



European DesertNet Newsletter n. 1/2010

This quarterly electronic newsletter is meant to inform the scientific community on dryland-relevant research issues. **Deadline** for reception of material for the next issue is **10.04.2010**. Please send your contributions (1000 characters max, including spaces) to czanolla@uniss.it

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1. DesertNet informs on the establishment of the Association DesertNet International (DNI)

Letter by EDN Chair and DNI to European DesertNet members on the establishment of the Association DesertNet International (DNI)

Dear members of European DesertNet, dear colleagues,

I am honoured to announce that on 30th November 2009, the scientific network of European Desert (EDN) has been transformed into the Association of *DesertNet International* (DNI), after its registration at the Strasbourg/Illkirch Court as a legal non-governmental and non-profit organization (CSO).

This implies that we now have the capacity to institutionally interact with the supranational institutions (e.g. European Commission) and international organizations (e.g. UNCCD and other UN agencies) more efficiently. Furthermore, the change in our name from European DesertNet to DesertNet International better reflects our international status, as our scientific network already has over 300 members from 52 countries.

Since its foundation, the Steering Committee and the Advisory Board of EDN have been discussing with other official partners the fundamental importance of transforming this international scientific network into an Association legally established at the international level. Discussions go back until UNCCD COP8 in September 2007 in Madrid, Spain when some constraints of having a non-legal status became very apparent, e.g.:

1. Without a legal status, the scientists of EDN have to be accredited to the Conference of the Parties by existing NGOs, a time consuming procedure which to date hampered a clearer visibility of the scientists of European DesertNet in the conference documents. At this point we were asked by members of UNCCD CST to consider transforming European DesertNet into an Association.
2. The Network requires an international funding mechanism, which would however require a legal position of the network as an NGO.
3. Although EDN carried out official assessments for its stakeholders partners (e.g. ministries), an official status as an NGO would also enable the presentation of official science-based statements at the UN meetings if the network had a legal status.

Since early 2008 the Steering Committee and Advisory Board of EDN have been working on the statutes. You can download the English version of the DNI statutes directly at: http://www.european-desertnet.eu/docs/FINAL_DNI-STATUTES_ENG_060509.pdf You will find the original French version and also a Spanish version of the DNI statutes at <http://www.european-desertnet.eu/> We chose the Strasbourg/Illkirch Court for the registration of our NGO as it automatically implies a more regional and international profile because the city of Strasbourg (France) is the official seat of the European Parliament and gives special advantage for international organizations to register there.

Attached you will find the final approved statutes of the *Association Of The Network For International Research On Desertification – DesertNet International (DNI)*. These statutes are now the frame of the work of DesertNet International.

According to Art. 5 & 6 of the statutes “The Chair of the Association DesertNet International (DNI) will chair the General Assembly and call for elections and will organise them with the assistance of the Steering Committee and the Bureau”. Please see Art. 3 of the Statues for differentiated vote procedure for election in DesertNet International (DNI).

The interim Steering Committee and Advisory Board of DNI will organise the first General Assembly of DNI in the first half of 2010. Members of DNI will be invited to the General Assembly in order to elect the first regular Steering Committee and Advisory Board of DNI, the Chair, Vice-Chair, Treasurer, Vice-treasurer, Secretary General and deputy Secretary General. You will find the procedure for elections in the attached statutes of DNI. The term in office shall be two years. Re-election is possible.

I would like to invite you, as members of the scientific network of European Desert (EDN) to become member in the Association of DesertNet International. Due to the legal status of DNI we cannot transfer your membership automatically. **For this reason, in the next few days each member of European DesertNet will receive an E.mail (subject: "Invitation to Membership in the Association of DesertNet International") with a personal link to complete an electronic online registration form to join DesertNet International.** You will also be able to register at any time via the European DesertNet Homepage: http://www.european-desertnet.eu/edntodni_main_eu.php

The Homepage of DesertNet International is being developed at the moment and will illustrate our new logo as well. In this transition phase we will continue to use the Homepage of European DesertNet.

Please note that a membership fee for DesertNet International is foreseen, whose amount will be decided upon at the first General Assembly of the Association of DesertNet International.

I would like to thank my colleagues in the Steering Committee and Advisory Board of European DesertNet for their patient work on formulating a statute for DesertNet International and taking care of the legal procedure. I think that

the creation of the Association of DesertNet International is absolutely vital for strengthening our profile as an independent scientific network and our striving for economic independence in our activities. This step will thus more efficiently support our main target and that is to scientifically support the fight against desertification and poverty in affected areas.

Best regards,

Carlos SAN JUAN MESONADA

Chair of European DesertNet
Interim Chair of DesertNet International

First General Assembly of DesertNet in preparation

The interim Steering Committee and Advisory Board of DesertNet have started with the preparations of the first General Assembly which will take place in Summer 2010 in order to elect the Steering Committee and Advisory Board of DesertNet International for the next two years. All members of DesertNet International will be invited to participate at this General Assembly. We will be providing you with organisational details in the course of the next weeks.

By: Carlos San Juan Mesonada, Mariam Akhtar-Schuster, Richard Escadafal and Giuseppe Enne.

