DesertNet International

# DesertNet International Newsletter n. 3/2013

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 **15.10.2013.** Please send your contributions (1000 characters max, including spaces) to czanolla@uniss.it

**Contents:**



## 1. DesertNet updates

**DesertNet International´s Side Event at the UNCCD COP 11 in Windhoek (Namibia)**

A DNI Side Event on "Launch of a Networking Process of International Scientific Bodies on Research on Land Degradation and Desertification" will be held in Windhoek (Namibia) on the occasion of the eleventh session of the UNCCD Conference of the Parties (COP11) in Windhoek, from 16 to 27 September 2013. This side event will firstly provide insight into the scientific needs and requirements identified by scientists from Africa, Asia and Latin America to improve policy measures to combat desertification and land degradation, and secondly highlight major findings on needs and requirements identified by DesertNet International in the recent scientific debate on improving the science-policy interface on desertification and land degradation.
Exact date and time will be communicated on the DNI web site as soon as available.

*Information contributed by: DNI Bureau*

## 2. Information relevant to DesertNet members

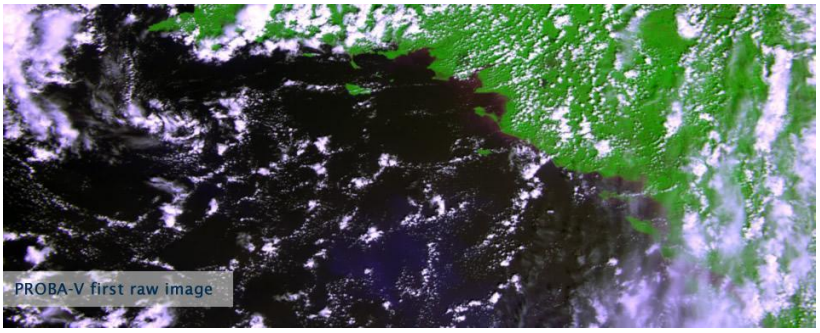
**DNI members active on the preparation of a Sustainable Development Goal on Land**

A number of DNI members participated in a consultative meeting on a Sustainable Development Goal (SDG) on a land degradation neutral world and the associated target for a Zero Net Land Degradation called by the UNCCD and hosted by the Korea Forest Service in Seoul June 26-27, 2013. They included Richard Thomas, Michael Cherlet, Victor Castillo, Mary Seely and Mark Schauer. A total of 25 people drawn from government policy and decision makers (UNCCD National Focal Points), international organizations, business and CSO representatives and academics were invited by the UNCCD to identify policies for action to promote the implementation of a SDG on land, define a roadmap for implementation and derive specific recommendations for the UNCCD to be tabled at the UNCCD COP11 in September 2013. The participants agreed that healthy land is a prerequisite for achieving food, water and energy security as well as climate change adaptation and mitigation and biodiversity preservation. They recommended that to halt and reverse current land degradation trends, there is a need to set commonly agreeable targets with indicators to measure progress towards a land-degradation neutral world. Many favoured a more positive goal that attempts to improve land management sustainably on a global scale. This dialogue is set to continue as positions are defined for the post-2015 development agenda and DNI members are encouraged to participate in the debates. The topic will be discussed at the forthcoming Global Soil Week in Berlin, October 2013.

