

DesertNet International



DesertNet International Newsletter n. 2/2013

This quarterly electronic newsletter is intended to inform the scientific community about dryland-relevant research matters. The **deadline** for receipt of material for the next issue is **15.07.2013**. Please send your contributions (1000 characters max, including spaces) to czanolla@uniss.it

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1. DesertNet updates

DesertNet International's Special Session held at the 2nd UNCCD Scientific Conference in Bonn, Germany

Tackling key challenges in the economic assessment of desertification, sustainable land management and resilience of arid and semi-arid and dry sub-humid areas were presented from different scientific perspectives by the leaders of the DesertNet task force / working groups on "Economics of SLM" (Richard Thomas), "Land and soils" (Richard Escadafal), "Dryland Observation Systems" (Michael Cherlet) and "Food Security" (Lindsay Stringer, who also organised the session).

DesertNet's co-chair Elena Abraham (IADIZA) facilitated the session, and its scientific presentations and discussions were well embedded in the topic of UNCCD's 2nd Scientific Conference that was focused on the theme "Economic assessment of desertification, sustainable land management and resilience of arid, semi-arid and dry sub-humid areas" (9-12 April 2013).

For more information on the session, contact: https://www.conftool.pro/2sc-unccd/index.php?page=browseSessions&form_session=74&CTSID_2SCUNCCD2012=rPVJg3jI8uz513,M-rvFY9I22t4

For more information on the 2nd UNCCD Scientific Conference contact: <http://2sc.unccd.int/conference-programme/presentations-and-interactive-conference-agenda/>



DesertNet International also held two internal working meetings at the conference venue in Bonn chaired by the DNI Chair Giuseppe Enne, e.g. to further develop its work programme and specifically its activities in the newly emerged consortium that will be scientifically organising UNCCD's 3rd scientific conference titled "Scientific and Traditional Knowledge for Sustainable Development" (STK4SD).

During the entire four-day conference DNI also provided scientific material of its members at its booth where the DNI collective posters were also displayed.

Questions on DNI activities and membership criteria were taken care of by the DNI Bureau Coordinator Chiara Zanolla.

Information contributed by: DNI Bureau

DNI Task Force on Land and Soil



During the past European Geosciences Union (Vienna, April 2013), the members of the Task Force (T&F) on Land and Soil of Desertnet International organized a session entitled: Studying soils and/or land: Approaches for sustainable management of the environment (Session SSS9.2). The aim of this session was to highlight the fact that sometimes basic soil science is not applied for sustainable land management. "Research results are largely developed in isolation and this academic knowledge has subsequently been ineffective at affecting change" B.

Wolfgang explained in her presentation. The weakness of policy measures and therefore the application of scientific knowledge could be due to the lack of ability to channel this information in order to provide expert advice.

Some presentations explored the corpus of international publications dealing with land and/or soils using bibliometric and data mining methods. The aim was to visualise the links and gaps between scientists, policymakers and practitioners. Moreover, several interesting case studies of successes and failures from different parts of the world - including China, Spain, Romania, Argentina, Kyrgyzstan, Ethiopia and Tibet were also presented.

The next step is the compilation of a Special Issue in a scientific journal to put together all these analysis and cases with a final discussion paper on how to improve the scientific advice to the policy organisations.

More information at: http://meetingorganizer.copernicus.org/EGU2013/special_interests/SSS

The work of the T&F was also simultaneously presented in Bonn* (April 2013) and an important conclusion for our association is that a better use of bibliometrics for exploring the scientific communities involved in DLDD research requires to take also into account important papers published in other working languages such as French (specially for Africa) and Spanish (for Latin America). The coming activities of the TF L&S will focus on these aspects, by inviting DNI members to join the efforts to build a worldwide 'corpus' of references.

* see report in this bulletin on the DNI session organized during the 2nd UNCCD Scientific Conference in Bonn

Information contributed by: Richard Escadafal and Maria José Marques, DNI Bureau

2. Information relevant to DesertNet members

Namibia to host the next UNCCD COP 11

The Republic of Namibia has offered to host the eleventh session of the Conference of the Parties (COP11) in Windhoek, from 16 to 27 September 2013. The announcement was made on 15 April 2013, by the Honourable Deputy Minister for Environment and Tourism of Namibia, Mr. Pohamba Shifeta, at the opening of the CRIC11.

Information contributed by: DNI Bureau

Catalogue of Knowledge Management (KM) and Decision Support (DS) methods, tools and products on Sustainable Land and Water Management (SLM)

This catalogue summarises the key KM and DS methods, tools and products on SLM, produced over the last 30 years by The Food and Agriculture Organization of the United Nations (FAO), its Land Degradation Assessment in Drylands Programme (LADA) and the World Overview of Conservation Approaches and Technologies (WOCAT).

