desertification in Tabas County, Iran Fahimeh Noei
	United Nations Industrial Development Organization
	Modernization and Expansion of the Date Processing Industry Project in Iran
12:15	Analyzing Iranian National AKIS Strategies to Investigate How They Are
	Contributing to Combating Desertification in this Country
	Naser Zamani College of Agricultural Economics and Development, University of Tehran, Iran
12:30	Management of Dryland Sustainable Agriculture - Perception of Farmers in Ahwaz Township of Iran
	Ahmad Reza Ommani
	Department of Agriculture, Islamic Azad University, Shoushtar Branch, Iran
12:45	Discussion
	Posters for Session 6
	Attitudes of Nahavand Township,
	Iran Wheat Farmers Toward On Farm Water Management (OFWM) Omid Noroozi
	Agricultural Extension & Education Department
	College of Agriculture, Tarbiat Modarres University, Tehran, Iran
	Rural Cooperation is a Procedure
	Rural Cooperation is a Procedure for Wind Erosion Control in the Southeast of Iran

	<b>Facilitating Learning to Combat Desertification</b> Mohammad Sadegh Allahyari Department of Agriculture, Islamic Azad University-Rasht Branch, Iran
	Session 15 Drought Management: Strategies and their Policy Implications
	Convenor: Prof. Dr. Ezatollah Karami Department of Agricultural Extension College of Agriculture, Shiraz University, Shiraz, Iran
11:30	Iranian Farmer's Mechanisms and Strategies to Dealing with Drought: A Case Study Mostafa Ahmadvand Department of Agricultural Extension and Education College of Agriculture, Shiraz University, Shiraz, Iran
11:45	Calibration of Indices (Soil Properties) of the Soil Parameter in the Iranian Model of Desertification Potential Assessment (IMDPA) Mohammad Jafari Faculty of Natural Resources, Tehran University, Karaj, Iran
12:00	Desertification Trend in Yazd Province and its Mitigation Options - Case Study of the Industrial Area of Meybod Ali Fathzadeh College of Natural Resources & Desert Science, Yazd University, Iran
12:15	Evaluation Wind Erosion Hazard and Control Programming in Order to Combat Desertification: A Case Study of Aghqalla-Gomishan Plane Nader Biroudian College of Range and Watershed Sciences, Gorgan University, Iran
12:30	
12:45	Discussion
13:00	Lunch Break
14:00	Keynote: Challenges Facing Biodiversity of the United Arab Emirates Frédéric Launay Environment Agency – Abu Dhabi (EAD), United Arab Emirates and Christophe Tourenq Emirates Wildlife Society – WWF, Abu Dhabi, United Arab Emirates

	Plenary Lectures
14:20	Indigenous Knowledge and Sustainable Water Resource Management in Drylands Dr. Abu Muhammad Shajaat Ali Department of Social Sciences, University of Texas, United States
14:40	Human Vulnerability in Drylands - The Socioeconomic Downstream Impact of Large Dams: A Case Study from an Evaluation of Flooding Risks in the Benue River Basin Prof. Dr. Michel Tchotsoua Vice-Dean of Research and Cooperation Head of Department of Geography, University of Ngaoundéré, Cameroon
15:00	Coffee Break / (Asr 15:09)
15:15	Roundtable 2
	<i>Combating Desertification in the GCC Countries:</i> <i>Grazing and how to deal with it in a modern world</i>
	Sustainable grazing management strategies in the GCC countries – how can we achieve it in a non participatory political environment?
	Organized and moderated by Prof. Dr. Hans-Jörg Barth <i>ISDEHS 2007 Pre Planning Chair</i> Department of Geography, University of Heidelberg, Germany
16:30	Closing
16:30	Sunset Surprise

	December 6, 2006
9:30	Use of Earth Observation in Climate Change Prediction and Seasonal Forecasting for Dryland Regions of the World: A WCRP-GEWEX Perspective Dr. ir. Peter J. van Oevelen European GEWEX Coordinator Land Surface Unit, European Space Agency - European Space Research & Technology Centre, The Netherlands
	Plenary Lectures