*Information contributed by: Richard Thomas, DNI Bureau*

## 3. Researchers Updates

**Belgium develops and launches PROBA V for worldwide vegetation monitoring**




*OBA-V first raw image over France (South of Brittany) – © VITO*

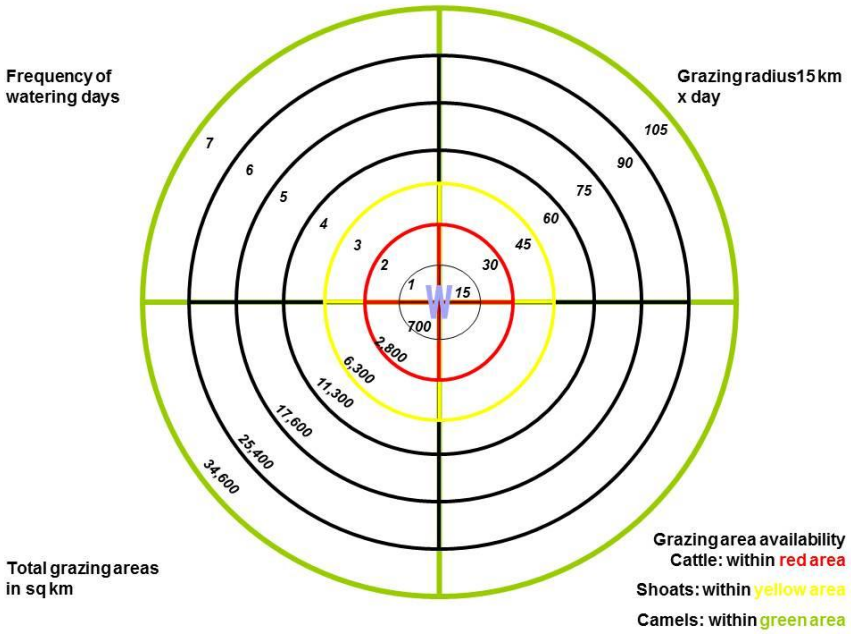
The current Vegetation-1 and Vegetation-2 instruments onboard the SPOT 4 and SPOT 5 satellites will only be available until 2013. For almost 15 years now, these instruments have monitored and mapped worldwide vegetation daily, thus providing essential information on crop yields, droughts, desertification, changes in the type of vegetation, deforestation, etc. to an ever extending user community.
The Sentinel 3 satellites built by ESA in view of the European GMES program will not be operational in due time.
Belgium took advantage of the great experience gained from the VEGETATION program to build the small satellite mission called PROBA-V ("V" standing for Vegetation) and fulfil all the specifications of the Vegetation user community during the gap period and even simultaneously with the forthcoming Sentinel 3 satellites.

PROBA-V was successfully launched on 7 May 2013

Sources: http://proba-v.vgt.vito.be/; http://eo.belspo.be/About/Programmes/ProbaV.aspx; http://smsc.cnes.fr/VEGETATION/index.htm; http://esamultimedia.esa.int/multimedia/publications/BR-310/; http://www.esa.int/Our_Activities/Observing_the_Earth/GMES/Sentinel-3

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

**An unpalatable truth: camels must replace goats, sheep and cattle in large areas of the world.**




In an increasingly arid 21st century (Philip K. Thorton et al. Agriculture and food systems in sub-Saharan Africa in a 4°C+ world. Phil. Trans. R. Soc. A, January 13, 2011 369:117-136) camels have a decisive survival and production advantage over cattle and small ruminants. The graph visually explains why camels are better food producers and more able to survive droughts then cattle and small ruminants. Camels can be watered every 14 days and therefore are able to travel as far as 105 km from a watering point (15 km x 7 days) and have access to a grazing area of 34,600 sq km: area within the green circle. Cattle and small ruminants on the contrary are obliged to be watered every 2-3-6 days (except in special areas where wild melon Citrillus spp. is very abundant) and can travel only to a maximum of 45 km from a watering point (15 km x 3 days). The grazing areas accessible to cattle and small ruminants is much smaller then the one available to camel with less fodder resources and more prone to be overused and degraded.

*Information contributed by: Maurizio Dioli, DNI member, Spain*

**Closing down the grasslands' in China's Gobi desert**

Research (2013) in northern China's Gobi desert region identified the unusual dryland dynamics created by the government's efforts at 'ecological resettlement' and 'closing down the grasslands'. Policy has reconfigured livestock-raising by restricting access to pasture land, eliminating movement and making conventional herding practices illegal in parts of Inner Mongolia Province. However, instead of eliminating herding it has created new business opportunities and greater financial reward for people willing to engage in modified forms of livestock-raising. This has drawn farmers to herding and seen traditional methods give way to intensified livestock raising practices. Purchase of fodder, infrastructure and well organised markets in cities maintain livelihoods whilst potentially degrading vegetation, land use and water resources, the purported reasons for 'closing down the grasslands'.

