

DesertNet International



DesertNet International Newsletter n. 2/2014

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 **15.10.2014**. Please send your contributions (1000 characters max, including spaces) to czanolla@uniss.it

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1. DesertNet updates

Towards the next UNCCD International Scientific Conference - updates

Combating drought, land degradation and desertification for poverty reduction and sustainable development: the contribution of science, technology, traditional knowledge and practices: this is the theme of the next Scientific Conference to be organized at the beginning of 2015 by the "Scientific and Traditional Knowledge for Sustainable Development" (STK4SD) Consortium, within the framework of the United Nations Convention to Combat Desertification (UNCCD).

The STK4SD Consortium brings together five organizations with a high level of scientific expertise and practical skills in the organization of international conferences alongside a long established commitment to the operations of the UNCCD: Agropolis International, DesertNet International, the Consultative Group for International Agricultural Research (CGIAR), L'Observatoire du Sahara et du Sahel (OSS), and the Instituto Argentino des Investigaciones de las Zonas Aridas (IADIZA).

The UNCCD has published the 1st announcement of the UNCCD 3rd Scientific Conference "Combating DLDD for poverty reduction and sustainable development: the contribution of science, technology, traditional knowledge and practices"

Upon decision of UNCCD COP11, the 3rd Scientific Conference shall take place at the 4th special session of the CST at the latest by the end of April 2015.

The Government of Mexico has offered to host the Conference.

For more information: <http://www.unccd.int/en/programmes/Science/Conferences/Pages/3rd-Scientific-Conference.aspx>

Information contributed by: DNI Bureau

Inaugural meeting of UNCCD's newly established Science-Policy Interface

The first meeting of the Science-Policy Interface (SPI) of the UN Convention to Combat Desertification (UNCCD) took place from 24 to 26 June 2014 in Bonn, Germany. At its meeting, the members of the SPI discussed and agreed on a first work plan for up to the next Conference of the Parties (COP.12).

The UNCCD Executive Secretary, Monique Barbut opened the meeting and recalled that “the SPI's mandate calls for it to identify, analyze and synthesize the efforts of the scientific community and channel the results into the UNCCD”. The Executive Secretary further highlighted that the SPI play a role on issues regarding land use and climate change adaptation, and achieving land degradation neutrality.

For more information contact: <http://www.unccd.int/en/programmes/Science/International-Scientific-Advice/Pages/default.aspx>

Information contributed by: DNI Bureau

2. Information relevant to DesertNet members

Wanted – new Management Committee members and observers



COST ES1104 is looking to expand the membership of its Management Committee and Management Committee Observers to include experts in arid lands restoration and the combat of desertification from the following countries: COST member countries as a Management Committee Member: Bosnia and Herzegovina, Croatia, Cyprus, Czech Republic, Estonia, Ireland, Lithuania, Luxembourg, Poland, Serbia, Slovakia, Slovenia, Sweden, former Yugoslav Republic of Macedonia.

Near Neighbour countries as a Management Committee Observer: Albania, Algeria, Azerbaijan, Belarus, Egypt, Georgia, Lebanon, Libya, Moldova, Montenegro, Russia, Syria, Ukraine.

If you are interested in representing one of these countries on the Management Committee or as a Management Committee Observer, please send a brief letter of motivation to the Action Chair, Dr Benz Kotzen (b.kotzen@gre.ac.uk), outlining your expertise in the topic.

More information about the Action at: http://www.cost.eu/domains_actions/essem/Actions/ES1104?management

Information contributed by: DNI Bureau

Funding for Short-Term Scientific Missions on Arid Lands Restoration 2014-2015

Funding will be made available for Short-Term Scientific Missions that contribute to the scientific objectives of this COST Action. ES1104, Arid Lands Restoration and Combat of Desertification.

Missions are aimed at strengthening the network by, for example, allowing scientists to 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.