10:00	Dryland Degradation in Saudi Arabia – A Long Story, Possible Solutions and Basic Problems Prof. Dr. Hans-Jörg Barth University of Heidelberg, Germany			
10:20		<b>NOAA-AVHRR NDVI</b> <b>Desertification</b> Prof. Dr. Ma of Cartography, GIS & F University of Göt	<b>in Central Asia</b> Irtin Kappas Remote Sensing Depar	
10:40	Integration of Remote Sensing and GIS for the Assessment of Transmission Losses in Arid Regions Mohammed El Bastawesy National Authority for Remote Sensing and Space Science (NARSS) Cairo, Egypt			
11:00	Tea and Coffee Break			
11:30	Parallel Sessions (Dhuhr 12:09)			
	S5	<b>S</b> 8	S11	S12
		Dr. R. I Faculty of A	ate Agronomic Practic Dryland Farming Are enors: Raman griculture & naga Sabapathi icultural Extension	
11:30	Suitability and Sustainability of Alternate Agronomic Practices for Mitigating Livelihood Problems of Dryland Farming Areas R. Raman Faculty of Agriculture, Annamalai University, Tamilnadu, India			
11:45	Path Analysis Technique for Strategic Irrigation Management Under Adverse Climatic Conditions Saleh A. Wasimi Central Queensland University, Faculty of Business and Informatics, Australia			
12:00	Investigation of Two Mulch Techniques with Planting Before & After Spraying Mulch: Tools for Dune Fixation in Biahi - Chenali Area in Hormozgan Province, Iran Mohammad Akbarian Department of Natural Resources, Hormozgan, Iran			

Weed Management in Dryland of Pakistan Muhammad Saeed Department of Weed Science, NWFP Agriculture University, Pakistan oping Drought Tolerant and More Water-use Efficient Varieties of Cereal and Legume Crops for Dry Areas in West Asia and North Africa Osman Abdalla ICARDA, Aleppo, Syria
and Legume Crops for Dry Areas in West Asia and North Africa Osman Abdalla ICARDA, Aleppo, Syria
Poster for Session 5
The Effect of Petroleum Mulching Operation on Seeds Germination of Desert Plants in Iran Vahid Jafarian Natural Resource Management & Combating Desertification Specialist Forest, Range, and Watershed Organization, Iran
Variation of Soil Infiltration under Different Tillage Operation S. Boroomand Nasab Department of Irrigation & Drainage of Water and Sciences Engineering, Shahid Chamran University, Ahwaz, Iran
The Influence of Seed Sowing Depth on Performance of Pistacia atlantica Seedlings in Nursery Ehsan Sayad Natural Resource Faculty, Shahid Chamran University, Iran
Effects of Osmopriming on Improving Deteriorated Seed of Hull and Hullness Barley (Hordeum Vulgare L.) Mansour Taghvaei Department of Desert Region Management
College of Agriculture, Shiraz University, Shiraz, Iran

	Prof. Dr. Michel Tchotsoua
	Department of Geography, University of Ngaoundere, Cameroon
11:30	Evaluating Trends in Spatial Relationship between NOAA/AVHRR-NDVI and Rainfall as Computed by Geographically Weighted Regression: A Case Study from a Dry Region in the Middle Kazakhstan Martin Kappas
	Cartography, GIS & Remote Sensing Department, University of Göttingen, Germany
11:45	Mapping Soil Salinity in Arid Lands Using Electrode Sensors, Geographic Information Systems (GIS) and Global Positioning Systems (GPS) Techniques Nassim Al-Abed Center for Environment and Water, Research Institute King Fahd University of Petroleum and Minerals Dhahran, Saudi Arabia
12:00	Land Degradation Due to Wind and Water Erosion in Kuwait Ebtisam Ali Al-Obaid Director of Soil and Arid Lands Environment Public Authority, Safat, Kuwait
12:15	Using Geographical Information Systems and Remote Sensing Techniques for Soil Erosion Assessment by USLE Model: Case Study, Rahim-Abad Watershed, Fars Province, Iran Seyed Rashid Fallah Shamsi Department of Desert Region Management College of Agriculture, Shiraz University, Shiraz, Iran
12:30	Environmental Impact Assessment of Gotvand Olia Hydroelectric Dam Using Overlays and GIS Kourosh Mohammadi Faculty of Agriculture, Tarbiat Modarres University, Iran
12:45	Remote Sensing and Geographical Information System (GIS) for Natural and Human Resources Management in Arid and Semi-Arid Regions Michel Tchotsoua Department of Geography, University of Ngaoundere, Cameroon
	Session 11 Indigenous Knowledge and Water Resource Management Convenor:
	Dr. Abu Muhammad Shajaat Ali Department of Social Sciences, The University of Texas, United States
11:30	Suggestions for Promoting Indigenous Knowledge System for Attaining Sustainable Agricultural Development in Dry Land Areas K. Kanaga Sabapathi Department of Agricultural Extension, Annamalai University, Tamilnadu, India