*Information contributed by: Troy Sternberg and Henri Rueff, School of Geography, Oxford, UK*

**Regional project dedicated to desert ecosystems in the MENA region**

Within the framework of the Desert Ecosystem and Livelihoods Program, 5 countries, namely Algeria, Egypt, Jordan, Morocco, and Tunisia, have received GEF grants to develop national-level projects aimed at enhancing desert ecosystems management and improving communities' living conditions. The national projects will be underpinned by the "MENA Desert Ecosystems and Livelihoods Knowledge Sharing and Coordination" regional project supported by the World Bank and executed by the Sahara and Sahel Observatory (OSS). The regional project launched on 27 June 2013 at the OSS premises with the inaugural meeting of its steering committee. Committee members resolved to encourage cross-fertilization among national projects. As executing agency, OSS will coordinate joint activities, including study tours and regional workshops, and will implement the project's monitoring-evaluation component.

*Information contributed by: Nabil ben Khattra and Jihed Ghannem, Sahara and Sahel Observatory (OSS)*

**Google recently made friendly available a 30 years LANDSAT image archive**

Google is well known to have made images and maps available worldwide to the large public in an easily accessible way. It recently compiled TIMELAPSE, a 30-years LANDSAT archive which can give an overview of the Earth surface evolution for the previous thirty years.
Observing phenomena such as glacier melting, the Aral Sea drying and deforestation increasing worldwide is rather illustrative and impressive. It can be a useful training tool for desertification demonstrations and initial teaching. This tool is available through Mozilla Firefox at the address hereunder, clicking on "Explore the world".
CNES is similarly developing a "SPOT Archive" project, now underway.

Website Address**:** http://world.time.com/timelapse/

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

**"BIOMASS", the forthcoming ESA "Earth Explorer" mission**

*Deforestation spot in Amazonia.*
*© Guardian*

The Space Mission BIOMASS has just been approved by ESA as its next mission of its "Earth Explorer" program. The mission aims at measuring the global forest biomass on a repetitive basis. BIOMASS is planned to be launched toward the end of the 2010's as the 7th "Earth Explorer" element. The project was nurtured by the French CESBIO laboratory, which together with other laboratories in the world is monitoring planetary carbon stocks and fluxes.
This is especially important in the tropics due to heavy deforestation, as well as in permafrost regions. BIOMASS will have a Synthetic Aperture radar (SAP) in P band, (69 cm wavelength) which will observe forest cover with a 50-100 meter resolution, giving an insight on forest volume structure.
Sources:
http://www.esa.int/For_Media/Press_Releases/ESA_s_next_Earth_Explorer_satellitehttp://eo.belspo.be/About/Programmes/ProbaV.aspx;
http://www.cesbio.ups-tlse.fr/fr/indexbiomass.html;
http://www.insu.cnrs.fr/node/4432?utm_source=DNI&utm_medium=Newsletters.

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

**New Chilean agroclimatic observatory to boost early warning for drought events**

*(c) Francesco Fiondella*

Reducing vulnerability to droughts and other agriculture-climate events with relevant, rapid response information for early warning purposes is the key goal of the Agroclimatic Observatory implemented by Chile's Ministry of Agriculture, which was launched on the World Day to Combat Desertification and Drought, on 17 June. The observatory advises the National Climate Risk Management Unit, providing updated information on meteorological, hydrological, and agricultural conditions.

The project has been made possible with the collaboration of the Chilean Meteorological Office (DMC), the Directorate-General for Water (DGA) , and Chile's Institute for Agriculture and Livestock Research (INIA). It is financed by the FAO, UNESCO and the Flemish Government, and supported by the International Research Institute for Climate and Society (IRI) and the Centro del Agua para Zonas Áridas de América Latina y el Caribe (CAZALAC).

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

**Rangeland Observatory Workshop**

The International Land Coalition (ILC) believes that a fair and effective monitoring of ongoing conversion and fragmentation of rangeland ecosystems is needed in order to provide a thorough understanding of the trends and their implications – and also to enhance informed and participatory decision making on land use and investments in rangelands, and on the trade-offs involved. To this aim, a Rangelands Observatory (RO) project has been established with the support of the Ford Foundation.

In June 2013 the inception workshop of the Rangelands Observatory was organised. The general objective of the workshop was to define jointly the change that the RO should seek to provoke and, accordingly, the structure, partnerships, functioning and institutional setting.

During the workshop, it was agreed to work initially on national or regional rangelands observatories (rather than in a single global observatory). Accordingly, available seed funds will be allocated to organisations strongly interested in initiating observatories at that scale.

Organizations, communities, individuals and administrations interested in taking part in and contributing to this Initiative are encouraged to contact the Rangelands Observatory coordinator at rangelands@landcoalition.info.