2. Information relevant to DesertNet members

Current status of the global scientific e.consultation on the needs, usefulness and options for an independent, international, interdisciplinary scientific advisory body on land degradation/desertification

On 27 January 2010 we invited the members of DesertNet to participate in this international scientific e.consultation which has been jointly organised by DesertNet and UNU-INWEH. We are happy to announce that since the start of our e.forum we are experiencing a good participation with excellent comments from Africa, Asia, Latin America, North America and Europe. The results of the three-month e.consultation, along with a list of all contributors, will be provided to the scientific community and to the CST Secretariat in summer 2010, ahead of the CST SS-2, in order to provide the CST Secretariat with scientific background for preparing its recommendations to COP10. The invitation to the e.forum is being spread by numerous mailing lists and experts. As this is an open process we are also experiencing that besides scientists also NGOs and other stakeholders are participating.

We look forward to receiving your comments as well in case you haven't responded to the e.forum questionnaire (9 questions) yet. Please do not hesitate to contact us if you need assistance.

We would herewith like to provide you with the details for registering to the e.forum:

1. Enter <http://www.desertnet-international.org>
2. Click on <Register> (button on the top right)
3. Fill in the <Register form> (here you have to decide on a password, enter you name, affiliation etc...)
4. Click on submit to submit your <Register form>
5. A few minutes later you will receive an e.mail from redmine@example.net (If you don't receive this mail, then kindly check whether it was caught in your SPAM filter)
6. Please click on redmine@example.net With this click you will activate your account.

7. Go back to the site <http://www.desertnet-international.org> and type in your <login> and your <password> which you typed in your <Register form>
8. In order to go directly to the survey questionnaire (9 questions) click on [Click here to continue to the questionnaire - only 9 questions!](#) You will find another link here for more background information as well: [e.Consultation on Land Panel.](#)
9. **IMPORTANT:** Please don't forget to press on the button <save> after answering each of the 9 questions.

By: Steering Committee of the E.Consultation

3. Researchers inform....



Declaration of the European Soil Bureau Network of the Joint Research Centre of the EC in support of the CST scientific style conference of the UNCCD held at COP9 in Buenos Aires, Argentina, 22-24 September 2009



The European Soil Bureau Network (ESBN) held its Plenary Annual Meeting in Budapest, Hungary during 14 – 16 September 2009. The membership of our scientific network brings together European soil specialists from 40 countries and is a permanent technical advisory body to the European Commission's Joint Research Centre, providing policy-relevant soil data and information. For over three decades, with the support of national, international organisations and of the European Commission, the ESBN has been documenting the nature, condition and threats to soil resources.

There is increasing understanding that soil resources are critical to sustainable development, especially in the context of climate change. Their extent and condition are foundational to delivering ecosystem services and goods such as food production and security, climate change mitigation including carbon sequestration and renewable energy production, climate change adaptation, biodiversity conservation and water and nutrient cycles.

We express our deep concern that the importance of soil is not always properly recognised, despite its paramount importance. Furthermore we wish to highlight the rapid and extensive degradation of soil in many regions and especially in the drylands.

We are convinced that a stronger focus on sustainable land and soil management is imperative if the goals of the UNCCD are to be achieved. In response, we call for the establishment of an International Panel on Land and Soil (IPLS) under the auspices of the UNCCD. In support, we offer our experience and energy to assist the future work of the IPLS.

We send our best wishes for a successful and productive conference.

The ESBN Plenary

More information: http://eusoils.jrc.ec.europa.eu/esbn/esbn_meetings_plenary2009.html

Advances in setting up the general secretariat of the Union for the Mediterranean.



In 2008, the EDN newsletter introduced the so-called 'Union for the Mediterranean' (UfM) initiative, which could play a major role in combating desertification in the Mediterranean.

While high level Mediterranean scientific synergies are being actively developed under the aegis of the 'Inter-academic Development Group', the political process is going on

more slowly by nature. Representatives of the UfM countries just reached an informal consensus to nominate Ahmad Massa'deh, a Jordan ambassador in EU and NATO, as Secretary General, and six deputy SG among which a Palestinian, an Israeli, a Turkish and a representative of the Arab league.

The former French Ministry of Foreign Affairs Hubert Vedrine who wrote an authoritative book about UfM considers that UfM should focus first on setting up concrete projects. Such major issues for EDN as water management are among UfM clear priorities.

A common informal feeling is that the Secretary could be set up in Barcelona before summer 2010.

By: Gérard Begni, chairmen, Science/Policy Interface WG, & Céline BOUHEY from informal contacts

Images from Earth Observatory, NASA. Potential Landslides near Epicenter of Haiti Quake

The 7.0-magnitude earthquake that devastated the country on January 12, 2010, may have also triggered landslides and shifted earth so that landslides are more likely in the future. This true-colour image highlights potential new landslides around the earthquake's epicenter. The image is from the Advanced Land Imager on NASA's EO-1 satellite.



