

# DesertNet International



## DesertNet International Newsletter n. 1/2013

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 **15.04.2013** Please send your contributions (1000 characters max, including spaces) to [czanolla@uniss.it](mailto:czanolla@uniss.it)

### Contents:

1. DesertNet updates
2. Information relevant to DesertNet members
3. Researchers' updates
4. Important upcoming events
5. Publications and Special Issues
6. Other information

### 1. DesertNet updates

---

#### DesertNet International part of the STK4SD Consortium in charge of the 3<sup>rd</sup> UNCCD Scientific Conference in 2014

DesertNet International in agreement with Agropolis International has promoted the creation of the "Scientific & Traditional Knowledge for Sustainable Development" (STK4SD) Consortium, selected by the UNCCD CST Bureau for the organisation of the UNCCD Third Scientific Conference that will take place in 2014 at the fourth special session of the Committee on Science and Technology (CST S-4). The theme of the conference will be "*Combating DLDD for poverty reduction and sustainable development: the contribution of science, technology, traditional knowledge and practices*". The STK4SD is a qualified Consortium made up of key research networks and institutions working in the field of desertification/land degradation, combining bio-physical and human sciences approaches.

Among its 6 members are three international networks and institutions (DesertNet International, CGIAR Consortium, Sahel and Sahara Observatory), and three national organizations from France (Agropolis International), Argentina

(IADIZA) and China (Chinese Academy of Forestry). The STK4SD Consortium also includes two affiliated partners (the EC Joint Research Centre and the Desertification Research Centre – NRD from Italy).

*DNI Bureau*

## 2. Information relevant to DesertNet members

---

### First meeting of the Intergovernmental Platform on Ecosystems and Ecosystem Services (IPBES)

The first meeting of IPBES was held in Bonn from 21 to 26 January 2013. IPBES has four strategic objectives: Knowledge generation; Identify and prioritize scientific information relevant policy aimed at decision-makers (without undertaking new research initiatives); Assessment of current knowledge on biodiversity and ecosystem services; Support policy formulation and implementation; Capacity building: Developing and active support for capacity-building activities to improve the interchange between science and policy at various levels.

For the implementation of objectives so broad and ambitious, the Multidisciplinary Expert Panel, consisting of 25 experts, has already been appointed. The MEP will work on the preparation of the program of activities in collaboration with the Bureau and the Secretariat. The program will be implemented in the years 2014-2018 will be presented for approval at the next plenary meeting of IPBES, planned for December 2013.

The program will be developed initially on the basis of proposals submitted by members, stakeholders and organizations participating as observers to IPBES. The implementation of the work program provides for the establishment of working groups to be established in the light of assessments of economic viability. The budget for 2013 is \$ 3.1 million. IPBES activity will open opportunities of work for the desertification scientific community or at least this is the wish of some country parties of UNCCD. This will be certainly an issue for discussions and decision at next meetings of UNCCD.

More information on: <http://www.ipbes.net/>; <http://www.iisd.ca/ipbes/ipbes1/>

*Information contributed by: Maurizio Sciortino, Steering Committee DNI, ENEA (Italian Agency for new technologies, Energy and Sustainable Economic Development), Italy*

### Call for proposals for new Case Studies on economics of Land Degradation and SLM



The Economics of Land Degradation (ELD) is an initiative for a global study on the economic benefits of land and land based ecosystems. The initiative highlights the value of sustainable land management (SLM) and provides a global approach for analysis of the economics of land degradation.

Calls for Existing case studies or proposals for new case studies are possible.

This call is open to all involved in the economics of Land Degradation addressing gaps on overall cost/benefits of different land management interventions, understanding of drivers of changes, relationship between population density and

land degradation, amongst others.