The deadlines for applications are:

15 October 2014 for STSMs to be initiated between December 2014-February 2015

15 April 2015 for STSMs to be initiated and completed between March-May 2015

More information at: <http://desertrestorationhub.com/funding-for-short-term-scientific-missions/>

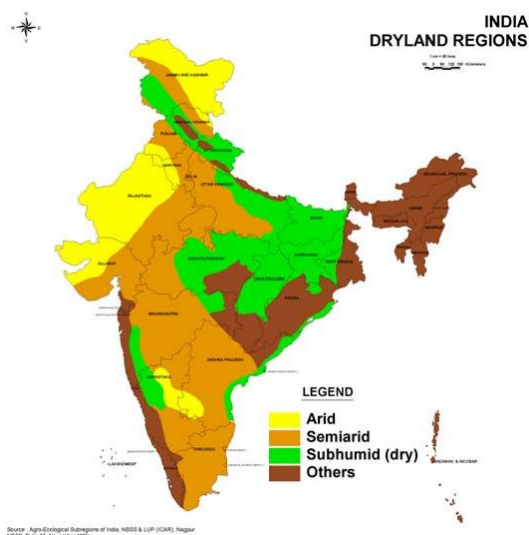
National Environment Awareness Campaign in India. NEAC 2014-2015.

The Campaign will fund short duration programmes for creating environmental awareness on combating desertification among the citizens of India. It is launched by The Ministry of Environment, Forests and Climate Change, Government of India. Programmes must have some action component that will ensure result in concrete actions for “Combating Desertification, Land Degradation and Drought”. Proposals can be divided in two subthemes:

Adopting sustainable land management practices

Restoration of degraded land

Regional Resource Agencies (RRAs) will assist the Ministry in planning, implementing, monitoring and evaluating the Campaign in their respective areas. The deadline for submission of completed Application form to the Regional Resource Agencies (RRA) is 20.08.2014



More information at: <http://sesindia.org/Proforma%20for%20Website.pdf>

Information contributed by: DNI Bureau

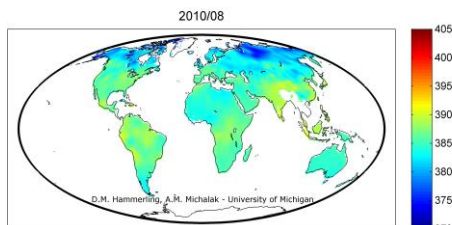
The Sustainable Development Solutions Network (SDSN) has released its revised indicator report.

The report can be found at: <http://unsdsn.org/resources/publications/indicators/>

Information contributed by: DNI Bureau

3. Researchers Updates

Nasa Successfully Launched The Oco2 Satellite



After the failure of OCO launch in 2009, NASA successfully launched its first spacecraft dedicated to studying atmospheric carbon on July 2, 2014. Orbiting Carbon Observatory-2 (OCO-2) is NASA's first dedicated Earth remote sensing satellite to study atmospheric carbon dioxide from Space. OCO-2 will be collecting space-based global measurements of atmospheric CO₂ with the precision, resolution, and coverage needed to characterize sources and sinks on regional scales. OCO-2 will also be able to quantify CO₂ variability over the seasonal cycles year after year. One of the innovative monitored parameters is vegetation fluorescence.

A CO₂ concentration product derived from the Japanese GoSAT/ACOS satellite. USA and Japan closely cooperated in CO₂ measurement from space issues. OCO₂ could be a second generation satellite.

Credit: hereunder quoted JPL/NASA website. Sources: <http://oco.jpl.nasa.gov/science/>

<http://news.sciencemag.org/earth/2014/06/carbon-mapping-satellite-will-monitor-plants-faint-glow>

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

Research in desert microbial ecology at the University of Pretoria, South Africa



The Kuseb River near Gobabeb in the central Namib Desert; a transition between the southern sand-sea and the northern gravel desert zone

The University of Pretoria's Centre for Microbial Ecology and Genomics (CMEG), led by Professor Don Cowan, has a large research program applying the latest metagenomic, phylogenetic and Next Generation Sequencing technologies to investigations of the microbial ecology of Namib Desert soils. The Namib, one of the world's oldest deserts, exhibits a highly defined longitudinal water gradient, the coastal west dominated by fog and the inland east by seasonal rain. CMEG researchers are studying the impact of macroclimate, microclimate, geology and microbiology on the structure and function of microbial communities in the Namib gravel and sand-sea desert zones.