It is divided into areas on SLM, all of them can be downloaded:

1. Water (Water Quality, Water Harvesting, Irrigation Management, Crops and Water Management)
2. Land (Soil Assessment, Soil Management, Land Use Planning, Rangelands and Grasslands)
3. Trees and Forestry (Forestry Management and Conservation)
4. Climate Change (Climate-Smart Agriculture (Mitigation+Adaptation+Productivity), Climate Change Mitigation in Agriculture (Including Soil Carbon Sequestration))
5. Impact Assessment
6. Policy Reforms (Water Legislation, Land Legislation)
7. Gender (Gender Mainstreaming)
8. Capacity Development (Capacity Development and Training)
9. Global Studies (Other SLM Publications)

You can find the full catalogue at: http://www.fao.org/uploads/media/SLM_catalogue_1.pdf

Information contributed by: Maria José Marques, DNI Bureau

3. Researchers Updates

Launch of the MWAR-LAC project in Latin America and the Caribbean

The project Managing Water Resources in Arid and Semiarid Regions of Latin America and the Caribbean (MWAR –LAC) was recently launched. This project is funded by the Flanders- Trust Fund (FUST) and is implemented by the UNESCO International Hydrological Programme (IHP) in collaboration with the Water Center for Arid Zones (CAZALAC) located in la Serena, Chile.

The objective of the MWAR-LAC project is to strengthen the capacity to manage the water resources of arid and semiarid areas in LAC through networking and facilitating international and regional cooperation. This will be achieved by developing pilot experiences and participating in regional projects together with relevant partners in Latin America.

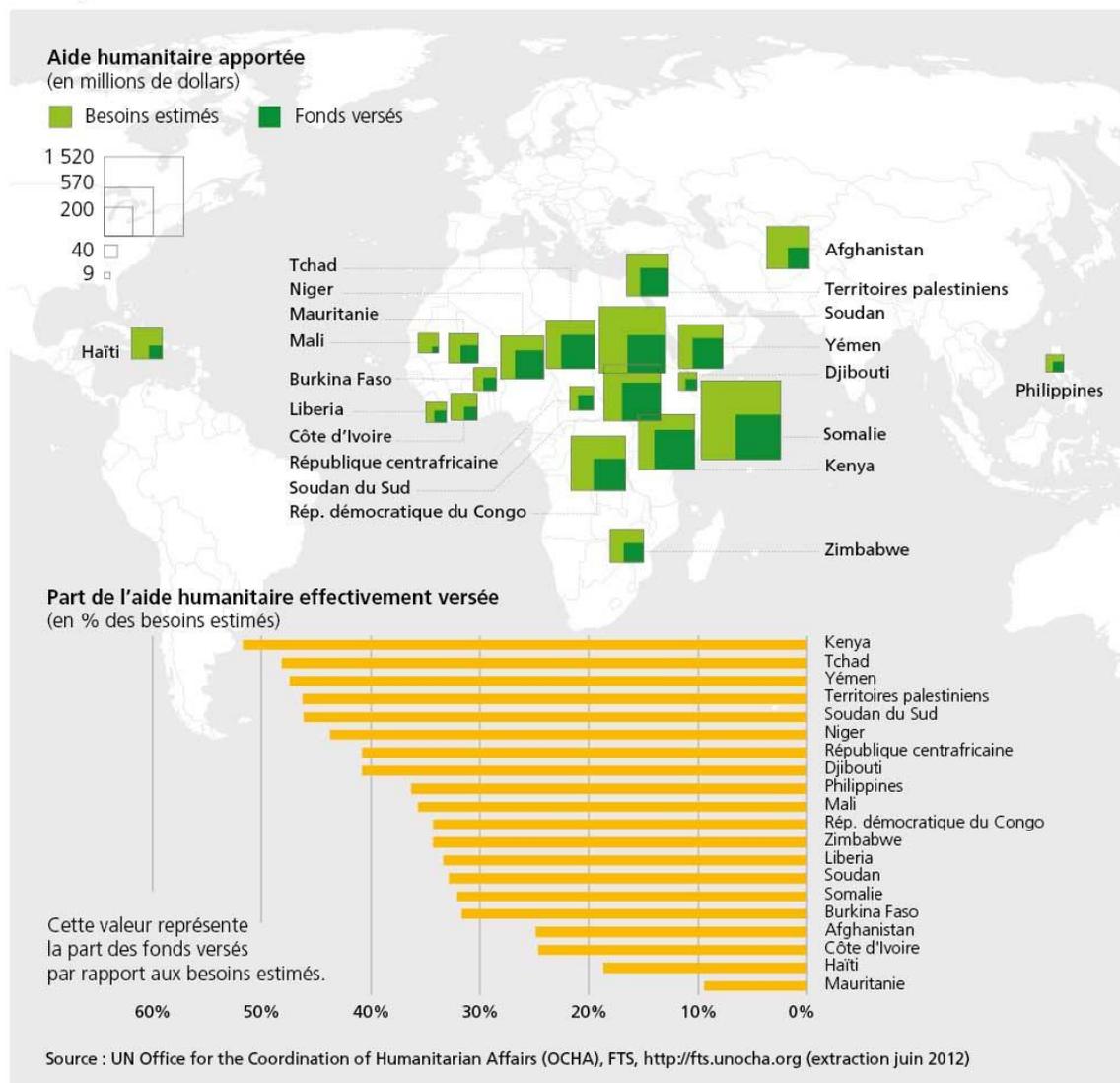
The overall goal of the project is to contribute to water management in arid and semiarid environments in Latin America and the Caribbean (LAC), through a reduction in the vulnerability of water resources systems to global changes based on sound scientific knowledge. Project website: http://www.cazalac.org/mwar_lac