Deadline: 31 March 2013

New Case Studies:

[http://eld-initiative.org/index.php?id=51&tx\\_ttnews%5Btt\\_news%5D=30&cHash=8ba2f29a601ddd2cad635514ea99ac47](http://eld-initiative.org/index.php?id=51&tx_ttnews%5Btt_news%5D=30&cHash=8ba2f29a601ddd2cad635514ea99ac47)

Existing Case Studies:

[http://eld-initiative.org/index.php?id=51&tx\\_ttnews%5Btt\\_news%5D=29&cHash=467badc95da8c4bc67d8370a7d09bc20](http://eld-initiative.org/index.php?id=51&tx_ttnews%5Btt_news%5D=29&cHash=467badc95da8c4bc67d8370a7d09bc20)

*Information contributed by: Maria José Marques Perez Univ. Autonoma de Madrid, Spain*

### 3. Researchers Updates

---

#### Nomination for Experts for first Science Committee of the Future Earth programme

The Science and Technology Alliance for Global Sustainability (comprising ICSU, ISSC, the Belmont Forum, UNEP, UNESCO, UNU and WMO as an observer), invites you to submit **nominations for experts** to serve on the first Science Committee of the Future Earth programme.

Future Earth is a new 10-year programme on integrated Earth system research for global sustainability to develop the knowledge required for societies worldwide to face challenges posed by global environmental change.

More information at: [www.icsu.org/future-earth](http://www.icsu.org/future-earth)

*Information contributed by: Maria José Marques Perez Univ. Autonoma de Madrid, Spain*

#### Genome sequence of chickpea



Chickpea (*Cicer arietinum*) is a drought tolerant and high protein crop that plays a crucial role in food security in India and parts of Sub-Saharan Africa and many developing countries.

Scientists from the CGIAR (<http://www.cgiar.org/>) have decoded the genome sequences of 90 chickpea varieties from 10 countries. The research published in *Nature Biotechnology* identifies clues on how the genome sequence can be used to improve crop yields in marginal environments.

More information at:

<http://www.nature.com/nbt/journal/vaop/ncurrent/full/nbt.2491.html>

*Information contributed by: Maria José Marques Perez Univ. Autonoma de Madrid, Spain*

#### Europe needs post-doc researchers



**JOINT RESEARCH CENTRE**

The European Commission's in-house science service

The Joint Research Centre (JRC) is currently seeking post-doctorate researchers in **Natural Sciences; Quantitative Sciences; Human and Social Sciences; Agricultural, Environmental and Earth Sciences;**

**Health Sciences** from the EU Member States and from Associated Countries.

Registration period: 29 January – 1 March 2013

More information at: [http://europa.eu/epso/apply/jobs/cast/2013/cast\\_jrc/index\\_en.htm](http://europa.eu/epso/apply/jobs/cast/2013/cast_jrc/index_en.htm)

*Information contributed by: Maria José Marques Perez Univ. Autonoma de Madrid, Spain*

#### Combating soil degradation and desertification: ReviTec<sup>®</sup>-sites in Cameroon and Inner Mongolia (China)

Based on ecological knowledge, the ReviTec<sup>®</sup> approach (University of Bremen, private partnership KeKo) supports the combat against soil degradation, erosion and desertification. In Cameroon, three demonstration, teaching and research sites have been established in 2012: one on the premises of our partner university in Ngaoundéré (Adamaoua; Northern Congo forest-savannah) and two near Maroua (Far North; East Sudanian savannah). Compost and different materials from local producers are tested (biochar, mycorrhiza, pumice, mulch). In the rainy season,

ReviTec<sup>®</sup> supported plant growth very effectively and retarded surface run-off. The vegetative green phase was extended well into the dry season. The sites are readily adopted for capacity building of stakeholders.

A ReviTec<sup>®</sup> site installed in 2009 at the Ordos Desert research station of the Inner Mongolia Academy of Forestry Science (IMAF; Hohhot) proved to control wind erosion efficiently.

The following support is highly acknowledged: Cameroon projects: the Universities of Bremen and Ngaoundéré (Cameroon), DAAD, GIZ. Inner Mongolia: IMAF, Pro-INNO.