*Information contributed by: DNI Bureau*

**Water use efficiency, a beneficial effect of increased atmospheric carbon dioxide?**

Knowledge of the ratio of water loss to carbon gain, or in other words, water-use efficiency, is essential to understand ecosystem functions. A large proportion of the ecosystems in the world are limited by water to reach their maximum potential biomass production. At the same time, if they become "more efficient at using water, they should be able to take more carbon out of the atmosphere due to higher growth rates"; Keenan et al. (Nature 499, 324–327 July 2013. doi:10.1038/nature12291) observed that the increase of water-use efficiency in forests is currently larger than that predicted by existing theory, and the phenomenon is not limited to a single region.

The improvement is associated with trends of increasing ecosystem-level photosynthesis and net carbon uptake, and decreasing evapotranspiration. Higher levels of carbon dioxide, mean the stomata don't need to open as wide, or for as long,

as a consequence the plants need less water to grow.
On the contrary, this also causes less water to be released to the atmosphere, diminishing the tree's cooling power. Moreover, high carbon dioxide levels will increase the runoff from the land surface in most areas, because more water from precipitation bypasses the plant cooling system and flows directly to rivers and streams (Cao et al., PNAS 107(21), 9513-9518 May 2010 doi:10.1073/pnas.0913000107)
We need to deepen the study of the influence of the vegetation on the surface of our planet and the consequences of changes we make on the ecosystems to determine our climate and global cycles of water and carbon.

More information at: http://www.nature.com/nature/journal/v499/n7458/full/nature12291.html

*Information contributed by: Maria José Marques, DNI Bureau*

## 4. Important upcoming events

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

| | | |
|---|---|---|
| **2013** | | |
| 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 |
| 16-27 Sep | 11th. Session of the COP UNCCD. http://www.unccdcop11.com/ | Windhoek , Namibia |
| 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 | 2nd. Global Soil Week 2013 “Losing 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 |
| 17-20 Nov | The 5th International Conference on Drylands, Deserts & Desertification | Sede Boqer Israel |

**New Dates for the First ILACCT Scientific Conference: August 28-30, 2013, Sobral, State of Ceará, Brazil**

The Latin American and Caribbean Initiative on Science and Technology (ILACCT) was established in July 2008 and its first Scientific Conference will be held on 28-30 August 2013 in the city of Sobral, State of Ceara, Brazil. The Conference intends to gather the scientific and technological knowledge on desertification, land degradation and drought in the LAC region. The conference has the following thematic priorities: (1) status of desertification, land degradation and drought (DLDD); (2) valuation of socio-economic and cultural impacts of DLDD; and (3) sustainable land management (SLM). It will bring together the scientific community, policy-makers, donors, international organizations, civil society organizations and land users, in an effort to jointly address the challenges of the people living in drylands.

For further information, please visit the following link: www.ilacct.org; email: ilacct@sobral.ce.gov.br

*Information contributed by: DNI Bureau*

**EGU General Assembly 2014**

The next EGU General Assembly 2014 (EGU2014) will be held again at the Austria Center Vienna (ACV) from 27 Apr 2014 to 02 May 2014.
Until 13 Sep 2013 it will be possible to take an active part in organizing the scientific programme of the conference at: http://meetingorganizer.copernicus.org/EGU2014/provisionalprogramme. Please suggest (i) new sessions with conveners and description and (ii) modifications to the skeleton programme sessions. The latter were compiled by the respective EGU Programme Group Chair and Officers based on community input at the last business meetings or later.
The EGU2014 Programme Committee will take into account all suggested new sessions and modifications to existing sessions, and use these to compile the final Session Programme as the basis for the Call-for-Papers. Then, conveners of approved sessions will be asked to actively promote their sessions and the public will be invited to submit their abstracts.
In case any questions arise, please contact egu2014@copernicus.org