Information contributed by: Koen Verbist, UNESCO, Hydrological Systems & Global Change Section, Santiago, Chile

A map of humanitarian aid and needs in 2012.

The “*Documentation Française*” published a map of the international humanitarian aid in 2012. This document is derived from UN/OCHA sources. The legends are in French, but can be easily understood by our non-francophone readers.

La réponse aux crises humanitaires dans le monde (2012)



© *Questions internationales*, numéro 56, La Documentation française, Paris, juillet-août 2012.
<http://www.ladocumentationfrancaise.fr>

The legends are in French, but can be easily understood by our non-francophone readers.

Two main conclusions – unfortunately well known by people aware of food crisis issues – can be drawn from this map

- The priority needs for international aid come more often from countries affected by food crisis. The causes of these crisis are most often soil degradation and international food market crisis (some features of the situation in Haiti have been already presented in the DNI newsletter), amplified by specific political and/or military national and regional adverse circumstances.
- The dark green squares can easily be included within the light green squares, which unfortunately means that the international aid is dramatically under the needs everywhere in the world. National communication and distribution problems as well as adverse political circumstances clearly amplify this discrepancy.

Source: *Questions internationales*, N° 56, La Documentation française, Paris, juillet-août 2012.

Information contributed by: Gerard Begni, CNES; DNI/AB; CSFD, France

An IMF report about growth in Sub-Saharan Africa



In October, 2012, the IMF issued a report called "Sub-Saharan Africa: Maintaining growth in an uncertain world". This report states that "economic conditions ... have remained generally robust against the backdrop of a sluggish global economy" .. "Growth is projected at 5% a year in 2012-2013", acknowledging however large discrepancies between the situations in regional countries. So, "policies settings should reflect specific countries conditions". In particular, Nigeria and RSA economic development should spill over the whole region. "Some degree of structural transformation – understood as the shift of workers from low to high average productivity activities and sectors – has been observed in most sub-Saharan African countries

since 1995", including average labour productivity in agriculture and a declining share in GDP. The report pushes to higher agricultural productivity growth as an accelerator to structural transformations, which requires among others more investments in the sector, improvements to the investment attractiveness, and removal of infrastructure bottlenecks.

Source: The full report can be downloaded at: <http://www.imf.org/external/pubs/ft/reo/2012/afr/eng/sreo1012.htm>

Information contributed by: Gerard Begni, CNES; DNI/AB; CSFD, France

Sub-Saharan Africa: the WB should take climate changes into account.



The Italian FEEM (Fondazione Eni Enrico Mattei) has reported an interview granted to Re3 by M. Raffaello Cervigni, Lead Economist at The World Bank.

In this interview, M. Cervigni states: "We can no longer use the climate of the past as a guide to design the investments of the future. Extreme events are becoming increasingly frequent particularly in Sub Saharan Africa, and it is of utmost importance to raise the quality and effectiveness of investments in key sectors such as agriculture, transport and urban development, in order to ensure their resilience to a changing climate". This is an important signal sent to investors in these regions and issues.



M. Cervigni also gave a short overview of the topics tackled during a seminar, held in FEEM's premises in Venice on February 12, 2013 about "The Climate Agenda in Africa:

Key Issues and Role of International Development Cooperation"

Sources: <http://re3.feem.it/getpage.aspx?id=5316>

Information contributed by: Gerard Begni, CNES; DNI/AB; CSFD, France

Land-surface modelling: bridging the gaps between GEWEX and iLEAPS approaches.