Prof. Dr. Hartmut Koehler, Mr Raimund Kesel (Univ. of Bremen, Centre for Environmental Research and Technology, UFT); Prof. Dr. Albert Ngakou (Univ. of Ngaoundéré, Cameroon), Mr Okenye Mambo (GIZ Maroua, Cameroon)

For more information, please contact: hartmut.koehler@uni-bremen.de

*Information contributed by: Prof. Dr. H. Koehler, Univ. Bremen, UFT, Bremen (Germany),*

### **Nursing role of Acacia plantations in the restoration of degraded environments.**



Reforestation of arid zones is of increasing importance because its potential in restoring degraded environments. Plantations have a strong influence on their abiotic environment and often function as 'nursing trees', facilitating the recruitment of other plants. This study is conducted in an Acacia forest-steppe ecosystem of central Tunisia (Bou Hedma National Park) where several reforestation campaigns took place. The most critical factor controlling plant productivity in those arid regions is soil water availability. Therefore, the nursing role of Acacia trees regarding the herbaceous layer is investigated in

terms of soil hydraulic properties and the near-surface water balance. Results show already that the improved hydraulic properties underneath the canopy are extending beyond the canopy radius. Further research will be carried out to relate those findings to the near-surface water balance of the ground vegetation and how to upscale hydrological models taking into account the gradual change in hydraulic properties. Advice and collaboration is welcome. Your interest in the study is appreciated.

More information at: [www.ugent.be/bw/soilmanagement/en/research/soilphysics](http://www.ugent.be/bw/soilmanagement/en/research/soilphysics); Please also contact *Maarten De Boever* ([maarten.deboever@UGent.be](mailto:maarten.deboever@UGent.be))

*Information contributed by: M. de Boever, Soil Physics Research Unit, UNESCO Chair on Eremology, Ghent University, Belgium.*

### **CASCADE Project**



The CASCADE Project (Catastrophic shifts in drylands: how can we prevent ecosystem degradation?) is preparing for its second plenary meeting in Alicante, Spain. We will be reviewing progress in the setting up of the key field and laboratory experiments. The meeting will give us the opportunity of viewing and discussing two local study sites. The Albaterra range is one of the most desertification-affected areas in Europe, where a number of restoration programs have been implemented over

the last decades. The experiments will identify degradation thresholds and examine the potential of restoration for reversing degradation shifts in the ecosystem. In the Mariola range pine forest and shrubby plant communities have developed on agricultural abandoned land and now experience high frequency of wildfires. Management strategies today need to focus on enhancing ecosystem resistance and resilience to wildfires. For more information about CASCADE research visit: <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		
25-26 Feb	Green Growth. Transforming economies for competitiveness and resilience? <a href="http://www.chathamhouse.org/GreenGrowth2013?campaign=confalerts">http://www.chathamhouse.org/GreenGrowth2013?campaign=confalerts</a>	London, UK
5-7 Mar	13 <sup>th</sup> Dialogue on Forests, Governance and Climate change <a href="http://www.rightsandresources.org/events.php?id=814">http://www.rightsandresources.org/events.php?id=814</a>	Yaounde, Cameroon
9-11 Mar	PSPC 2013- Poverty Alleviation and Social Protection Conference 2013 <a href="http://www.tomorrowpeople.org/poverty-social-protection-conference.html">http://www.tomorrowpeople.org/poverty-social-protection-conference.html</a>	Bangkok, Thailand
11-15 Mar	High-level Meeting on National Drought Policy: Towards More Drought Resilient Societies <a href="http://www.hmndp.org/">http://www.hmndp.org/</a>	Geneva, Switzerland
17-21 Mar	3 <sup>rd</sup> Mediterranean Forest Week <a href="http://www.iii-med.forestweek.org/">http://www.iii-med.forestweek.org/</a>	Tlemcen, Algeria
7-12 Apr	European Geosciences Union, General Assembly <a href="http://www.egu2013.eu/">http://www.egu2013.eu/</a>	Vienna, Austria
9-12 Apr	UNCCD 2 <sup>nd</sup> Scientific Conference <a href="http://2sc.unccd.int/home/">http://2sc.unccd.int/home/</a>	Bonn, Germany
22-26 Apr	35 <sup>th</sup> International Symposium on Remote Sensing of Environment <a href="http://www.isrse35.org/">http://www.isrse35.org/</a>	Beijing, China
13-18 May	World Association of Soil and Water Conservation Conference <a href="http://www.idd.go.th/web_waswac2/index.htm">http://www.idd.go.th/web_waswac2/index.htm</a>	Bangkok, Thailand
21-24 May	Water for Life. Biohydrology 2013-02-10 <a href="http://www.biohydrology2013.de/">http://www.biohydrology2013.de/</a>	Landau/Pfalz, Germany
27 May-1 Jun	WOCAT Share Fair & 16th WWSM <a href="https://www.wocat.net/fileadmin/user_upload/documents/Workshops/WWSM/16th_WWSM_announcement.pdf">https://www.wocat.net/fileadmin/user_upload/documents/Workshops/WWSM/16th_WWSM_announcement.pdf</a>	Pretoria, South Africa
4-7 Jun	Mapping Global Change: Spatial Statistics 2013 <a href="http://www.spatialstatisticsconference.com/">http://www.spatialstatisticsconference.com/</a>	Columbus, Ohio, USA
14-17 Jun	19th International Interdisciplinary Conference on the Environment <a href="http://ieaonline.org/?page_id=68">http://ieaonline.org/?page_id=68</a>	Portland, Oregon, USA
17-18 Jun	5 <sup>th</sup> Conference on Desertification and Land Degradation <a href="http://www.desertland.eu/">http://www.desertland.eu/</a>	Ghent, Belgium
22-25 May	2nd International Scientific Conference RESPAG – Regional Development, Spatial Planning and Strategic Governance <a href="http://www.respag.org/welcome.php">http://www.respag.org/welcome.php</a>	Belgrade, Serbia
26-29 May	Soil Carbon Sequestration for Climate Food Security and Ecosystem Services <a href="http://scs2013.land.is/">http://scs2013.land.is/</a>	Reykjavik, Iceland
8-12 Jul	17 <sup>th</sup> ISCO Conference. Environmental Sustainability Through Soil	Medellín,