Acquired January 15, 2010

More information, images, and animations: <http://earthobservatory.nasa.gov/>

By: Maria Jose Marques Perez, vice-treasurer of the DesertNet Board Univ. Autónoma de Madrid, Spain

Agricultural Management Practices Assessment

ManPrAs is a web-based tool for Agricultural Management Practices Assessment, able to evaluate the sustainability of agricultural practices through:

- its soil conservation index (SCI), a “dynamic” indicator of soil quality combining the interaction among the physical-chemical and climatic site characteristics and the single agricultural operations.
- economic results (Gross Margin-GM)

- carbon sequestration (CSI) associated to each agricultural practice

and to simulate the impact on soil degradation, farm profitability and socio-economic features, and carbon sequestration effects of alternative crops in a specific context. The main feature of the tool is to obtain a trade-off between economic and environmental conservation attitude of the alternative agricultural techniques.

At farm level the tool is strongly user-orientated and allows assessment of the environmental and economic aspects of agricultural practices, giving a powerful simulation tool to farmers and stakeholders involved in land management. The same parameters could be assessed and mapped at territorial level to give insights for policy formulation.

More information: <http://www.osservatoriomedes.it>

By: G. Quaranta and R. Salvia, University of Basilicata, Italy

Nov. 2, 2009. ESA launches SMOS, a satellite which will dramatically improve soil moisture monitoring from space.



The SMOS (Soil Moisture and Ocean Salinity) mission is a joint ESA / CNES (F) / CDTI (SP) Earth Observation program proposed by the French lab CESBIO and selected as the 2nd Earth Explorer Opportunity Mission. It was successfully launched on Nov.2, 2009.

Photo: Artist view of the SMOS satellite, launched on Nov. 2, 2009.

The SMOS payload is a L-Band (1.4 GHz) 2D passive interferometric radiometer with a Y-shaped 3 arms synthetic aperture antenna. The primary objective of the SMOS mission is the global observation of soil moisture and ocean salinity, two important parameters needed for accurate modelling of weather and climate. In particular, the SMOS Soil Moisture accuracy objective is of 4% on volumetric soil moisture, with three days revisit and a spatial sampling better than 50 km.

Soil moisture is one of the most physical drivers of vegetation phenomena. SMOS cannot monitor the local scale, but can collect high repetitive coherent regional soil moisture measurement at regional scale, thus bringing a dramatic increase in desertification monitoring and forecast datasets at that scale.

By: Gérard Begni, chairman, Science/Policy Interface WG.

Improving diet and income in rural sub-Saharan Africa: Solar-powered drip irrigation

The food needs of Africa's growing population require technologies that significantly improve rural livelihoods at minimal environmental cost. These technologies will likely be distinct from those of the Green Revolution, which had relatively little impact in sub-Saharan Africa. Solar-powered drip irrigation is a strategy for enhancing food security in the rural Sudano-Sahel region of West Africa. It significantly augments both household income and nutritional intake, particularly during the dry season, and is cost effective compared to alternative technologies.

More information: <http://www.pnas.org/content/early/2010/01/13/0909678107>

By: Maria Jose Marques Perez, vice-treasurer of the DesertNet Board Univ. Autónoma de Madrid, Spain

Experts agree on a universal Standardized Precipitation Index

At an international Workshop from 8-11 December 2009 at the University of Nebraska, USA, which was co-sponsored by WMO and UNCCD, experts agreed on using a *Universal Meteorological Drought Index* in order to more effectively monitor drought and climate risk management. The experts advised that worldwide all national meteorological and hydrological services should use the *Standardized Precipitation Index*. By the end of 2010, WMO will have designed a user manual on this index, and based on two more expert rounds recommend globally applicable indices to cope with agricultural and hydrological droughts.

More information: http://www.wmo.int/pages/mediacentre/press_releases/pr_872_en.html

By: Dr. Mariam Akhtar-Schuster, Co-Chair of European DesertNet (EDN) and Interim Co-Chair of DesertNet International (DNI)

Tiny hopes for the Aral sea

Everybody knows the dramatic situation of the Aral Sea, which decreased by almost 90%, leaving a desertified and toxic bed, scattered all around by violent winds, causing among others damages to human health and desertification spreading. This is mainly due to unsustainable irrigation practices in cotton cultivation in Uzbekistan.

The Kazakh government supported by the World Bank decided to react and save the northern part of the Aral Sea by building the large Kokaral dam which was completed in 2005.



July - September, 1989

October 5, 2008

Although limited to a modest fraction of the former sea extent as clearly shown in the left two images, the results are outstanding. Sea withdrawal caused the Aralsk harbor to be 100 km away from the water, which is now less than 25 km. Local climate is warmer, water salinity dramatically decreased, water ecosystems and fishes appeared again. Some 2.000 tons of fishes were caught in 2007. Agricultural activities in these areas could resume step by step in these (now less) hostile lands. The larger southern part is now completely disappearing since no significant actions were decided by the Uzbek government.

Figure: The dramatic decrease of the Aral Sea - The Kazakh part saved by the Kokaral dam is clearly visible in the upper right corner of the satellite images. (c) NASA.