*Information contributed by: DNI Bureau*

## 5. Publications and Special Issues

1. Antwi-Agyei P, Dougill AJ, Fraser EDG, **Stringer LC** 2013 Characterising the nature of vulnerability to climate variability: empirical evidence from two regions of Ghana. *Environment, Development and Sustainability* 15:903–926
2. Bisaro A., Kirk M., Zdruli P., Zimmermann W. (2013) Global drivers setting desertification research priorities: insights from a stakeholder consultation forum. Land Degrad. Dev.. doi: 10.1002/ldr.2220. http://onlinelibrary.wiley.com/doi/10.1002/ldr.2220/abstract
3. O. Nawash, M. Shudiefat, R. Al-Tabini, K. Al Khalidi (2013). Ethnobotanical study of medicinal plants commonly used by local bedouins in the badia region of Jordan. The Royal Botanic Garden, P.O. Box 99, Amman 11910, Jordan, http://dx.doi.org/10.1016/j.jep.2013.05.044.
http://www.sciencedirect.com/science/article/pii/S0378874113003954
4. Linstadter, A., and G. Baumann, 2013, Abiotic and biotic recovery pathways of arid rangelands: Lessons from the High Atlas Mountains, Morocco: Catena, v. 103, p. 3-15.
5. Mayor, A. G., S. Kefi, S. Bautista, F. Rodriguez, F. Carteni, and M. Rietkerk, 2013, Feedbacks between vegetation pattern and resource loss dramatically decrease ecosystem resilience and restoration potential in a simple dryland model: Landscape Ecology, v. 28, p. 931-942.
6. Misra, A. K., 2013, Climate change impact, mitigation and adaptation strategies for agricultural and water resources, in Ganga Plain (India): Mitigation and Adaptation Strategies for Global Change, v. 18, p. 673-689.

7. Nagendra H, Reyers B and Lavorel S. 2013. Impacts of land change on biodiversity: making the link to ecosystem services. Current Opinion in Environmental Sustainability. 5:1-6; DOI: 10.1016/j.cosust.2013.05.010. http://www.sciencedirect.com/science/article/pii/S1877343513000663
8. Nutini, F., M. Boschetti, P. A. Brivio, S. Bocchi, and M. Antoninetti, 2013, Land-use and land-cover change detection in a semi-arid area of Niger using multi-temporal analysis of Landsat images: International Journal of Remote Sensing, v. 34, p. 4769-4790
9. Reed MS, Fazey I, Stringer LC, Raymond CM, Akhtar-Schuster M, Begni G, Bigas H, Brehm S, Briggs J, Bryce R, Buckmaster S, Chanda R, Davies J, Diez E, Essahli W, Evely A, Geeson N, Hartmann I, Holden J, Hubacek K, Ioris I, Kruger B, Laureano P, Phillipson J, Prell C, Quinn CH, Reeves AD, Seely M, Thomas R, van der Werff Ten Bosch MJ, Vergunst P, Wagner L 2013 Knowledge management for land degradation monitoring and assessment: an analysis of contemporary thinking. *Land Degradation and Developmen*t 24(4) 307-322
10. Reed MS, Bonn, A, Broad K, Burgess P, Burt TB, Fazey IR, Hubacek K, Nainggolan D, Quinn CH, Roberts P, Stringer LC, Thorpe S, Walton DD, Ravera F, Redpath S. Participatory scenario development for environmental management: a methodological framework *Journal of Environmental Management*; 128: 345–362
11. Salinas, C. X., and J. Mendieta, 2013a, Mitigation and adaptation investments for desertification and climate change: an assessment of the socioeconomic return: Mitigation and Adaptation Strategies for Global Change, v. 18, p. 659-672.
12. Salvati, L., and M. Carlucci, 2013, The impact of Mediterranean land degradation on agricultural income: A short-term scenario: Land Use Policy, v. 32, p. 302-308.
13. Sardans, J., and J. Penuelas, 2013, Plant-soil interactions in Mediterranean forest and shrublands: impacts of climatic change: Plant and Soil, v. 365, p. 1-33.
14. Shafran-Nathan, R., T. Svoray, and A. Perevolotsky, 2013a, Continuous droughts' effect on herbaceous vegetation cover and productivity in rangelands: results from close-range photography and spatial analysis: International Journal of Remote Sensing, v. 34, p. 6263-6281.
15. van Luijk, G., R. M. Cowling, M. Riksen, and J. Glenday, 2013, Hydrological implications of desertification: Degradation of South African semi-arid subtropical thicket: Journal of Arid Environments, v. 91, p. 14-21.
16. Zhou, L. H., Y. L. Zhu, G. J. Yang, and Y. Q. Luo, 2013, Quantitative evaluation of the effect of prohibiting grazing policy on grassland desertification reversal in northern China: Environmental Earth Sciences, v. 68, p. 2181-2188.