	Conservation <a href="http://iscocolombia2013.com/ingles/index.html">http://iscocolombia2013.com/ingles/index.html</a>	Colombia
4-6 Sep	Utilization and protection of halophytes and salt-affected landscapes <a href="http://members.iif.hu/tot3700/salinityconferencehungary2013.html">http://members.iif.hu/tot3700/salinityconferencehungary2013.html</a>	Kecskemét, Hungary
10-14 Sep	1st CIGR Inter-Regional Conference on Land and Water Challenges <a href="http://www.landandwater2013.iamb.it/">http://www.landandwater2013.iamb.it/</a>	Bari, Italy
29 Sep – 2 Oct	First International Conference on Global Food Security <a href="http://www.globalfoodsecurityconference.com/">http://www.globalfoodsecurityconference.com/</a>	Noordwijkerhout, The Netherlands
7-9 Oct	First GlobalSoilMap Conference <a href="https://colloque.inra.fr/GlobalSoilMap-2013">https://colloque.inra.fr/GlobalSoilMap-2013</a>	Orléans, France
2014		
26-28 Mar	Globe 2014. Building resilience through sustainability strategies & innovation <a href="http://www.globe-net.com/events/2014/3/globe-2014/">http://www.globe-net.com/events/2014/3/globe-2014/</a>	Vancouver, Canada
14-16 Oct	9th International Soil Science Congress on “The Soul of Soil and Civilization” <a href="http://www.soil2014.com/">http://www.soil2014.com/</a>	Side, Antalya, Turkey

### EGU General Assembly 2013



Several sessions on desertification and land degradation are going to be held at the next EGU General Assembly 2013 to be held from 7 to 12 April 2013 in Vienna, Austria:

SSSO. 3 - Soils in Africa: challenges and opportunities

SSSO. 7 - Digital soil mapping: novel approaches and sensing techniques to the prediction of key soil properties

SSSO. 8 - Spatial and Temporal Patterns in Soil Systems: Monitoring, Modeling and Characterization of soil water contents and soil properties

SSS8. 2 - Land use change and land management impacts on soil organic carbon: From process understanding to regional assessments

SSS9. 2 - Studying soils and/or land: Approaches for sustainable management of the environment

SSS9. 5 - Co-evolution of soil and vegetation and the impact of human interventions on hydro-geomorphological systems

SSS9.11 - Soil erosion and desertification processes in Mediterranean areas

SSS10.2 - Soil and irrigation sustainability practices

SSS10.3 - Sustainable productivity of soils: a question of balance

More information at: <http://meetingorganizer.copernicus.org/EGU2013/sessionprogramme/SSS>

