

DesertNet – Structure and Aims of an International Network for Desertification Research

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ABSTRACT

DesertNet (<http://www.european-desertnet.eu/>) is an interdisciplinary scientific network which was established in October 2006 at the UN premises in Bonn, Germany, by a group of international scientists. The network strives to generate and enhance scientific knowledge and understanding of the biophysical and socio-economic processes of desertification. This international **scientific network** provides an international platform for scientifically based discussions and exchange of ideas, addressing knowledge gaps, and identifying research areas. DesertNet is also a **think tank** community which identifies issues and priorities for the sustainable development of drylands. The paper outlines the current role of DesertNet in the international scientific community and it delineates its role to strengthen the Science/Policy Interface.

Keywords: scientific networks, science/policy dialogue, UNCCD.

INTRODUCTION

The Executive Secretariat of the UNCCD, Mr Luc Gnacadja, clearly underscored at the International meeting on “Biodiversity, Desertification, Water, Food and Human Rights” (Sassari, Sardinia, September 2008), that currently there are public and global policy failures that counteract a successful implementation of measures to prevent and to combat desertification. These are:

- A failure to up-scale good practices.
- A failure to diffuse available knowledge (also specifically scientific knowledge).
- A failure to mainstream at the national level.
- A failure to mobilize the required resources.
- A failure to converge from the global to the local level.

The international scientific community supports the perception of the UNCCD that these failures exist and need to be tackled in order to successfully prevent further desertification and to develop cost-efficient and implementable tools for land rehabilitation to sustain and improve human well-being in drylands. DesertNet responds to demands for assessment and information needs and translates knowledge into laymen's terms to improve public awareness of desertification and its costs and implications beyond drylands. The network has close connections to the EC Research Directorate, ministries, development agencies and UN bodies (specifically United Nations Convention to Combat Desertification - UNCCD).

As an international scientific network on global desertification research DesertNet has created instruments, which will be introduced in this paper, to strengthen and guarantee a durable communication between scientists across the globe to (1) collate available knowledge on desertification in order to identify success stories and lessons learnt, (2) to

strengthen scientific cooperation between different regions (N-S and S-S cooperation), (3) to identify research gaps and measures to overcome them, and (4) to promote participatory-based research to safeguard dryland ecosystem services. These aims should on the long run support sustainable social and economic development and also back science as a major partner for formulating best development options for drylands.

DESERTNET's Philosophy

Sustainable dryland management and development requires the translation and transfer of sound science into political decision-making processes. International scientific networks like DesertNet provide important and indispensable science-policy communication interfaces for guaranteeing a continuous dialogue between science and decision-makers for sustainable dryland development. The policy level has to recognize the relevance of such international scientific networks which administer scientific data and knowledge and convert it into a comprehensive format for implementation. DesertNet also underscores the importance of regular communication between scientists, NGOs and development agencies. Such continuous science-based communication and interaction at the global level also counteracts the reduplication of cost-effective research and actions to combat desertification.

The economic stability especially of rural households in drylands is directly influenced by changes to the quality and to the quantity of the locally available biodiversity, the soils and the surface water or groundwater. In order to mitigate poverty and unwillingly undertaken migration to urban centres due to land degradation, DesertNet underscores the importance of considering policy-driven regulations that create incentives and reward mechanisms for local rural communities to look after their lands in a sustainable manner. Thus, policy is not only seen as an important partner to combat desertification but policy is also seen as an important research aspect by the scientific network.

Land tenure and ownership rights over land need to be considered as well in this context in order to counteract the maximum and uncontrolled exploitation of dryland resources which ultimately leads to desertification. We regard the participation of land users at the onset of any rehabilitation and dryland development activities as absolutely crucial for their local acceptance and thus for the success of these initiatives. A continuous interaction between scientists, decisions-makers and land users helps to transform knowledge into action at the local level. DesertNet underscores, that policy should also promote the relevance of participatory and interdisciplinary-based research on desertification in order to make applied research more attractive for junior scientists.

Desertification touches issues which are generally in the responsibility of different national ministries. DesertNet underscores that the success of national actions to combat desertification and to prevent desertification will depend on a stronger cross-ministerial communication at the national level. This measure will support the mainstreaming of resources and actions at the national level.

Climate change is increasingly affecting the goods and services which dryland ecosystems can provide for human well-being. Bio-physical changes caused by climate change are unprecedented and they interact with human-induced impacts on the natural dryland environment. DesertNet thus also underlines the importance to continue supporting basic cutting-edge science on bio-physical, social and economic indicators and monitoring of changes in order to obtain scientifically sound information and scenarios on the trends of the carrying capacities of dryland ecosystems. Scientifically based assessments in a globally changing world are the fundament for any successful and cost-efficient policy activities to develop mitigation and adaptation strategies to support sustainable dryland management.