**Organization of international, interdisciplinary scientific advice to support the UNCCD**


ADVANCE COPY*

ICCD/COP(11)/CST/3

Convention to Combat Desertification

UNCCD

Conference of the Parties
Committee on Science and Technology

Organization of international, interdisciplinary scientific advice to support the Convention process. Conclusions and recommendations of the Ad Hoc Working Group to Further Discuss the Options for the Provision of Scientific Advice Focusing on Desertification/Land Degradation and Drought Issues

Note by the secretariat

Summary

The conclusions and recommendations of the Ad Hoc Working Group to Further Discuss the Options for the Provision of Scientific Advice Focusing on Desertification/Land Degradation and Drought Issues (AGSA), which are accompanied by the background, mandate, activities and main outcomes of the work of the AGSA, a comprehensive analysis of 11 components of an integrated concept. The final report of the AGSA, containing all detailed information as requested in the terms of reference of the AGSA, is contained in document ICCD/COP(11)/CST/INF.2. At its eleventh session, the Committee on Science and Technology may wish to review and recommend that the COP adopt the recommendations herein.

* Unofficial copy for information purposes only.

The conclusions and recommendations of the Ad Hoc Working Group to Further Discuss the Options for the Provision of Scientific Advice Focusing on Desertification/Land Degradation and Drought Issues (AGSA) are now available in English on the UNCCD website:

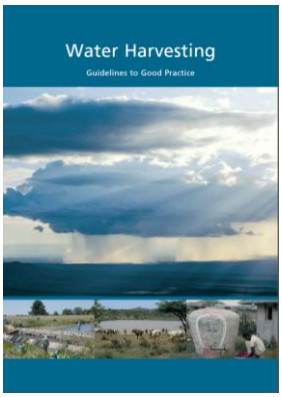
http://www.unccd.int/en/about-the-convention/official-documents/Pages/SymbolDetail.aspx?k=ICCD/COP(11)/CST/3&ctx=COP(11)/CST

This document will be presented and discussed at the COP11 in Windhoek, Namibia, and is listed as ICCD/COP(11)/CST/3

*Information contributed by: Mariam Akhtar-Schuster, DNI AB Coordinator*

**Water Harvesting: Guidelines to Good Practice**

Mekdaschi Studer, R. and Liniger, HP. 2013. Water Harvesting: Guidelines to Good Practice. CDE, Bern; RAIN, Amsterdam; MetaMeta, Wageningen; IFAD, Rome. Funded by SDC and IFAD



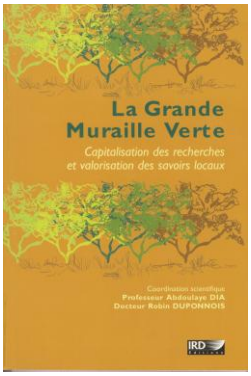

Water security is a prerequisite to achieve food security. Water harvesting (WH) offers under-exploited opportunities for drylands. The principle is simple: capture potentially damaging rainfall runoff and translate it into plant growth or water supply.

The guidelines introduce the concepts behind WH and propose a harmonised classification system, followed by an assessment of suitability, adoption and upscaling of practices. Four WH groups are presented (floodwater harvesting, macro- & microcatchment WH, rooftop & courtyard WH) and, for each, a selection of good practice in the form of case studies is given. These are presented in the systematic and standardised format developed by the World Overview of Conservation Approaches and Technologies (WOCAT).

These practical guidelines offer technologies that can form part of an overall adaptation strategy for practitioners in the field and inform decision makers and donors to better understand and implement their choices. Order a copy of the book from: wocat@cde.unibe.ch; www.wocat.net;

*Information contributed by: Rima Mekdaschi Studer, WOKAT University of Bern, Switzerland*

**La Grande Muraille Verte. Capitalisation des recherches et valorisation des savoirs locaux**



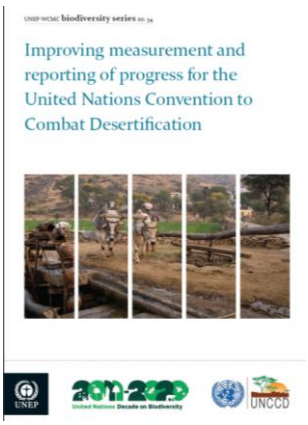

The purpose of this book (in French) is to present the 50 years of capitalization of experiments, scientific and local knowledge on management and development of semi-arid and arid areas. These experiments made it possible to set up many trials and to raise awareness of practices and relevant traditional techniques resulting from local knowledge. The main ambition is to put forth the recommendations in order to optimize the strategies of the implementation of the Great Green Wall.