The issue n° 13 of the iLEAPS newsletter (April 2013) brings the attention on the gaps between iLEAPS and GEWEX approaches in land-surface modelling activities, and evidences the urgent need to bridge them. This is a key issue for desertification modellers.

In the Editorial, Bonan G.B (NCAR) and Santanello J.A (NAA-GSFC) analyze the present situation as follows.

Models of Earth's weather and climate require fluxes of momentum, energy and moisture across the land-atmosphere interface to solve the equations of physics and dynamics.

Our understanding of Earth's climate has progressed to the point that any credible model should integrate coherent representations the terrestrial biosphere, the interacting physical, chemical and biological components of the Earth system and related human perturbations. Biogeochemical cycles such as carbon fluxes

reactive gases and atmospheric chemistry are quite important as well as ecosystem changes in response to climate changes and anthropic pressures.

In contrast, numerical weather prediction relies more heavily on the terrestrial hydrosphere and interaction with boundary layer processes at short time scales. As a consequence, modelling techniques and products has diverged between related scientific communities.

A common ILEAPS/GEWEX newsletter has been issued to push and help the two communities to develop improved prediction models across scales.

Sources: http://www.ileaps.org/index.php?option=com_phocadownload&view=category&id=3:&Itemid=81

Information contributed by: Gerard Begni, CNES; DNI/AB; CSFD, France

Standardizing the biodiversity approach: the Essential Biodiversity Variables (EBV).



Climatologists made a giant step when they reached an agreement about Essential Climatic Variables (ECV) which among others led to a standardization of language, and of monitoring, modelling and forecasting systems in their worldwide community.

Currently, no global, harmonized observation system for delivering regular, timely data on biodiversity change exists – partly since no biodiversity equivalent of ECV exists. So, In January, 2012, a group of DIVERSITAS scientists held a workshop to lead such a work, and just issued a peer-reviewed paper about EBV (see references hereunder) in the framework of the development of the biodiversity component of GEOSS, called GEO BON. A short term perspective was the first IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) plenary meeting held in Bonn, January 21-26, 2013. A long term perspective is the Aichi targets for 2020 as reasserted by the Parties to the United Nations Convention on Biological Diversity (UNCBD). The overall challenge is to have all the biodiversity stakeholders speaking the same common and unambiguous language.

Sources: <http://www.diversitas-international.org/activities/observation/geo-bon-1/essential-biodiversity-variables>, Pereira H. M. et al (2013) Essential Biodiversity Variables - Science, vol. 339, 18 January 2013

Information contributed by: Gerard Begni, CNES; DNI/AB; CSFD, France

MACSUR Project - Modelling European Agriculture with Climate Change for Food Security



The project MACSUR (<http://www.macsur.eu/>) is a knowledge hub within FACCE-JPI (Joint Programming Initiative for Agriculture, Climate

Change, and Food Security) . MACSUR gathers the excellence of existing research in livestock, crop, and trade science to describe how climate variability and change will affect regional farming systems and food production in Europe in the near and the far future and the associated risks and opportunities for European food security. The knowledge hub consists of 73 partners from 17 countries all over Europe and Israel. The project focuses on the technical and informational integration of suitable existing models and their application in regional case studies that reflect the European diversity in soil, climate, socio-economy and agricultural systems.

The Desertification Research Centre (NRD) from the University of Sassari is leader of the Italian partnership (scientific responsible Pier Paolo Roggero) which includes eleven research units from Universities (Bologna, Florence, Marche, Milan, Potenza, Sassari, Tusciana), CNR IBIMET, Agricultural Research Council Cropping system research Centre, Enea and Fondazione Medes. Some NRD members participated in the MACSUR special session at the 2nd UNCCD Scientific Conference held in Bonn on April 2013.

Information contributed by: Pier Paolo Roggero, NRD - Desertification Research Group, Univ. of Sassari (Italy)

CASCADE Project

Representatives of the EC-funded CASCADE Project have recently attended the UNCCD's 2nd Scientific Conference in Bonn. A special session "Catastrophic Shifts in Drylands: How Can We Prevent Ecosystem Degradation? How to Overcome the Difficulties of Successful Engagement of Non-Scientific Stakeholders?" was presented and was well-received. The project is investigating tipping points in dryland ecosystems that may affect biodiversity and ecosystem services.

