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**EUROPEAN DESERTNET:
A GLOBAL NETWORK OF SCIENTISTS
TO COMBAT DESERTIFICATION AND POVERTY**

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SUMMARY

Desertification adversely affects about one billion people, threatening their day-to-day life and preventing sustainable development. It is an intertwined series of negative feedbacks between heterogeneous factors that can only be understood through a sound interdisciplinary scientific approach. The United Nations Convention to Combat Desertification is the proper international framework to channel these efforts. Nevertheless, it was acknowledged that the network of stakeholders is quite complex and requires an in depth dialogue with independent scientists. For that reason, European scientists, encouraged by the strong commitments of the EU environmental policies, set up the so-called European Desertnet network (EDN), scaling up a German initiative to the European, and then just within a year, due to the global interest, to a worldwide scale.

This initiative was supported by the European Commission and the Secretariat of the UNCCD. EDN defined a proper structure that includes a Chairperson and a co-chairperson, a Steering Committee, an Advisory Board, and a Users Board. Right in the beginning, members of the Steering Committee and the Advisory board of EDN established five Working Groups which can be joined by any interested scientists and whose results are openly available on the EDN website⁴. EDN started working immediately after its foundational meeting at the UNCCD premises in Bonn, Germany in October 2006. One of its major early achievements was the analysis of the draft versions of the Ten-year Strategic Plan of the UNCCD, prepared by the so-called *Intergovernmental Intersessional Working Group (IIWG)*. EDN also organised and led a workshop about '*Desertification: Science, Policy and the Web of Stakeholders*' as a side event at the COP-8 of the UNCCD, held in Madrid, 3-14 September, 2007, and was invited to actively participate at other side events of COP-8. EDN led a workshop about '*Observation of desertification: Observation and analysis of processes of desertification as controlled by climate change and land use change*' in Hamburg, September 6-7, 2007, which resulted in a manifesto '*Towards a Dryland Observation System*'.

As of October 2007, 238 independent scientists from 39 countries have joined EDN.

Following these success stories and its rapid growth, EDN is going through a mandatory consolidation phase which is being observed with much interest by the scientific communities, the UNCCD and the EC.

About desertification, the UNCCD and the need for a scientific 'bottom-up' network

Desertification and drought impacts in arid, semi-arid lands and dry subhumid areas are one of the most severe challenges that the poorest people and countries in the world have to face now and will have to increasingly face in the future. All four scenarios of the Millennium Ecosystem Assessment Desertification Synthesis Report (2005) anticipate an increase in degradation. Desertification is ranked as one of today's major environmental challenges. Desertification is caused primarily by human activities and climatic variations. It does not refer to the expansion of existing deserts. It occurs because dryland ecosystems, which cover over one third of the world's land area, are extremely vulnerable to over-exploitation and inappropriate land use. Poverty, political instability, deforestation, overgrazing, and inadequate irrigation practices can all undermine the land's productivity. This process is making people poorer and poorer while the population in drylands is increasing continuously. As a consequence, the affected countries or regions have less and less resources and can neither invest to combat or mitigate the process nor develop alternative economic solutions to make local populations less dependent from the services rendered by ecosystems. These services will further decline as the dryland ecosystems continue to degrade. This process, if it remains unchecked will finally surpass thresholds toward irreversibility. So, the situation can be described as an intertwined series of negative feedbacks between natural phenomena, human-induced situations, societal, economic and political contexts which can only further aggravate the situation of local population.