Abdoulaye Dia et Robin Duponnois, coordination scientifique

Marseille, IRD Editions, 496 p. + cd-rom, ISBN: 978-2-7099-1738-4

*Information contributed by: Ronald Bellefontaine, CIRAD, France*

**Improving measurement and reporting of progress for the United Nations Convention to Combat Desertification (UNEP-WCMC Biodiversity Series no. 34)**




The report is available for download on the UNEP-WCMC website: http://www.unep-wcmc.org/improving-measurement-and-reporting-of-progress-for-the-united-nations-convention-to-combat-desertification_1031.html

The publication explores and synthesises the experiences of the UNCCD in the move to more evidence and results-based management and the introduction of a new reporting and monitoring system, the Performance Review and Assessment of Implementation System (PRAIS).

*Information circulated by: UNEP WCMC*

## 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 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.

**Eligible applicant should be graduate students, post-docs, or early stage researchers, and must be enrolled in or affiliated to an institution located in a COST country or an approved institution in a Near Neighbour country.*

*COST countries: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom and Former Yugoslav Republic of Macedonia*

*Approved institutions in Near Neighbour countries: the Centre for Ecological-Noosphere Studies, Armenian National Academy of Sciences; and Al Hussein Bin Talal University, Jordan*.

More information at: http://desertrestorationhub.com/stsms/

The ***Water Footprint Network*** organises a Training course in South Africa, Pretoria, October 8-10, Global Water Footprint Standard Training Course

More information at: http://www.waterfootprint.org/?page=files/agenda

*Information contributed by: Maria José Marques, DNI Bureau*

**Researchers on a field expedition in the Namib Desert**


Researchers from the Centre for Microbial Ecology and Genomics (CMEG) at the University of Pretoria in South Africa completed a successful field expedition in the Namib Desert (south-west Africa) in late April. Twenty CMEG researchers, led by Prof Don Cowan and joined by collaborators from South Africa), Germany, the UK, Spain and the Netherlands, extended their studies on the microbial ecology of the gravel desert and sand-sea zones of the central Namib. The team is using state-of-the-art metagenomic and metaviromic methods to investigate the structure and

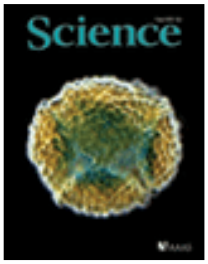
function of microbial communities in relation to water availability, C/N turnover and stress adaptation [1,2]. For more information, contact don.cowan@up.ac.za

*[1] Stomeo et al. (2013) Hypolithic and soil microbial community assembly along an aridity gradient in the Namib Desert. Extremophiles 17:329-337*

*[2] Makhalanyane et al. (2013) Evidence of species recruitment and development of hot desert hypolithic communities. Environ Microb Rep 5:219-224*

*Information contributed by: Prof DA Cowan, Institutional Research Theme (Genomics) Univ. of Pretoria, South Africa*

**"SCIENCE" advocates for a more proactive dialogue between scientists and citizens about climate change**




The editorial of the April issue of the worldwide-known US "Science" journal is a strong advocacy for a more proactive dialogue between scientists and citizens about climate change (authors: Bassam Z. Sharashiri & Jerry A. Bell).

"Scientists have a responsibility to help their fellow citizens understand what science and technology can and cannot do for them" especially in the climate change domain where they "must do more" through proper existing communication channels and toolkits "to be credible as scientist-citizen(s)". The authors quote the words of F. Sherwood Rowland to his colleagues, about the effect of CFCs on stratospheric ozone: "Isn't it the responsibility of scientists, if you believe that you have found something that can affect the environment, isn't it your responsibility to do something about it, enough so that action takes place?... If not us, who? If not now, when?" The authors conclude asking their readers to join the climate change conversation now.

Sources: Sharashiri Bassam Z. & Bell Jerry A. – Climate Change Conversations,

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



**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