Other programmes: <http://meetingorganizer.copernicus.org/egu2013/sessionprogramme>

*Information contributed by: Maria José Marques Perez Univ. Autonoma de Madrid, Spain*

### WOCAT Announcement on Share Fair and 16th WOCAT Workshop and Steering Meeting

We are pleased to announce the WOCAT Share Fair and the 16th WOCAT Workshop and Steering Meeting taking place in Pretoria, South Africa, from 27 May to 1 June 2013. Since 1996, WOCAT has organized International Workshops and Steering Committee Meetings (known as WWSM) with the goal (a) to bring together the main collaborating and

funding institutions and the core collaborators, (b) to assess the progress and exchange experiences, (c) to further develop the programme and (d) to plan for the future including budgetary consequences.

This year we have the opportunity to get familiar with SLM issues in South Africa. A 2-day WOCAT Share Fair on “Innovations in SLM, decision support and up-scaling - at local and national level” will open the meeting, followed by a 1-day field day highlighting the mapping experience in South Africa, and the 3-day WOCAT Workshop and Steering Meeting (WWSM). The outcome of the Share Fair will be further developed during the WWSM, progress evaluated and directions for the way forward set.

Deadline for registration is March 4, 2013. Please use the on-line registration form.

For further information:

[https://www.wocat.net/fileadmin/user\\_upload/documents/Workshops/WWSM/16th\\_WWSM\\_announcement.pdf](https://www.wocat.net/fileadmin/user_upload/documents/Workshops/WWSM/16th_WWSM_announcement.pdf).

*Information contributed by: Isabelle Providoli, PhD, Senior Research Scientist, WOCAT, University of Bern (Switzerland)*

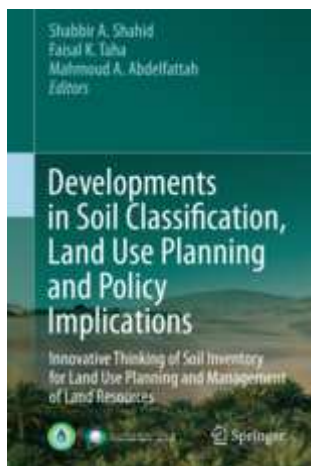
## 5. Publications and Special Issues

---

1. Alavipanah, S.K., Hamzeh, M., Goodarzi Mehr S., and Khakbaz, B., 2011. Important topics critical to remote sensing in arid regions, International Conference on Dryland ecosystem functioning and resilience: integrating biophysical assessment with socio-economic issues, Alghero (Italy), 6-8 July 2011.
2. Alavipanah, S.K., Goodarzi Mehr, S., Hamzeh, M. and Khakbaz, B., 2011. Land surface temperature of Yardang region in Lut Desert (Iran) based on field measurements and Landsat Thermal data, International Conference on Dryland ecosystem functioning and resilience: integrating biophysical assessment with socio-economic issues, Alghero (Italy), 6-8 July 2011.
3. Alavipanah, S.K., Goodarzi Mehr S. and Mirzaei S., 2012, THE POTENTIALS AND LIMITATIONS OF REMOTE SENSING IN THE SOILS OF ARID AND SEMIARID AREAS, EORSA 2012.
4. Alavipanah, S.K., Weng, Q., Hamzeh, M., Khakbaz, B. and Goodarzi Mehr, S., 2012. Investigating One of the Warmest Regions of the Earth Using MODIS Data, EORSA 2012.
5. Alavipanah, S.K., Matinfar, H.R., Sarmasti, N., Jafarbeglou, M. and Goodarzi Mehr, S., 2012. Introduction to indexes in Identification of Saline Soils by using of ASTER and LISS III Data Case Study: Regions of Iran, EUROSOIL 2012.
6. Alavipanah, S.K., Goodarzi Mehr, S., and Khakbaz, B., 2012. Remote sensing application in Evaluation of soil characteristics in desert areas, EUROSOIL 2012.
7. Alavipanah, S.K., Hamzeh, M., Khakbaz, B., Khosravi, F., and Goodarzi Mehr, S., 2012. Investigating the effective parameters in thermal remote sensing of desert in one of the hottest places on the Earth, 2nd Oxford Interdisciplinary Desert Conference, Progress and integration in desert research, 29-30 March 2012.
8. Alavi Panah, S.K., Talebi, S., and Amiraslani F., 2012. Predictability of Water Sources Using Snow Maps Extracted from the Modis Imagery in Central Alborz, Iran.
9. Roberta Aretano, Irene Petrosillo, Nicola Zaccarelli, Teodoro Semeraro, Giovanni Zurlini. 2013. People perception of landscape change effects on ecosystem services in small Mediterranean islands: A combination of subjective and objective assessments. *Landscape and Urban Planning*, Volume 112, Pages 63-73
10. Bagheri, N., Ahmadi, H., Alavipanah, S.K., and Omid, M., 2011. Soil-line vegetation indices for corn nitrogen content prediction, *Int. Agrophys.*, 2012, 26,103-108, doi: 10.2478/v10247-012-0016-8
11. Celia Barbero-Sierra, Maria Jose Marques, M. Ruíz-Pérez. 2013. The case of urban sprawl in Spain as an active and irreversible driving force for desertification. *Journal of Arid Environments*, Volume 90, Pages 95-102
12. Paolo D’Odorico, Abinash Bhattachan, Kyle F. Davis, Sujith Ravi, Christiane W. Runyan. 2013. Global desertification: Drivers and feedbacks. *Advances in Water Resources*, Volume 51, Pages 326-344