More information: <http://91.121.162.160/aryl/Kokaral.pdf>

By: Gérard Begni, chairmen, Science/Policy Interface WG & Kamila Magzieva, member of EDN

Seed Conservation and Regeneration in Semi-Arid and Arid Ecosystems: Some Key Findings

The recurrent droughts in Sahel raised the key question of seed conservation and further regeneration capacity in soils, mainly sandy soils and dunes systems. In October-November 2009, a transect between Senegal (450 mm/yr) and Mauritania (100 mm/yr) could bring an encouraging answer. Rainfalls were very good in 2007, good in 2008 and quite abundant in 2009, bringing an interesting answer to the issue of gramineous steppe resilience in such ecosystems.

All the dunes between the latitude of Louga to Rosso were already fixed end of October 2009. An active dune existing in 2001 at Diang North of Louga is now perfectly fixed by a gramineous steppe with local biological crust patches. On the opposite, between Rosso Mauritania and Nouakchott limit of semi-arid and arid ecosystem (100 mm isohyets) no vegetative cover covers the dunes, which exhibit only scattered acacias. The vegetative cover rehabilitation is common in Senegal, local in Mauritania but very heterogeneous everywhere. These observations have a triple meaning:

- The seed reserves in the soil are rich enough to allow rehabilitation when rainfalls are good;
- Immediately after the beginning of the dry season the vegetative cover depends on edaphic conditions;
- The best vegetative cover rehabilitation always corresponds to wind activities: densely vegetated areas are located in sand accumulation areas. On the opposite, rehabilitation is less efficient in deflation and wind erosion areas where vegetation is scarce.

We also observed that a good rehabilitation leads simultaneously to an increase in herd sizes. End of October overgrazing and trampling was already visible around all settlements.

By: Monique Mainguet and Frédéric Dumay, University of Reims-Champagne, France

Sahel Greening– new research outcomes

The greening of the Sahel observed since the mid-1980s by remote sensing technique is a challenging issue for all those who study land degradation and restoration and food security in that region. Key lessons are to be learnt from a comprehensive understanding of this phenomenon.



In its fifth newsletter, the Global Land Project presents recent findings by scientists from the Lund University, Sweden. Possible observation artifacts hypothesis were eliminated. Typical regional phenological trends were evidenced, as well as strong correlation between greenness and rainfall trends. Overgrazing has been overstated: instead of driving change, herders seem to react to it.

Figure: Villagers herd goats near windblown sand dunes in the Sahel region of Niger

Strong relationships between precipitation, net primary productivity, biomass burned and carbon emission was evidenced. Spectral water stress data were shown ineffective for deriving productivity information for semi-arid landscapes since vegetation density is too low.

Future work will involve studying the abiotic, biotic and anthropogenic drivers of the carbon cycle by integrating in situ measurements, remote sensing, and ancillary data into a process-based modeling framework.

More information : http://www.globallandproject.org/Newsletters/GLP_NEWS_05.pdf

By: Gérard Begni, chairmen, Science/Policy Interface WG.

Innovative management of Acacia senegal trees to improve resource productivity and gum arabic production in arid and semi-arid sub-Saharan Africa (ACACIAGUM)



The project targets rural areas in sub-Saharan Africa to improve resource productivity and gum-arabic production in African arid and semi-arid ecosystems

Overall Objective: To enhance the sustainable management and use of natural *Acacia senegal* tree resources thereby supporting the environment and livelihoods in arid and semi-arid sub-Saharan Africa

Funding: EU INCODEV; Implemented in CAMEROON, KENYA, NIGER and SENEGAL (Jul 2007-Jun 2011)

Approach: Unique north-south collaboration where relevant expertise and resources are availed by participating African scientists and their European counterparts to improve gum arabic production resulting in a high quality multi-disciplinary research approach

Achievements: The participating scientists, including MSC and PhD students, have collaborated and conducted research with so far promising results which will be disseminated through different appropriate pathways.

More information: info@ngara.org; www.ngara.org or <http://inco-acaciagum.cirad.fr/project>

By: Sheila Mburu, Network for Natural Gums and Resins in Africa (NGARA)

According to FAO, weeds can be a major cause of agricultural loss and desertification.

According to a report by the FAO (August 2009), weeds are causing some USD 95 billion a year in lost food production worldwide, 70 billion (>70%) of which is lost in poor countries. FAO's weed expert, Ricardo Labrada-Romero said that some weed species can not only lead to complete crop failure but also make fields infertile for many years, making them an additive source of desertification. Weeds are the number one cause of stagnating yields and production particularly in Africa. "With only manual labor available, African smallholders need to weed every day and that means a family physically can't handle more than 1-1.5 hectares," According to Labrada-Romero, dedicated management exist that would allow them to farm more land and grow more food.



Figure: Small farmers spend half their time in the fields weeding. Weeds are proven to cause soil degradation - © FAO – Alberto Conti.