CMEG is seeking applications from good young researchers for MSc and PhD degree programs.

For more information, see www.up.ac.za/CMEG or contact don.cowan@up.ac.za.

Information contributed by: Don Cowan University of Pretoria, South Africa

Urmia Lake Dry Up Assessment for Optimum Guidelines Determination Using SWOT Model

Constraints on water availability and reductions in water quality jeopardize secure access to this resource for all legitimate stakeholders, including aquatic and terrestrial ecosystems. Urmia Lake in the northwestern corner of Iran is one of the largest permanent hyper saline lakes in the world and the largest lake in the Middle East. The lake's surface

area has been estimated to have been as large as 6100 km² but since 1995 it has generally been declining and was estimated from satellite data to be only 2366 km² in August of 2011 (Landsat data). The decline is generally blamed on a combination of drought, increased water diversion for irrigated agriculture within the lake's watershed and mismanagement.

Information about a recent research activity carried out in this area can be addressed to Dr Ali Akbar Damavandi: damavandi58@yahoo.com

Information contributed by: Ali Akbar Damavandi, Semnan University, Iran

4. Important upcoming events

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

2014		
3-8 Aug	Restoration, Ecosystem Services and Land Use Policy http://www.ser2014.org/	Oulu, Finland
16-18 Aug	3rd Young Earth Scientist Congress and 25th Colloquium of African Geology http://www.cag25.or.tz/	Dar Es Salaam, Tanzania
15-19 Sep	IAEG XII CONGRESS. Engineering Geology for Society and Territory http://www.iaeg2014.com/	Torino, Italy
22-25 Sep	the Earth Living Skin: Soil, Life and Climate Changes http://www.els2014.eu/d/98/invitation_to_attend/	Nova Yardinia, Italy
15-18 Sep	Agrobiodiversity and Agroenvironment Symposium (A-BES 2014) http://abes.mardi.gov.my/	Kuching, Malaysia
14-16 Oct	9th International Soil Science Congress on "The Soul of Soil and Civilization" http://www.soil2014.com/	Side, Antalya, Turkey
9-15 Nov	XX Latinoamerican Soil Science Congress http://www.xxcongresolatinoamericanodesuelosperu.org/index_e.php	Cusco, Peru
12-13 Nov	International Symposium on the Post 2015 Agenda & The Sustainable Development Goals http://www.sdgp2015.com/	Sydney, Australia
17-20 Nov	Drylands, Deserts and Desertification http://in.bgu.ac.il/en/desertification/	Negev, Israel
26-28 Nov	International Scientific Symposium of Water Management and Desertification http://www.unioneag.org/en/symposium-2014/	Istanbul, Turkey
2015		
9-12 Mar	3rd UNCCD Scientific Conference. Combating Drought, Land Degradation and Desertification for poverty reduction and sustainable development http://3sc.unccd.int/	Mexico

Call for Abstracts for the 3rd UNCCD Scientific Conference

The 3rd UNCCD scientific conference aims to attract the widest possible range of scientific, local and traditional knowledge that can be harnessed to achieve poverty reduction and sustainable development in areas susceptible to desertification, land degradation and drought. Potential participants are highly encouraged to submit an extended abstract to the organizing committee to present their work and results in relation to the conference topics.

The call for abstract is now open until September 15th, 2014.

More information at: <http://3sc.unccd.int/participants/submit-an-abstract>

Information contributed by: DNI Bureau

3rd Global Soil Week

The 3rd Global Soil Week will be held in Berlin/Germany from Monday the 20th of April until Friday the 24th of April 2015.

The call for proposals is open from 22 July to 28 September 2014.