11:45	Encouraging Local Women Participation in Water Resources Management in Zanjanrood, Iran Jafar Yaghoubi Department of Agricultural Extension and Education Faculty of Agriculture, University of Zanjan, Zanjan
12:00	The Role of Local and Grassroots Organizations in Management and Protection of Natural Resources Sharaf Eldin Hamad Magzoub Environmental Management, University of Khartoum, Sudan
12:15	Sustainable Use of Biopesticides for the Management of Insects and its Diseases with Special Reference to Traditional Knowledge Dr. K. Murugan Department of Zoology Bharathiar University, Coimbatore, India
12:30	Traditional Strategies of Management of Water and Soil Fertility at Mokolo, Mandara Mountains (Northern Cameroon) Michel Tchotsoua Department of Geography, University of Ngaoundere, Cameroon
12:45	The Citadel of Bam: The Largest and Oldest Raw Mud Brick of the World in Heart of Iran Deserts Mohammad Hady Far Poor Soil Science Department, Faculty of Agriculture Shahid Bahonar University of Kerman, Kerman, Iran
	Session 12 Livestock and Range Management Convenor: Dr. David Gallacher University Seminar and Academic Advising Zayed University, Dubai Campus, United Arab Emirates (UAE)
11:30	Intensification of Rangeland Grazing in an Oil-rich State: Causes, Consequences and Possible Solutions David Gallacher University Seminar and Academic Advising Zayed University, Dubai Campus, United Arab Emirates (UAE)
11:45	Evaluation of Future Scenarios of Biomass Dynamics under Pastoral Conditions and Regional Water Balance Aspects for the Drâa Catchment in Southeastern Morocco Andreas Roth Institute of Crop Science and Resource Conservation INRES-Division Plant Nutrition, University of Bonn, Bonn, Germany
12:00	Rangeland Management Options for Sustainable Improvement of Fodder and

	Livestock Production in the Dry Areas of Central and West Asia and North Africa A. E. Osman
	International Center for Agricultural Research in the Dry Areas Arabian Peninsula Regional Program, (ICARDA-APRP) Dubai, United Arab Emirates
12:15	Salinity, Temperature and Light Affects Seed Germination of Haloxylon salicornicum: a Common Plant in Sandy Habitats of Arabian Deserts Nasreen Hassan Department of Biology, Faculty of Science, UAE University, United Arab Emirates
12:30	Evaluation of Regional Policies on Sustainable Range Management, Using Integrated Optimization Model of Ecological, Socio-economic Factors: Case Study, Eastern Azarbayejan, Iran Seyed Rashid Fallah Shamsi Department of Desert Region Management College of Agriculture, Shiraz University Shiraz, Iran
12:45	Effects of Time of Seed Maturation on Dormancy and Germination Requirements of Two Important Desert Plants in the UAE Ali El-Keblawy Department of Biology, Faculty of Science, UAE University, United Arab Emirates
	Posters for Session 12
	Screening of Indicator Halophytes for Reclamation of Degraded Rangelands in Saline Coastal Area of Eastern Caspian Sea Abdollah Chamani College of Range Management, Gorgan, Iran
	The Study of Ecological Degradation in Arid Regions of Iran Amirreza Keshtkar Mountainous and Arid Regions Reclamation Department Natural Resources Faculty, Tehran University, Iran
13:00	Lunch Break
14:00	Keynote: GTZ in the Gulf Region Artificial Groundwater Recharge in the Emirate of Abu Dhabi Dr. Georg Koziorowski Regional Priority Program: Water

14:20	<b>Detection of Hydrologic Changes</b> Prof. Dr. S. Saied Eslamian School of Engineering and Applied Sciences, Princeton University, United States
14:40	Water Resources of Georgia and Modeling of Water Pollution in Dry Regions of Georgia Prof. Dr. Teimuraz Davitashvili I. Vekua Institute of Applied Mathematics, Tbilisi State University, Georgia
15:00	Coffee Break / (Asr 15:09)
15:20	Use of Data Mining Techniques to Identify Crisis in Dryland Living Dr. Saleh A. Wasimi Central Queensland University, Faculty of Business and Informatics, Australia
15:40	Influence of Human Activity on Dune Fields Development in Southern Morocco Prof. Dr. Andrzej Barczuk Vice-Dean, Institute of Geochemistry, Mineralogy and Petrology Warsaw University, Poland
16:00	Water Scarcity and Food Trade in the Middle Eastern and North African Countries Dr. Hong Yang Swiss Federal Institute for Environmental Science and Technology Switzerland
16:15	Soil and Water Conservation Practices for Dryland Agriculture Prof. Dr. K. Kanaga Sabapathi Department of Agricultural Extension, Annamalai University, Tamilnadu, India
16:30	Integrated Crop Production Technologies for Dryland Agriculture Dr. R. Raman Faculty of Agriculture, Annamalai University, India
16:45	Meeting ISDEHS Organizing Team
17:15	Coffee Break / (Maghrib 17:29)
17:45	Roundtable 3
	GM UNCCD
	Planning in progess
	Organized GM UNCCD / NDRD

	Moderated by Dr. Alladeen M. A. Al-Sharjabi Senior Forests Specialist General Directorate of Forests & Desertification Control Ministry Of Agriculture and Irrigation, Sanan'a, Yemen
19:30	Closing / (Isha 18:59)
	Dubai Creek Dinner Cruise