More Information: <http://www.fao.org/news/story/en/item/29402/icode/>

By: Gérard Begni, chairmen, Science/Policy Interface WG

Atlas on Desertification Status Mapping of India Based on Satellite Remote Sensing

In order to address the pre-requisites of a systematic desertification assessment, monitoring and mitigation, India had undertaken the challenging and mandatory task of mapping the status of desertification of the entire country (both hot and cold regions) by using satellite based remote sensing techniques, in a record time of three years, as a committed and responsible signatory to the United Nations Convention for Desertification (UNCCD). This was achieved through

developing a nationwide network of organizations dealing with the problem of desertification, organizing brain-storming sessions to standardize the indicators, legend and a comprehensive classification system catering to both hot and cold desertic conditions. A pilot project on 1:50,000 scale was carried out in various agro-climatic zones of the

Processes	1:500,000 scale	
	Area (mha)	% of TGA
Water Erosion	33.56	10.21
Vegetal Degradation	31.66	9.63
Wind/Eolian Degradation	17.56	5.34
Frost Shattering	10.21	3.10
Salinity/Alkalinity	5.26	1.60
Mass Movement	4.45	1.35
Water logging	0.98	0.30
Rocky areas/ Barren	1.65	0.50
Others	0.15 (Man made, frost heaving etc.)	0.04
	105.48 mha	32.07 %

country using Indian Remote Sensing satellite data (LISS III) , in order to validate and create a comprehensive schema of desertification status mapping (DSM) for the entire country. This led to operationalization of the remote sensing based nation-wide DSM task. Subsequently desertification status mapping was carried out on 1:500,000 scale for India using Indian Remote Sensing satellite data (AWiFS), state-wise DSM maps were prepared and finally a composite DSM map was generated for the entire country which is a maiden attempt of its kind. Space Applications Centre, Ahmedabad (India) was the focal institution for realizing the above mentioned. About 16 other organizations/ institutions participated in realizing this

mega project and accomplishing it in schedule period of 3 years.



Satellite data of three seasons (Post-monsoon /Summer/ Winter) over various years were used to map different processes and severity of desertification like water-erosion, wind-erosion , salinization, water-logging, mining , frost-shattering and frost- heaving (in cold regions) etc. and estimate the area affected in the country. The table above gives the details of the various processes of desertification and the corresponding area affected in million hectares (mha) & percent of the total geographic area of the country(% of TGA).

Finally, an Atlas of desertification & land degradation status maps of various states of India was brought out, containing state wise DSM map and statistical details on the area affected by different desertification processes of varying severity (fig 1.)

Figure: Desertification & Land Degradation Atlas of India (Coverpage)

This assessment will serve as the first base-line information on the desertification status of the country and help in planning the desertification mitigation strategies as well as monitoring the changes in the status of desertification in the country, in future. Besides, this study could be dove-tailed with the over-all objectives of the UNCCD to have a global desertification status map.

More information: please contact: arya_as@sac.isro.gov.in

By: A.S Arya & Ajai ,Space Applications Centre, Indian Space Research organization (ISRO), Ahmedabad, India

2009 UNCCD Photo Awards 2009

Third prize of the photo contest.

Other images are available at:

<http://www.unccd.int/publicinfo/photo/2009/awards/awards.php?newch=1>

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By: Maria Jose Marques Perez, vice-treasurer of the DesertNet Board Univ. Autónoma de Madrid, Spain

Success story from the degraded loess plains in China

A video titled “Hope in a changing climate” shows success in efforts to rehabilitate degraded land in the loess plains of China. Video at:

http://www.thewaterchannel.tv/index.php?option=com_hwdvideoshare&task=viewvideo&Itemid=53&video_id=510

4. Important upcoming events

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

2010		
18-20 Feb	National Seminar on Population, Development and Environment : Issues and Challenges http://www.bhu.ac.in/seminar/taradevi.pdf	Varanasi, Uttar Pradesh, India
25 Feb	The Third Annual Sustainability Summit: After Copenhagen: How can business face the climate change challenge? http://www.economistconferences.co.uk/event/third-annual-sustainability-summit/176	London, United Kingdom
1 March	Land as the missing link – Sustainable land management is a solution to global challenges Registration until 22. February 2010 at: katharina.graf@gtz.de ,	Eschborn Germany
19-20 March	National Seminar on Climate Change Adaptation and Mitigation: The Way Ahead http://www.xidas.in/	Jabalpur, Madhya Pradesh, India
24-26 March	2nd International Congress on Integrated Water Resources Management and Challenges of the Sustainable Development http://www.fsa.ac.ma/gire3d	Agadir, Morocco
24-26 March	International Drought Symposium http://cnas.ucr.edu/drought-symposium/	California, US
24-27 March	13th Congress of Soil Science-Efficient Resource Management for Sustainable Agriculture	Faisalabad, Punjab, Pakistan