For more contact: <http://globalsoilweek.org/>

5. Publications and Special Issues

1. Amani Al-assafa, Oraib Nawashb & Mohammad Omari (2014). Identifying forest ecosystem services through socio-ecological bundles: a case study from northern Jordan. DOI:10.1080/13504509.2014.919968. International Journal of Sustainable Development & World Ecology. <http://www.tandfonline.com/doi/full/10.1080/13504509.2014.919968#.U7rWeLH5eJ>
2. Dardel, C., L. Kergoat, P. Hiernaux, M. Grippa, E. Mougin, P. Ciais, and C. C. Nguyen, 2014, Rain-Use-Efficiency: What it Tells us about the Conflicting Sahel Greening and Sahelian Paradox: Remote Sensing, v. 6, p. 3446-3474.
3. Ferrara, A., L. Salvati, A. Sabbi, and A. Colantoni, 2014, Soil resources, land cover changes and rural areas: Towards a spatial mismatch?: Science of the Total Environment, v. 478, p. 116-122.
4. Gamoun, M., 2014, Grazing intensity effects on the vegetation in desert rangelands of Southern Tunisia: Journal of Arid Land, v. 6, p. 324-333.
5. Harris, A., A. S. Carr, and J. Dash, 2014, Remote sensing of vegetation cover dynamics and resilience across southern Africa: International Journal of Applied Earth Observation and Geoinformation, v. 28, p. 131-139.
6. Kaplan, S., D. G. Blumberg, E. Mamedov, and L. Orlovsky, 2014, Land-use change and land degradation in Turkmenistan in the post-Soviet era: Journal of Arid Environments, v. 103, p. 96-106.
7. Kong, T. M., D. E. Austin, K. Kellner, and B. J. Orr, 2014, The interplay of knowledge, attitude and practice of livestock farmers' land management against desertification in the South African Kalahari: Journal of Arid Environments, v. 105, p. 12-21.
8. Masubelele, M. L., M. T. Hoffman, W. J. Bond, and J. Gambiza, 2014, A 50 year study shows grass cover has increased in shrublands of semi-arid South Africa: Journal of Arid Environments, v. 104, p. 43-51.
9. Ponti, L., A. P. Gutierrez, P. M. Ruti, and A. Dell'Aquila, 2014, Fine-scale ecological and economic assessment of climate change on olive in the Mediterranean Basin reveals winners and losers: Proceedings of the National Academy of Sciences of the United States of America, v. 111, p. 5598-5603.
10. Salvati, L., M. Zitti, and M. Carlucci, 2014, Territorial Systems, Regional Disparities and Sustainability: Economic Structure and Soil Degradation in Italy: Sustainability, v. 6, p. 3086-3104.
11. Tane, H. K., T. H. Sun, Z. L. Zheng, and J. Liu, 2014, Auditing reforested watersheds on the loess plateau: Fangshan Shanxi: Ecological Indicators, v. 41, p. 96-108.

Special issue - UNCCD 2nd Conference Papers

The special Issue of papers from UNCCD 2nd Scientific Conference is available at <http://www.planet-risk.org/index.php/pr/issue/view/5>

The UNCCD 2nd Scientific Conference was convened from 9-12 April 2013 in Bonn Germany. The Global Risk Forum (GRF) Davos was the lead institution for the Conference. GRF has released a special issue of its journal 'Planet@Risk' to the topic of desertification.

Information contributed by: DNI Bureau

6. Other Information

IGBP's second synthesis

The International Geosphere-Biosphere Programme's (IGBP) first landmark synthesis, published in 2004, will be followed by a second synthesis scheduled for 2015. The synthesis will cover key Earth-system research findings from various projects.

For more contact:

<http://www.igbp.net/news/news/news/igbpssecondsynthesis.5.2fc4e526146d4c130b78.html>

Information contributed by: DNI Bureau

MACSUR Mid Term meeting Scientific Conference

In the frame of Face JPI - Macsur Project (<http://www.macsur.eu/>), the Mid-Term Scientific Conference "Achievements, Activities, Advancement" was held in Sassari (Sassari) hosted by the Desertification Research Centre of the University of Sassari (NRD UNISS) from 1 to 3 April. The meeting was a unique opportunity in this pan-European project for discussing in person common issues with and among stakeholders of different regions and how to approach the impact of climate change to producing food in Europe in a world with a growing population.

More information, presentations and book of abstracts are available at <http://www.macsur.eu/index.php/2-uncategorised/51-mid-term-meeting-summary>

Information contributed by: Pier Paolo Roggero, NRD-UNISS, Italy

---- Editorial Board ----

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