13. Hamzeh S., Naseri, A.A., Alavipanah, S.K., Bartholomeus, H., Mojaradi, B., Clevers, J. and Behzad, M., 2012. An evaluation of hyperspectral vegetation indices for detecting soil salinity in sugarcane fields using EO-1 Hyperion Data, *Geophysical Research*, Vol. 14, EGU2012-12289, 2012, EGU General Assembly 2012.
14. Hamzeh, S., Naseri, A.A., 2012. Alavipanah, S.K., Mojaradi, B., Bartholomeus, H.M., Clevers, J.G.P.W. and Behzad M., Estimating salinity stress in sugarcane fields with spaceborne hyperspectral vegetation indices, *International Journal of Applied Earth Observation and Geoinformation*, <http://dx.doi.org/10.1016/j.jag.2012.07.002>, Article in press.
15. Hassanlou, M.R., Zahtabian, G. and Alavipanah, S.K., 2012. Evaluating and Estimating Suspended Solid's Density in Sefidroud Dam's Lake, by Using Remote Sensing Data, *World Applied Sciences Journal* 16 (6): 863-868, 2012.
16. Stefanie M. Herrmann, Gray G. Tappan . 2013. Vegetation impoverishment despite greening: A case study from central Senegal. *Journal of Arid Environments*, Volume 90, Pages 55-66
17. Hua Ma, Yuan Lv, Hongxun Li. 2013. Complexity of ecological restoration in China. *Ecological Engineering*, Volume 52, Pages 75-78
18. Matinfar, H. R. and Alavipanah, S.K., 2012. Vegetation Indices and Land Surface Temperature as a Clue for Change Detection Monitoring (Case Study; Khoramabd Region). 8th International Soil Science Congress on "Land Degradation and Challenges in Sustainable Soil Management" 15 - 17 May 2012, TURKEY.
19. Isaac A. Meir, Aviva Peeters, David Pearlmutter, Suleiman Halasah, Yaakov Garb & John-Michael Davis (2012): An assessment of regional constraints, needs and trends, *Advances in Building Energy Research*, DOI:10.1080/17512549.2012.740209
20. Panagiotis T. Nastos, Nadia Politi, John Kapsomenakis. 2013. Spatial and temporal variability of the Aridity Index in Greece *Atmospheric Research*, Volume 119, January 2013, Pages 140-152
21. Luca Salvati, Margherita Carlucci . 2013. The impact of Mediterranean land degradation on agricultural income: A short-term scenario *Land Use Policy*, Volume 32, Pages 302-308
22. Shahid, Shabbir A.; Taha, Faisal K.; Abdelfattah, Mahmoud A. (Eds.). 2013. *Developments in Soil Classification, Land Use Planning and Policy Implications. Innovative Thinking of Soil Inventory for Land Use Planning and Management of Land Resources.*, Springer, ISBN: 978-94-007-5331-0. Hardcover, 766 pages.
23. Lindsay C. Stringer\*, Andrew J. Dougill (2013). Channelling science into policy: Enabling best practices from research on land degradation and sustainable land management in dryland Africa. *Journal of Environmental Management* 114 (2013) 328e335. <http://dx.doi.org/10.1016/j.jenvman.2012.10.025>
24. A UNEP Synthesis Report. 2012. *Avoiding Future Famines: Strengthening the Ecological Foundation of Food Security through Sustainable Food Systems* -: [http://www.unep.org/publications/ebooks/avoidingfamines/portals/19/UNEP\\_Food\\_Security\\_Report.pdf](http://www.unep.org/publications/ebooks/avoidingfamines/portals/19/UNEP_Food_Security_Report.pdf)
25. A UNEP Synthesis Report. 2012. *Emissions Gap 2012* -: <http://www.unep.org/pdf/2012gapreport.pdf>
26. Emmanouil A. Varouchakis, Dionissios T. Hristopulos. 2013. Improvement of groundwater level prediction in sparsely gauged basins using physical laws and local geographic features as auxiliary variables *Advances in Water Resources*, Volume 52, Pages 34-49
27. Feng Wang, Xubin Pan, Dongfang Wang, Chongyang Shen, Qi Lu. 2013. Combating desertification in China: Past, present and future. *Land Use Policy*, Volume 31, Pages 311-313