	http://www.sss-pakistan.org/Congress/Congress.htm	
28-29 April	4th. National Seminar on Soil Erosion and Sediment seconf4@gmail.com	Noor, Iran
02-07 May	European Geosciences UNION EGU General Assembly http://meetings.copernicus.org/egu2010/	Vienna, Austria
10-19 May	International Training Program. Assessing Crop Production, Nutrient Management, Climatic Risk and Environmental Sustainability with Simulation Models. http://www.caes.uga.edu/events/dssat10/	Griffin, Ga. US
26-28 May	International Soil Science Congress on "Management of Natural Resources to Sustain Soil Health and Quality" http://www.soil2010.omu.edu.tr/	Samsun, Turkey
26-29 May	International Symposium on Biology of Rare and Endemic Plants http://www.sciencedev.net/FE/LoadSite.aspx?url=http://www.metu.edu.tr/~bio_rare	Mugla, Turkey
2-4 Jun	Green Business Africa Summit & Expo 2010. http://www.greenbusinessafricaexpo.com/	Nairobi, Kenya
15-17 June	Toward Sustainable Groundwater in Agriculture – An International Conference Linking Science and Policy. http://ag-groundwater.org	California, US
22- 25 June	International Conference on Sustainable Social and Human Development http://www.ontariointernational.org/IDCHome.htm	Sudbury, Ontario, Canada
20-22 July	International Conference on Sustainable Community Development 2010 http://www.ipsas.upm.edu.my/icosd2010	Putrajaya, Malaysia
25-30 July	IGARSS International Geoscience and Remote Sensing Symposium http://www.igarss2010.org/default.asp	Hawaii, US
1-6 Aug	19th World Congress of Soil Science http://www.19wcsc.org.au/index.html	Brisbane, Australia
6-20 Aug	Second International Conference on Climate, Sustainability and Development in Semi-arid Regions - ICID 2010. http://icid18.org/	Fortaleza, Ceara, Brazil
1-4 Sept	Dryland Hydrology: Global Challenges/Local Solutions http://www.hydrosymposium.com/	Tucson, Arizona, US
1-4 –Sept	Arid Land Hydrology: Global Perspectives. http://www.azhydrosoc.org/index.html	Tucson, AZ, US
6-7 Oct	DESURVEY Scientific Conference on Scientific Tools For Desertification Policy http://www.desurvey.net/	Rome, Italy
11-15 Oct	First WASWC Council Meeting and International Conf. on Combating Land Degradation in Agricultural Areas www.ms.iswc.ac.cn	Xian, Sannxi, China
21-23 Oct	6th WSEAS Int. Conf. on Energy, Environment, Ecosystems and Sustainable Development. http://www.wseas.us/conferences/2010/timisoara/eesd/	Timisoara, Romania
8-11 Nov	The Third International Conference on Drylands, Deserts and Desertification: The Route to Restoration	Sede Boqer Campus, Israel

	http://www.entersymposium.com/ddd/site/	
8-12 Nov	XVI International Soil Conservation Conference (ISCO 16) http://www.isochile2010.cl/	Santiago de Chile, Chile
19-21 Nov	2010 Pilot International Conference on Global Sustainable Development, Theme: Climate Change, A Challenge to Businesses in the 21st Century. http://www.conferencealerts.com/seeconf.mv?q=ca1ms00a	Kampala, East Africa, Uganda

By: Maria Jose Marques Perez, Mariam Akhtar-Schuster, Chiara Zanolla

5. Publications and Special Issues

1. Akhtar-Schuster M, Bigas H, Thomas R (eds), 2010. *White Paper of the Dryland Science for Development Consortium (DSD), Working Group 3. Monitoring and Assessment of Desertification, Land Degradation and Drought: Knowledge Management, Institutions and Economics.* Available at <http://www.drylandscience.org>
2. Bauer, S; Stringer, L (2009) Science and the global governance of desertification <http://www.sagepublications.com/>, The Journal of Environment and Development, 18(3), pp248-267. <http://dx.doi.org/10.1177/1070496509338405>
3. Lorent, H., R. Sonnenschein, G. M. Tsiourlis, P. Hostert, and E. Lambin. 2009. Livestock subsidies and rangeland degradation in central Crete. *Ecology and Society* 14(2): 41. [online] URL: <http://www.ecologyandsociety.org/vol14/iss2/art41/>
4. Márton L. (2008). Manganese requirement of sunflower (*Helianthus annuus* L.), tobacco (*Nicotiana tabacum* L.) and triticale (x *Triticosecale* W.) at early stage of growth. *European Journal of Agronomy*, 28 (2008) 586–596. <http://dx.doi.org/doi:10.1016/j.eja.2008.01.006>
5. Márton L. (2008). Climate change and fertilization interactions on pea (*Pisum sativum* L.) yield. VII. Alps-Adria Scientific Workshop, Stara Lesna (Slovakia). *Cereal Research Communications*, Vol. 36, 2008, Suppl. pp703-706
6. Márton L. (2008). Impact of Rainfall, Liming, Nitrogen (N), Phosphorus (P₂O₅), Potassium (K₂O), Calcium (CaO), Magnesium (MgO) Mineral Fertilization on Triticale (x *Triticosecale* Wittmack) Yield in a Monoculture in Hungary. *Cereal Research Communications* 36(2), pp. 333–341. <http://dx.doi.org/doi:10.1556/CRC.36.2008.2.13>
7. Márton L. (2008). Long Term Study of Precipitation and Fertilization Interactions on Winter Wheat (*Triticum aestivum* L.) Yield in the Nyírlugos Field Trial in Hungary Between 1973 and 1990. *Cereal Research Communications*. 36(3), pp. 511–522. <http://dx.doi.org/doi:10.1556/CRC.36.2008.3.15>
8. Márton L. (2008). Effect of Precipitation and Fertilization on the Changes in Soil Organic Carbon (SOC). *Cereal Research Communications* 36(4), pp. 611–622. <http://dx.doi.org/doi:10.1556/CRC.36.2008.4.10>
9. Márton L. (2007). Precipitation and Fertilization Level Impacts on Winter Rye (*Secale cereale* L.) Yield. *Cereal Research Communications* 35(3), pp. 1509–1517. <http://dx.doi.org/doi:10.1556/CRC.35.2007.3.15>
10. Márton L., Pereda M.P. and Mohinder S.G. (2007) Long term studies of crop yields with changing rainfall and fertilization. *Agricultural Engineering Research* 13: 37-47.
11. Reed MS; Dougill AJ. 2010 Linking degradation assessment to sustainable land management: A decision support system for Kalahari pastoralists. *Journal of Arid Environments* 74 (1) pp149-155.
12. Stringer, L; Dyer, J; Reed, MS; Dougill, AJ; Twyman, C; Mkwambisi, D (2009) Adaptations to climate change, drought and desertification: insights to enhance policy in southern Africa <http://www.elsevier.com/locate/envsci>, *Environmental Science and Policy*, 12(7), pp748-765. doi:10.1016/j.envsci.2009.04.002 <http://dx.doi.org/10.1016/j.envsci.2009.04.002>
13. Stringer, L (2009) Reviewing the links between desertification and food insecurity: from parallel challenges to synergistic solutions., *Food Security*, 1(2), pp113-126. doi:10.1007/s12571-009-0016-0 <http://dx.doi.org/10.1007/s12571-009-0016-0>