CURRENT INSTRUMENTS AND PRODUCTS OF DESERTNET

Science/Policy Interface

DesertNet is a **think tank** for dryland research for sustainable development. It has created and is further expanding its role as one important science/policy interface. Besides establishing an international scientific steering committee and advisory board, DesertNet has also created a user board and a board for ministerial correspondents to consolidate its communication with ministries, and other official departments as well as with national and international NGOs, extension staff members, and with the media. One major achievement shortly after its foundation was the response to a ministerial request to organise an international scientific review process to assess the IIWG 10-Year Strategic Plan and to analyse the Framework to Enhance the Implementation of the UNCCD (2008 – 2018).

At a Hearing on Desertification at the European Parliament on 15 May 2008, which was jointly organised by EPP-ED Group and DesertNet – scientists emphasized the importance of a stronger political commitment to expand research to come up with useful and standardised indicators and bio-physical and socio-economic monitoring mechanisms that can diagnose current land conditions and trends. A dossier was produced in several languages which was widely distributed at the European Parliament and was sent to scientists worldwide. DesertNet had the great privilege to have Prof. John B. Thornes, who was a member of DesertNet, at this Hearing on Desertification in the European Parliament in May 2008. His critical and valuable contributions are reflected in the dossier of the hearing.

Working Groups

A survey carried out among scientists in Spain (coordinated by Dr. Mará José Marqués Pérez, 2007) showed that scientists see the importance of scientific networks like DesertNet to set up working groups which deal with prevailing issues. As an interdisciplinary **network of scientists** involved in land degradation/desertification research DesertNet has already created international and flexible working groups on “Science-Policy Interface”, “Dryland Observation System”, “Economic Drivers & Social-Economic Consequences” and “Training and Capacity Building”. Since their emergence in early 2007, these working groups have produced important documents for decision-making and for the scientific community.

The leaders and members of the DesertNet working groups are also contributing to and partly co-leading the three working groups of the Dryland Science for Development (DSD) Consortium (secretariat@drylandscience.org) which is currently organising the first scientific-style conference of the CST. This conference will take place back to back with COP-9 in September/October 2009 in Buenos Aires, Argentina.

The DSD Consortium members are DesertNet, ICARDA, ICRISAT, JRC-IES and UNU-INWEH (<http://www.unccd.int/publicinfo/cstsciconf/menu.php>).

All above-mentioned working groups are also aimed at strengthening the scientific base to improve the implementation of the aims of the UNCCD.

Newsletter and Website

With the regular publication of its newsletter (http://www.european-desertnet.eu/newsletters_eu.php), DesertNet informs its over 300 members from over 51

countries as well as ministries, NGOs and research and development institutes and agencies about dryland-relevant issues in the fields of policy, science and land use. The network's regular information policy especially, also on UN activities, attracted members from DesertNet to attend the COP-8 in Madrid, Spain (3-14 September 2007). The enhanced attendance of scientists at the COP in Madrid (scientists registration to UNCCD's official meetings is facilitated by DesertNet) was acknowledged and appreciated by the UNCCD/CST and has helped raise awareness on the convention's development and discussions within the scientific community.

Members of DesertNet are usually affiliated to universities. The scientific network also allows the membership for students. These two aspects are considered as vital to better support and link academic curricula in future across countries (N-S and S-S) and to strengthen applied research at universities and motivate students to invest in a more integrated and participatory-based-research career. Scientists, development agencies, ministries, UN agencies and NGOs use DesertNet's information channels to exchange information. DesertNet's Newsletter and Website and its international mailing list are enhancing communication and thus supporting the development of new partnerships, especially at the international level. Students from lesser developed countries regularly consult the secretariat of DesertNet to look for training opportunities abroad.

CONCLUSIONS

DesertNet *quo vadis?*

In order to manoeuvre more successfully as an independent and international scientific advisory platform, DesertNet is currently in the process of developing a legal structure by becoming the *Association of the Network for International Research on Desertification* (DesertNet International). The legal status will further improve the cooperation with UN bodies and strengthen its profile as a solid science/policy interface. The EC has already reacted very positively to the development of the DesertNet and states that the network will play a stimulating role and promote Research on Desertification.

REFERENCES

- ❖ Akhtar-Schuster, M., Begni, G., San Juan Mesonada, C. 2007. European Desertnet: A global network of scientists to combat desertification and poverty. Electronic Publication of the Global Jean Monnet
- ❖ Conference 2007 - The European Union and World Sustainable Development. Brussels, 5th-6th November 2007. http://www.ec.europa.eu/education/programmes/ajm/conf07/desertnet_en.pdf