Experiments are being implemented on 6 degraded sites in the Mediterranean region to mimic natural systems and generate new insights and practical knowledge for better land management. A new cost-benefit analysis methodology will incorporate high resolution GIS-modeling to factor in the environmental dimension when assessing the financial impacts of action or inaction. One way of sharing information with stakeholders will be through a web-based system, CASCADiS, including videos and presentations. See: <http://www.cascade-project.eu/>

Information contributed by: Nichola Geeson, CASCADE dissemination

4. Important upcoming events

List of links to next meetings regarding desertification, water conservation and land degradation.

2013		
22-25 May	2nd International Scientific Conference Respag - Regional Development, Spatial Planning And Strategic Governance http://www.respag.org/welcome.php	Belgrade, Serbia
26-29 May	Soil Carbon Sequestration: for Climate Food Security and Ecosystem Services http://scs2013.land.is/	Reykjavik, Iceland
27 May-1 Jun	WOCAT Share Fair & 16th WWSM https://www.wocat.net/fileadmin/user_upload/documents/Workshops/WWSM/16th_WWSM_announcement.pdf	Pretoria, South Africa
4-7 Jun	Mapping Global Change: Spatial Statistics 2013 http://www.spatialstatisticsconference.com/	Columbus, Ohio, USA
14-17 Jun	19th International Interdisciplinary Conference on the Environment http://ieaonline.org/?page_id=68	Portland, Oregon, USA
17-18 Jun	5 th Conference on Desertification and Land Degradation http://www.desertland.eu/	Ghent, Belgium
18-20 Jun	9th International Conference on Ecosystems and Sustainable Development http://www.wessex.ac.uk/13-conferences/ecosud-2013/page-3.html	Bucharest, Romania
8-12 Jul	17 th ISCO Conference. Environmental Sustainability Through Soil Conservation http://iscocolombia2013.com/ingles/index.html	Medellín, Colombia
6-7 Aug	International Conference on Sustainable Development 2013 Canada http://www.ontariointernational.org/Canada2013/ICSD2013Canada-home.htm	Ontario, Canada
4-6 Sep	Utilization and protection of halophytes and salt-affected landscapes http://members.iif.hu/tot3700/salinityconferencehungary2013.html	Kecskemét, Hungary
10-14 Sep	1st CIGR Inter-Regional Conference on Land and Water Challenges http://www.landandwater2013.iamb.it/	Bari, Italy
16 to 27 Sept	11th Conference of Parties (COP11) of the United Nations Convention to Combat Desertification (UNCCD)	Windhoek, Namibia

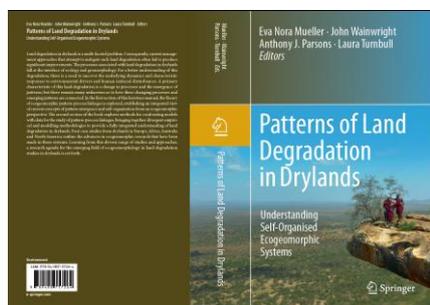
	http://www.unccd.int/en/media-center/MediaNews/Pages/highlightdetail.aspx?HighlightID=190	
29 Sep – 2 Oct	First International Conference on Global Food Security http://www.globalfoodsecurityconference.com/	Noordwijkerhout, The Netherlands
7-9 Oct	First GlobalSoilMap Conference https://colloque.inra.fr/GlobalSoilMap-2013	Orléans, France
27-31 oct	Global Soil Week 2013. Loosing ground? http://globalsoilweek.org/	Berlin, Germany
4-6 Dec	International Conference on Sustainable Development 2013 India http://www.ontariointernational.org/India2013/ICSD-India.htm	Punjab, India
2014		
3-7 Mar	Nexus 2014: Water, Food, Climate and Energy Conference http://nexusconference.web.unc.edu/	North Carolina, USA
26-28 Mar	Globe 2014. Building resilience through sustainability strategies & innovation http://www.globe-net.com/events/2014/3/globe-2014/	Vancouver, Canada
14-16 Oct	9th International Soil Science Congress on “The Soul of Soil and Civilization” http://www.soil2014.com/	Side, Antalya, Turkey