By: Lindsay C. Stringer, Sustainability Research Institute, University of Leeds, UK, Mariam Akhtar-Schuster Interim Co-Chair of DesertNet International (DNI) & Laszlo Márton, Hungarian Academy of Sciences

Below are publications devoted to Haiti at this time. This is a sad example of how misusing of resources can lead to land degradation and poverty. There are many lessons to learn from this situation. Research and implementation are the most important ways to recovery.

1. Roth, K., 1992. Haiti Deserted. *Nation* 254, 113-113.
2. Stycos, J.M., Duarte, I., 1995. Parks, resettlement, and population - a case-study in the Dominican-Republic. *Society & Natural Resources* 8, 243-260.
3. Brothers, T.S., 1997. Deforestation in the Dominican Republic: a village-level view. *Environmental Conservation* 24, 213-223.
4. Higuera-Gundy, A., Brenner, M., Hodell, D.A., Curtis, J.H., Leyden, B.W., Binford, M.W., 1999. A 10,300 C-14 yr record of climate and vegetation change from Haiti. *Quaternary Research* 52, 159-170.
5. Dolisca, F., McDaniel, J.M., Teeter, L.D., 2007a. Farmers' perceptions towards forests: A case study from Haiti. *Forest Policy and Economics* 9, 704-712.
6. Dolisca, F., McDaniel, J.M., Teeter, L.D., Jolly, C.M., 2007b. Land tenure, population pressure, and deforestation in Haiti: The case of Foret des Pins Reserve. *Journal of Forest Economics* 13, 277-289.
7. Moleon, J., 2000. Outlook for community forestry development in Haiti. *Possibilitites and Approaches toward Community Forestry in the Caribbean, Proceedings*, 33-34.
8. Pierre, A., 2000. Community possibilities and approaches toward forestry in Haiti. *Possibilitites and Approaches toward Community Forestry in the Caribbean, Proceedings*, 101-102.
9. Dolisca, F., McDaniel, J.M., Shannon, D.A., Jolly, C.M., 2009a. A Multilevel Analysis of the Determinants of Forest Conservation Behavior Among Farmers in Haiti. *Society & Natural Resources* 22, 433-447.
10. Dolisca, F., McDaniel, J.M., Shannon, D.A., Jolly, C.M., 2009b. Modeling farm households for estimating the efficiency of policy instruments on sustainable land use in Haiti. *Land Use Policy* 26, 130-138.

By: Maria Jose Marques Perez, vice-treasurer of the DesertNet Board Univ. Autónoma de Madrid, Spain

Special Issue on Resilience and Vulnerability of Arid and Semi-Arid Social Ecological Systems Forthcoming in Ecology and Society

Livelihood sustainability in drylands is threatened by a complex and inter-related range of social, economic, political, and environmental changes that present significant challenges to researchers, policy-makers and land users. Dynamic ecological and environmental change models are used to investigate whether climate change induced drought events may push dryland systems to cross biophysical thresholds, causing a long-term drop in agricultural productivity. The goal of this special issue is to conduct a structured comparison of how livelihood systems in different dryland systems are affected by drought, thereby making methodological, empirical and theoretical contributions to our understanding of how these types of socio-ecological systems may be vulnerable to climate change.