**New publication: DNI mentioned for its role in promoting sustainable land management**

*Developments in Soil Classification, Land Use Planning and Policy Implications* (see complete reference in the above list) is an important addition to the technical literature of ecology and a storehouse of information on soil that includes inventories, material on databases, and details of policy developments. Soil may be just brown dirt to most people, but its sustained health is vital to the world's ecosystems, and it is under threat as never before from contamination, degradation and salinization, among other issues. As the world's population continues to expand, maintaining and indeed increasing agricultural productivity is more important than ever. The absence of scientific soil inventories, especially in arid areas, leads to mistaken decisions about soil use. Greater efficiency in soil use is possible when these resources are properly classified using international standards. Focusing on arid regions, this volume details soil classification from many countries. It is only once this information is properly assimilated by policymakers it becomes a foundation for informed decisions in land use planning for

rational and sustainable uses.

Part III "New Trends in Land Degradation and Desertification" and Chapter 38 of the book include a paper by Pandi Zdruli entitled "*New Trends in Land Degradation and Desertification Research and the Role of the Association DesertNet International in Sharing Knowledge and Promoting Sustainable Land Management*"

*Information contributed by: Pandi Zdruli,, DNI Steering Committee member, CIHEAM -Bari (Italy)*

**CSFD announces the publication of the English version of two of its "Dossiers"**

**Dossier Nbr 9** on "Pastoralism in drylands: the case of sub-Saharan Africa": This dossier reviews sub-Saharan pastoral systems, their relevance and roles as well as existing interactions between pastoralism and natural resources. It also considers economic and ecological challenges pastoralism is facing.

Authors: Bernard Toutain (agropastoralist, CIRAD), André Marty (sociopastoralist, IRAM), André Bourgeot (anthropologist, CNRS), Alexandre Ickowicz (livestock scientist, CIRAD) and Philippe Lhoste (livestock scientist, CIRAD).

Download the PDF version for FREE ( 64 pages, 7 Mo) on the following page: <http://www.csf-desertification.org/index.php/actu/199-publication-pastoralism-drylands>. A printed version is also available, please contact us at the address at the end of this post to request a copy.

**Special Dossier** on the: "The African Great Green Wall project: What advice can scientists provide? Building a 'Great Green Wall' across the Sahel has been recognized as a powerful political slogan to strengthen the fight against desertification, but how can scientists help in such an endeavor? This is the question the special issue of "Dossiers du CSFD" tempted to answer in October 2011. As part of our mandate to synthesize and largely disseminate the scientific knowledge on desertification, this 'Dossier' has been translated: the English version has just been released. Of course the original version in French is also still available on our website.