5. Publications and Special Issues

1. Bagella, S., Salis, L., Marrosu, G. M., Rossetti, I., Fanni, S., Caria, M. C., & Roggero, P. P. (2013). Effects of long-term management practices on grassland plant assemblages in Mediterranean cork oak silvo-pastoral systems. *Plant Ecology*, 1-11. <http://link.springer.com/article/10.1007/s11258-013-0194-x#page-1>
2. Belkheiri O., Mulas, M., 2013. The effects of salt stress effects on growth, water relations and ion accumulation in two halophytes *Atriplex* species. *Environmental and Experimental Botany*, vol. 86, pp. 17-28. <http://www.sciencedirect.com/science/article/pii/S009884721100164X>
3. Belkheiri, O., Mulas, M., 2013. Effect of water stress on growth, water use efficiency and gas exchange as related to osmotic adjustment of two halophytes *Atriplex* spp. *Functional Plant Biology*. <http://dx.doi.org/10.1071/FP12245>.
4. Concostrina-Zubiri, L., E. Huber-Sannwald, I. Martínez, J.L. Flores Flores, A. Escudero, Biological soil crusts greatly contribute to small-scale soil heterogeneity along a grazing gradient, *Soil Biology and Biochemistry*, Volume 64, September 2013, Pages 28-36, ISSN 0038-0717, 10.1016/j.soilbio.2013.03.029
5. Dono Gabriele, Raffaele Cortignani, Luca Doro, Luca Giraldo, Luigi Ledda, Massimiliano Pasqui, Roggero Pier Paolo (2013). Adapting to uncertainty associated with short-term climate variability changes in irrigated Mediterranean farming systems. *Agricultural systems*, vol. 117, p. 1-12, ISSN: 0308-521X, doi: 2048/10.1016/j.agry.2013.01.005. <http://www.sciencedirect.com/science/article/pii/S0308521X13000176>
6. Frédéric J.C. Joly, Tulganyam Samdanjigmed, Valérie Cottreau, Claudia Feh, Ecological constraints on and consequences of land use heterogeneity: A case study of the Mongolian Gobi, *Journal of Arid Environments*, Volume 95, August 2013, Pages 84-91, ISSN 0140-1963, 10.1016/j.jaridenv.2013.03.014.
7. Giora J. Kidron, Vincent P. Gutschick, Soil moisture correlates with shrub–grass association in the Chihuahuan Desert, *CATENA*, Volume 107, August 2013, Pages 71-79, ISSN 0341-8162, 10.1016/j.catena.2013.02.001.
8. Jianjun Tang, Henk Folmer, Jianhong Xue, Estimation of awareness and perception of water scarcity among farmers in the Guanzhong Plain, China, by means of a structural equation model, *Journal of Environmental Management*, Volume 126, 15 September 2013, Pages 55-62, ISSN 0301-4797, 10.1016/j.jenvman.2013.03.051.
9. Jixi Gao, Zhongjie Shi, Lihong Xu, Xiaohui Yang, Zhiqing Jia, Shihai Lü, Chaoyang Feng, Jianxun Shang, Precipitation variability in Hulunbuir, northeastern China since 1829 AD reconstructed from tree-rings and its linkage with remote oceans, *Journal of Arid Environments*, Volume 95, August 2013, Pages 14-21, ISSN 0140-1963, 10.1016/j.jaridenv.2013.02.011.

10. Ledda L, Deligios P.A., Farci R, & Sulas L (2013). Biomass supply for energetic purposes from some Cardueae species grown in Mediterranean farming systems. *Industrial Crops and Products*, 47, 218-226. <http://www.sciencedirect.com/science/article/pii/S0926669013001416>.
11. Ming-Yi Yang, Des E. Walling, Xi-Jun Sun, Feng-Bao Zhang, Bo Zhang, A wind tunnel experiment to explore the feasibility of using beryllium-7 measurements to estimate soil loss by wind erosion, *Geochimica et Cosmochimica Acta*, Volume 114, 1 August 2013, Pages 81-93, ISSN 0016-7037, 10.1016/j.gca.2013.03.033.
12. Nathalie van Vliet, Anette Reenberg, Laura Vang Rasmussen, Scientific documentation of crop land changes in the Sahel: A half empty box of knowledge to support policy?, *Journal of Arid Environments*, Volume 95, August 2013, Pages 1-13, ISSN 0140-1963, 10.1016/j.jaridenv.2013.03.010.
13. Raul P. Lejano, Joana Tavares-Reager, Fikret Berkes, Climate and narrative: Environmental knowledge in everyday life, *Environmental Science & Policy*, Volume 31, August 2013, Pages 61-70, ISSN 1462-9011, 10.1016/j.envsci.2013.02.009.
14. Robert H. Webb, Todd C. Esque, Kenneth E. Nussear, Mark Sturm, Disruption rates for one vulnerable soil in Organ Pipe Cactus National Monument, Arizona, USA, *Journal of Arid Environments*, Volume 95, August 2013, Pages 75-83, ISSN 0140-1963, 10.1016/j.jaridenv.2013.03.016.
15. Seddaiu Giovanna, Giovanna Porcu, Luigi Ledda, Roggero Pier Paolo, Alberto Agnelli, Giuseppe Corti (2013). Soil organic matter content and composition as influenced by soil management in a semi-arid Mediterranean agro-silvo-pastoral system. *Agriculture, Ecosystems & Environment*, vol. 167, p. 1-11, ISSN: 0167-8809, doi: 10.1016/j.agee.2013.01.002. <http://www.sciencedirect.com/science/article/pii/S0167880913000054>
16. S. Zhang, G. Carmi, P. Berliner, Efficiency of rainwater harvesting of microcatchments and the role of their design, *Journal of Arid Environments*, Volume 95, August 2013, Pages 22-29, ISSN 0140-1963, 10.1016/j.jaridenv.2013.03.003.