More information: www.ecologyandsociety.org<<http://www.ecologyandsociety.org>>).

If interested in submitting a paper to this issue, please contact Dr Claire Quinn (c.h.quinn@see.leeds.ac.uk)

By: Lindsay C. Stringer, Sustainability Research Institute, University of Leeds, UK

Land Matters – Enhancing Synergies among the Rio Conventions on Land Use and Sustainable Land Management

Recommendations from the UNCCD 1st Scientific Conference 22-24 September 2009, Buenos Aires, Argentina. Science briefs series no. 1. Published by DSD (Dryland Science for Development Consortium) and UNCCD.

Download: <http://www.unccd.int/knowledge/docs/Science%20Briefs%20Series%20No.1.pdf>

By: Dr. Mariam Akhtar-Schuster, Co-Chair of European DesertNet (EDN) and Interim Co-Chair of DesertNet International (DNI)

6. Other Information

International Master's Degree in Arid Land Studies

A new Master's degree has been set up by Humboldt University in Berlin (HU), University of Sheffield (SU), UK, and Texas Tech University (TTU), Lubbock, Texas, with funding from the EU-US Atlantis Programme. The first intake of students will be in September 2010. Students will study an interdisciplinary programme, spending time at all three institutions.

SU and HU students will begin at their home universities and travel to the US on scholarship funds to study at Texas Tech. The Arid Land Studies programme at TTU is coordinated by the International Center for Arid and Semiarid Land Studies (ICASALS). This US portion of the programme will require students to conduct coursework and research in agriculture and natural resources, geosciences, and water resource management. Programme details are available at www.iaff.ttu.edu/home/icasals/atlantis.asp

By: Tony Parsons, The University of Sheffield, UK

Partners for Projects

CORDIS offers a free on-line service(http://cordis.europa.eu/partners-service/home_en.html) to help you to find the best research partners for your projects, either in the context of EU-funded Research and Development projects or within a broader search for technology-orientated partnerships. You can publish your profile by entering your idea, expertise or Project.

The following institutions are looking for partners in Environmenta calls:

- **Higher Concil of Science and Technology.** Jordan. **Contact:**Dr. Nawash, Oraib

Keywords: desertification, restoration, dry areas vegetation, seed dormancy, biodiversity, direct seed transplanting.

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10509895&pid=2&q=8692552EBCB4193EF98B579CD9FD58B0&type=sim

- **University of Murcia.**Spain. **Contact:** Dr. Julia Martinez

Keywords: impacts of climate on biodiversity, indicators, sustainable development, water management, dynamic modelling, land use.

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10235677&pid=0&q=8692552EBCB4193EF98B579CD9FD58B0&type=sim

- **Ben GurionUniversity.** Israel.

Keywords: drylands, livestock, desertification, silvipasture, climatechange, carboncycle, agroforestry. Contact: PhDStephan Leu

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10885182&pid=1&q=8692552EBCB4193EF98B579CD9FD58B0&type=sim

- **NationalandKapodistrianUniversityofAthens.** Greece.

Keywords: geomorphology - GIS - riskassessmentand natural hazards. **Contact:** Prof. Niki Evelpidou.

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10196562&pid=3&q=8692552EBCB4193EF98B579CD9FD58B0&type=sim

- **NationalResearch Centre.**Egypt

Keywords: water management, abioticstress, crops, soilfertility, nitrogen. **Contact:** Dr. MagdiAbdelhamid

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10773118&pid=4&q=8692552EBCB4193EF98B579CD9FD58B0&type=sim

- **NationalCenterofagricultureresearchand extensión.** Jordan

Keywords: water, salinity, soil, irrigation, halophytes, water use effeiciency, desertification. **Contact:**Mrs. KefahYousef

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10770454&pid=5&q=8692552EBCB4193EF98B579CD9FD58B0&type=sim

- **UludagUniversity.** Turkey

Keywords:poverty, socialexclusion, lifesatisfaction, immigrantsintegration, qualityoflife. **Contact:** Ms. NuranBayram

http://cordis.europa.eu/search/index.cfm?fuseaction=part.document&CLB_LANG=EN&CLB_ID=10588441&pid=1&q=D0235DA19CC96F49CFA16F55BFBA75EB&type=sim

By: Maria Jose Marques Perez, vice-treasurer of the DesertNet Board Univ. Autónoma de Madrid, Spain

Call for Potential Suitable Consultants: Study on the Subset of Impact Indicators Required for Reporting in 2012

COP9 accepted the provisional use of a set of eleven impact indicators to measure progress against the strategic objectives of The UNCCD Strategy for 2008-2018. Two of the eleven measures are mandatory; one to assess the proportion of the population in the affected areas living above the poverty line; and the other to assess the status of land cover. Further work on the methodologies for an effective use of these two indicators is necessary.

The contract will be issued for the period 1 March 2010 – to – 1 June 2010. Consultants are requested to undertake one mission to the UNCCD headquarter.

Attention: The **Terms of Reference** for two consultants are attached ([100201 TOR_subset.doc](#)).

By: Victor M. Castillo, Programme Officer- KMST Unit, UNCCD Bonn, Germany

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