



COST Action ES1104

Arid Lands and Combat of Desertification: Setting up a Drylands and Desert Restoration Hub

Final Conference

Restoration of Arid Lands and Combat of Desertification: From Science to Practice

30-31 March 2016

University of Greenwich, London, UK
Stockwell Street Building

Wednesday 30 March

09:00-09:45 Registration

09:45-10:00 Welcome

Benz Kotzen (Chair, COST Action ES1104, University of Greenwich, UK)

David Maguire (Vice Chancellor, University of Greenwich, UK)

10:00-11:00 COST Action ES1104 – An overview

11:00-11:30 Coffee break

11:30-13:00 **Applied multidisciplinary research in dryland restoration**

Chair: Cristina Branquinho (University of Lisbon, Portugal)

Edoardo Costantini (Council for Agricultural Research and Economics, Italy): Soil indicators to assess the effectiveness of restoration strategies in dryland ecosystems

Ilan Stavi (Dead Sea and Arava Science Centre, Israel): Moderate-intensity practices for restoring soil functions and ecosystem services in drylands

Melanie Köbel (University of Lisbon, Portugal): Plant diversity along a desertification gradient: the importance of soils

Discussion panel:

Richard Thomas (International Center for Agricultural Research in the Dry Areas, Jordan)

Pedro Berliner (Ben Gurion University of the Negev, Israel)

Fabrizio Cassi (Timesis, Italy)

13:00-14:00 Lunch break

14:00-15:30 From science to practice

Chair: Edoardo Costantini (Council for Agricultural Research and Economics, Italy)

Roberto de Phillipis (University of Florence, Italy): The induction of biological soil crusts: an environmental biotechnology for the rehabilitation of desert soils

Alejandro Valdecantos (Mediterranean Centre for Environmental Studies, Spain): Plant-plant interactions in dryland restoration

Alexandra Silva (SECIL-Companhia Geral de Cal e Cimento, S.A., Portugal): Quarry rehabilitation and biodiversity: a case study from Portugal

Discussion panel:

Yannis Fermantzis (Ministry of Rural Development and Food, Greece)

Mchich Derak (Regional Directorate of Forestry and Desertification Control of the Rif, Morocco)

Moctar Sacande (Royal Botanic Gardens, Kew/FAO, UK)

15:30-16:00 Coffee break

16:00-17:30 Strategic approaches to land use planning

Chair: Gudrun Schwilch (University of Bern, Switzerland)

Janet Hooke (University of Liverpool, UK): Landscape approach to dryland restoration: a review of relevant concepts and tools for implementation

Maria Jose Marques (Autonomous University of Madrid, Spain): Multifaceted impacts of Sustainable Land Management in drylands

Matteo Jucker (University of Bern, Switzerland): Assessing resilience of land use systems in dry Mediterranean areas prone to regime shifts

Discussion panel:

Grammenos Mastrojeni (Ministry of Foreign Affairs and International Cooperation, Italy)

Karin van Boxtel (Both Ends, Netherlands)

Anton Imeson (3D Environmental Change, Netherlands)

Thursday 31 March

09:30-11:00 **Engagement with stakeholders**

Chair: Maria Jose Marques (Autonomous University of Madrid, Spain)

Ute Schmiedel (University of Hamburg, Germany): The role of paraecologists in ecological restoration

Pandi Zdruli (CIHEAM Mediterranean Agronomic Institute of Bari, Italy): Engaging with local communities in the restoration of Wadi Kharrouba, North West Desert, Egypt

Mehreteab Tesfai (Norwegian Institute for Bioeconomy Research): Stakeholder involvement in water harvesting projects in Africa: a key factor for success

Discussion panel:

Mariam Akhtar-Schuster (PT-DLR, Germany)

Yasemen Karatas (Ministry of Forestry and Water Affairs, Turkey)

Troy Sternberg (University of Oxford, UK)

11:00-11:30 Coffee break

11:30-13:00 **Learning from practitioners**

Chair: Janet Hooke (University of Liverpool, UK)

Gudrun Schwilch (University of Bern, Switzerland): Learning from and sharing best practice in the management of drylands

Alice Nunes (University of Lisbon, Portugal): Ecological restoration across the Mediterranean basin as viewed by practitioners

Teresa Mexia (University of Lisbon, Portugal): Priorities, difficulties and challenges of restoration in drylands: young researchers' perspectives

Discussion panel:

Roberto de Philippis (University of Florence, Italy)

Ramazan Apaydin (Ministry of Forestry and Water Affairs, Turkey)

Anton Imeson (3D Environmental Change, Netherlands)

13:00-14:00 Lunch break

14:00-16:00 **Setting new agendas in restoration science**

Chair: Simon Berkowicz (Hebrew University of Jerusalem, Israel)

Federico Rossi (University of Florence, Italy): The role of cyanobacterial-produced exopolysaccharides in the successful induction of biological soil crusts in desertified areas

Alessandra Adessi (University of Florence, Italy): Investigating the role of extracellular polymeric substances in the physiology of dryland biological soil crusts

Isaac Kedem (Hebrew University of Jerusalem, Israel): Exploring the role of an unusual green alga in the healthy functioning of a desert crust

Ariel Cohen (Ben Gurion University of the Negev, Israel): The impact of environmental change

on the development of ephemeral gullies

Luca Paoli (University of Siena, Italy): Desertification and lichens: biological markers of climatic and nitrogen stress in dry environments

Bouajila Essifi (Institut des Régions Arides, Tunisia): Mapping and monitoring of a restoration project in southern Tunisia

Adriana Príncipe (University of Lisbon, Portugal): Regenerating Mediterranean forest: the implications of microclimate in drylands

Troy Sternberg (University of Oxford, UK): Mapping potential groundwater for sustainable Gobi Desert communities

16:00-16:30 Coffee break / Close