New Publication: Land degradation in Drylands, Mueller, et al.



Land degradation in drylands is a multi-faceted problem. The processes associated with land degradation in drylands fall at the interface of ecology and geomorphology. For a better understanding of this degradation, there is a need to uncover the underlying dynamics and characteristic responses to environmental drivers and human-induced disturbances. A primary characteristic of this land degradation is a change in processes and the emergence of patterns; but there remain many unknowns as to how these changing processes and emerging patterns are connected. This book explores the theory of ecogeomorphic pattern-process linkages, examines

methods for confronting models with data for the study of pattern-process linkages, and presents case studies from drylands in Europe, Africa, Australia and North America. Finally, a research agenda for emerging field of ecogeomorphology in land-degradation studies in drylands is set forth.

Information contributed by: Anthony J. Parsons, Department of Geography, University of Sheffield (UK)

6. Other Information

Training Courses and Scientific Missions

The **COST Action ES-1104** Desert Restoration Hub can provide financial support to eligible applicants to carry out a Short-Term Scientific Mission (STSM) that will contribute to the scientific objectives of this COST Action. Scientists can go to an institution or laboratory in another COST country to foster collaboration, to learn a new technique, or to take measurements using instruments and/or methods not available in their own institution/laboratory.

Next application deadlines:

- 15 July 2013 for STSMs to be initiated September-November 2013.
- 15 October 2013 for STSMs to be initiated December 2013-February 2014
- 15 January 2014 for STSMs to be initiated and completed between March-May 2014.

More information at: <http://desertrestorationhub.com/about/stsms>

The **University of Salento** (Lecce-Italy) announces the second edition of the International Summer School "Life-Cycle Approaches to Sustainable Regional Development", which will take place in Santa Maria di Leuca (LE) from July 8th to July 12th 2013. The focus of the school will be on LCA, Carbon Footprint, Water Footprint and Integrated Reporting.

More information at: <http://www.lcss.unisalento.it/>

The **Center for Sustainable Development** offers courses every two months on Community Based Adaptation to Climate Change, Integrated Adaptation, DRR and Rural Development, Food Security, Nutrition and Home Gardens, Water Conservation and Management, and others. You can see the syllabi, course fees and you can enroll at: <http://www.csd-i.org/online-learning/>

More information at: <http://www.csd-i.org/>

The **Water Footprint Network** organises different Training courses:

- Spain, Madrid, May 22, Water Footprint Training Course
- Netherlands, Amsterdam, May 28-30, 2013, Global Water Footprint Standard Training Course
- Italy, Lecce, July 8-12, Global Water Footprint Standard Training Course
- South Africa, Pretoria, October 8-10, Global Water Footprint Standard Training Course

Contact information: info@waterfootprint.org; xander.debruine@waterfootprint.org

The **University of East Anglia** organises a training course on Water Security for Policy Makers and Practitioners to gain an appreciation of the relations between water security and energy, climate, food, human or national security and to have extended their networks and resource base. Location: International Development UEA. University of East Anglia, Norwich, UK. 10-14 June 2013.

More information at: <http://www.uea.ac.uk/international-development/dev-co/professional-training/water-security-for-policy-makers-short-course-2013>

Summer School on Field Spectroscopy and Ecological modeling, July 15 – 20, 2013 Palermo (Italy). This Summer School is organised by **COST Action ES0903 EUROSPEC** and is open to young researchers from across Europe involved in spectral measurements. Besides the lectures on field spectroscopy, a field campaign will be organized in a olive grove site in Castelvetro: students will be actively involved in the ground-truth activities and in the data processing. The program will also include some hands-on sessions on spectral data integration into ecological models.

The selected students will receive a grant from EUROSPEC of 1000 Euros (800 for students coming from Italy) to cover travel, accommodation, and living expenses.

Deadline for applications: 25th of May 2013.