We will be grateful to receive comments and remarks to improve this 'Dossier'. Find more information and the links to download the FREE PDF version here:

<http://www.csf-desertification.org/index.php/desertification-et-son-combat/fiche-actualite/great-green-wall>

Please note all our on-line publications are also available on <http://issuu.com/csf>

*information provided by Dr. Richard Escadafal, DNI Secretary General, chair of the 'Comité Scientifique Français de la Désertification' (CSFD) <http://www.csf-desertification.org>*

### **Guidebooks on green economy for practitioners and other stakeholders**

The Division for Sustainable Development of the UN Department of Economic and Social Affairs (UNDESA) has published a series of guidebooks to the green economy following the United Nations Conference on Sustainable Development (Rio+20).

**Issue 1** provides a guide to the history and emerging definitions of green economy and related concepts such as green growth and low carbon development. It also includes a concise guide to approximately 90 recent green economy publications.

**Issue 2** aims to outline some principles that can be used to guide interpretation and application of the concept, as well as to identify some key areas where the green economy might be expected to deliver added value within the broader context of sustainable development.

**Issue 3** aims to explore the range of policy measures that have been proposed under the 'green economy' label by experts and practitioners as well as by several governments in recent national planning documents.

More information at: <http://sustainabledevelopment.un.org/index.php?menu=1518>

*Information contributed by: Maria José Marques Perez Univ. Autonoma de Madrid, Spain*

## **6. Other Information**

---

### **Vacancy announcement**

The Systems Group within the Department of Communication & Systems at The Open University is seeking a Postdoctoral Research Associate to work with Drs Chris Blackmore and Kevin Collins and Professor Ray Ison on the Climate change adaptation and water governance (CADWAGO) project funded by a trio of European Foundations (Riksbankens Jubileumsfond, Compagnia di San Paolo and VolkswagenStiftung). The project will develop the knowledge base and capacity to adapt to climate change through improved water governance approaches (see [www.cadwago.net](http://www.cadwago.net) for further information).

Research Associate in Water Governance, Faculty of Mathematics, Computing & Technology

Temporary contract for 24 months, Based in Milton Keynes - £30,424 - £34,223

Circulation date: 04/02/2013

Closing date: 04/03/2013

*Information contributed by: P.P. Roggero, Desertification Research Centre, University of Sassari, Italy*

### **Newly launched website of the UNEP Office of the Chief Scientist**

The website (1) informs about of the UNEP Chief Scientist Office to the scientific community, and (2) enables scientists to provide input to UNEP's activities.

Contact: <http://www.unep.org/science/chief-scientist/>

*Information contributed by: Mariam Akhtar-Schuster, Advisory Board DNI*

### **About the role of women in semi-arid regions**

The work activities of rural women are relevant in all disadvantaged areas worldwide. However, it is in the semi-arid environment that rural women are most able to cover a much broader spectrum of activities when compared to other

areas. This high ability is explained by the fact that these women combine different strategies more efficiently and dynamically, to adapt themselves to the demands of labor and natural environment. Among these activities, raising domestic fowls and pigs and growing garden vegetables and orchards are the most common. The implications to public policies are related to the need to consider the resources and knowledge of rural women of semi-arid regions, thus focusing applied research and participatory courses on improving technologies that add value and strengthen endogenous components of the rural women's micro-economic system. The recognition and enhancement of the female micro-economic world will certainly contribute to maintain and fortify semi-arid regions ecologically and economically. For more information:

[http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma\\_global=0&la\\_revista=1&revista=166&codigo=2034&que\\_busca=vidal](http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma_global=0&la_revista=1&revista=166&codigo=2034&que_busca=vidal); please also contact D. De Lima Vidal: [lesisa2008@gmail.com](mailto:lesisa2008@gmail.com)

*Information contributed by: Déa de Lima Vidal, Veterinary Faculty - State University of Ceará - Fortaleza, Brazil*

### **---- 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.

#### **Secretariat DesertNet International**

c/o Biozentre Klein Flottbek and Botanical Garden, University of Hamburg  
Ohnhorststr. 18  
22609 Hamburg, Germany  
Tel. +49 (0)40 42816-260  
Fax. +49 (0)40 42816-261