More info: <http://cost-es0903.fem-environment.eu/training-schools/2013-palermo-summer-school/>

Information contributed by: Maria José Marques, DNI Bureau

Vacancy announcement

A 36-month Post-doctoral position, is available at EC- Joint Research Centre in Ispra, Italy, applications **deadline: 03/06/2013 23:59 CET**. TOPIC: "Drought Probabilistic / Ensemble Forecasting". Applicants must fill the ESRA on-line form on: <http://recruitment.jrc.ec.europa.eu/call-for-granholders.php?inst=IES&pid=2044>.

A short manual of the ESRA (External Staff Recruitment Application) is available in http://recruitment.jrc.ec.europa.eu/docs/ESRA%20Terms%20and%20Conditions%20of%20Use%202013-03_v6_FINAL.pdf

Contractual conditions:

General rules governing JRC Grantholder scheme: http://ec.europa.eu/dgs/jrc/downloads/jrc_grantholder_rules.pdf

Vademecum for Grantholders: http://ec.europa.eu/dgs/jrc/downloads/jrc_ispra_vademecum_en.pdf

Draft Employment Contract under Italian Employment Law:

http://ec.europa.eu/dgs/jrc/downloads/jrc_contract_italy_draft_en.pdf

DETAILS on Vacancy: JRC's Climate Risk Management (CRM) Unit is developing methods and tools for monitoring and assessing extreme events (e.g., droughts & floods) and their impacts from regional to global scales. Ongoing work includes the development of a European Drought Observatory (EDO) for drought monitoring, assessment, and forecasting in Europe and the development of similar methods and tools for Africa, Latin America and at the global level. The CRM Drought Team is looking for a candidate to support and further develop our activities on drought forecasting, especially medium to long range probabilistic /ensemble forecasting. The candidate will apply ensemble forecasts from ECMWF and other forecasting centres for meteorological drought forecasting, but also as input to land surface models that can provide related drought products, such as soil moisture anomalies. The tasks include the development, implementation and testing of forecasting methodologies for selected drought products as well as the provision of meteorological expertise to the team.

Qualifications: The ideal candidate should have a Ph.D. in meteorology or closely related disciplines or a minimum of 5 years of research experience in the mentioned fields after the first degree giving access to doctoral studies. She/he should have experience in working with meteorological forecasts including ensemble forecasting and should be familiar with handling large meteorological datasets. Demonstrated experience with related programming, specifically in R or similar languages, and scripting tools are essential. Good knowledge of spoken and written English is required. The knowledge of another community language would be an advantage.

Relevant publications and presentations should be highlighted.

Information contributed by: Maurizio Sciortino, DNI Steering Committee

The 9th meeting of AARSE endorses the so-called "El Jadida" declaration.



For long, Remote sensing has been shown a key tool to monitor African drylands and better understand the mechanism underlying regional desertification. The African Association of Remote Sensing of the Environment (AARSE) held its 9th meeting in El Jadida (Kingdom of Morocco, Oct. 29 to Nov.02, 2012) and signed the so-called El Jadida Declaration.

In short, the declaration recognizes the role of Earth Observation and Geospatial Science and Technology products and services in attaining worldwide and national development goals. It underlines the contribution of Africa in such an effort. It calls on the African Union and African Governments to support a coordination office on space affairs at African regional intergovernmental level in order to develop a coordinated African space policy relying on existing Earth Observation and geoinformation organizations, support the development of the African Resource Management Constellation, engage actively in GEO and GEOSS and support enhanced use of Earth Observation and geoinformation products and services through such dedicated programmes as ESA/TIGER.

The declaration can be downloaded at: <http://africanremotesensing.org/profiles/blogs/the-el-jadida-declaration-2012>

Information contributed by: Gerard Begni, CNES; DNI/AB; CSFD, France

Camel Role in Challenging Environments was Praised by Scientists

The Scientific Conference of Camel Research and Production (SCCRP) was organized on 17-18 April, 2013 in Sudan University of Science and Technology, Deanship of Scientific Research under the guidance and supervision of Prof Dr.

Amel Omer Bakhiet Dean Deanship of Scientific Research at Khartoum. The role of camel as a tool to ensure livelihood in deserted and marginalized lands of the world was praised and appreciated. The scientists called on the international development organizations to take camel as a tool for combating hunger and extreme poverty in the challenging climate zones of the world.

Information contributed by: Raziq Kakar, Lasbella University of Agriculture, Water and Marine Sciences, Pakistan

---- Editorial Board ----

Mariam Akhtar-Schuster, Hamburg University, Germany; Gérard Begni, Earth, Environment & Climate, CNES, France; María José Marqués Perez, Universidad Autónoma de Madrid, Spain; Lindsay Stringer, University of Leeds, UK; Chiara Zanolla, NRD - Sassari University, Italy.

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