This explains why desertification is a permanent concern for the UN. Its former Secretary General, Koffi Annan, declared that '*Drought and desertification threaten the livelihood of over 1 billion people in more than 110 countries around the world*'. Combating desertification is essential to ensure the long-term productivity of inhabited drylands. Unfortunately, past efforts (remedial and preventive actions) have failed too often, at the local, regional and global level. In order to better face such a tremendous challenge, the UN Convention to Combat Desertification (UNCCD) was adopted in Paris on 17th June 1994 and entered into force on 26th December 1996. The UNCCD aims to promote effective action through innovative local programmes and supportive international

⁴ www.european-desertnet.eu

partnerships. The treaty acknowledges that the struggle to protect drylands will be a long one - there will be no quick and "one size fits all" solution. This is because the causes of desertification are many and complex, ranging from international trade patterns to unsustainable land management practices. Real and difficult changes will have to be made, both at the international and the local levels.

Countries affected by desertification are implementing the Desertification Convention by developing and implementing national, sub-regional, and regional action programmes. Drawing on past lessons, the Convention states that these programmes must adopt a democratic, bottom-up approach. They should emphasise stakeholder participation (e.g. local land users and decision makers) and create an "enabling environment" designed to support the development of "self-help" mechanisms so that local affected people can help themselves to reverse and also to prevent land degradation. Of course, governments remain responsible for creating this enabling environment and have to create a legislative framework for sustainable development especially of the rural areas. They must make politically sensitive changes, such as decentralising authority, improving land-tenure systems, and empowering politically or culturally marginalised groups (especially women), farmers, and pastoralists. They should also permit non-governmental organisations (NGOs) to play a strong role in preparing and implementing the action programmes. NGOs often have a long tradition in working with local stakeholders. They often enjoy much trust among the land users and are, thus, invaluable partners for communication networking with local stakeholders and for the designing and implementation of scientifically sound land use alternatives which consider the local social, cultural and economic realities. In contrast to many past efforts, such action programmes for sustainable development should also be fully integrated into other national policies for sustainable development. They should be flexible and adjustable as circumstances change.

The Convention opens an important new phase in the battle against desertification, but it is just a beginning. In particular, governments are regularly reviewing the action programmes. They also focus on awareness-raising, education, and training (academic and non-academic), both in developing and developed countries. Desertification can only be reversed through profound changes in local and international behaviour. Step by step, these changes will ultimately lead to sustainable land use and food security for a growing world population. Combating desertification, then, is really just part of a much broader objective: the sustainable development of countries affected by drought and desertification.

The European Union has always been on the forefront of the combat for better environment conditions worldwide to the benefit of sustainable development, in particular for the poorest and most vulnerable populations in the world. This is principally based on the European Union's philosophy of solidarity that is well in line with the traditions of a democratic Europe. It also serves Europe's long-term interests since living in a world where poverty and despair grow among billion of people can only be a source of major tensions and conflicts in which ultimately Europe will be directly affected. The positions of Europe during the WSSD in Johannesburg, its strong commitment to push the Kyoto Protocol (drawing Russia within the process), and some years before, the signature of the UNCCD in Paris are clear signals to the developing world.

The first Article of the UNCCD defines 'desertification' as land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities. As a consequence of the complexity described above, combating desertification implies a wide network of actors. The starting point can only be an interdisciplinary approach by physical and socio-economic scientists. Without a detailed and sound scientific understanding of the situation, nobody can take sound decisions to combat desertification and/or mitigate its impacts, or forecast the actual impact of decisions which sometimes proved counterproductive.

All scientists addressing desertification issues are fully aware of that very complex situation. Most of them work in close connection with affected people. The political signals of the EU put European scientists at the forefront. Some members of European interdisciplinary groups of scientists, active in basic and applied research on land degradation/desertification, directly related to poverty alleviation, decided to coordinate their activities in view of generating a momentum towards a wide collaboration at national and international level. Such an international coordination requires a scientific network built by the scientists themselves in view of answering the multiple interdisciplinary oriented pressing questions required for the sustainable development of the poorest people in drylands. This is the reason why scientists in Europe created European Desernet – EDN in short. EDN is a

'bottom-up' initiative to build up such a network and take advantage of a large spectrum of existing knowledge that needs to be gathered and turned into an interdisciplinary approach for implementation.

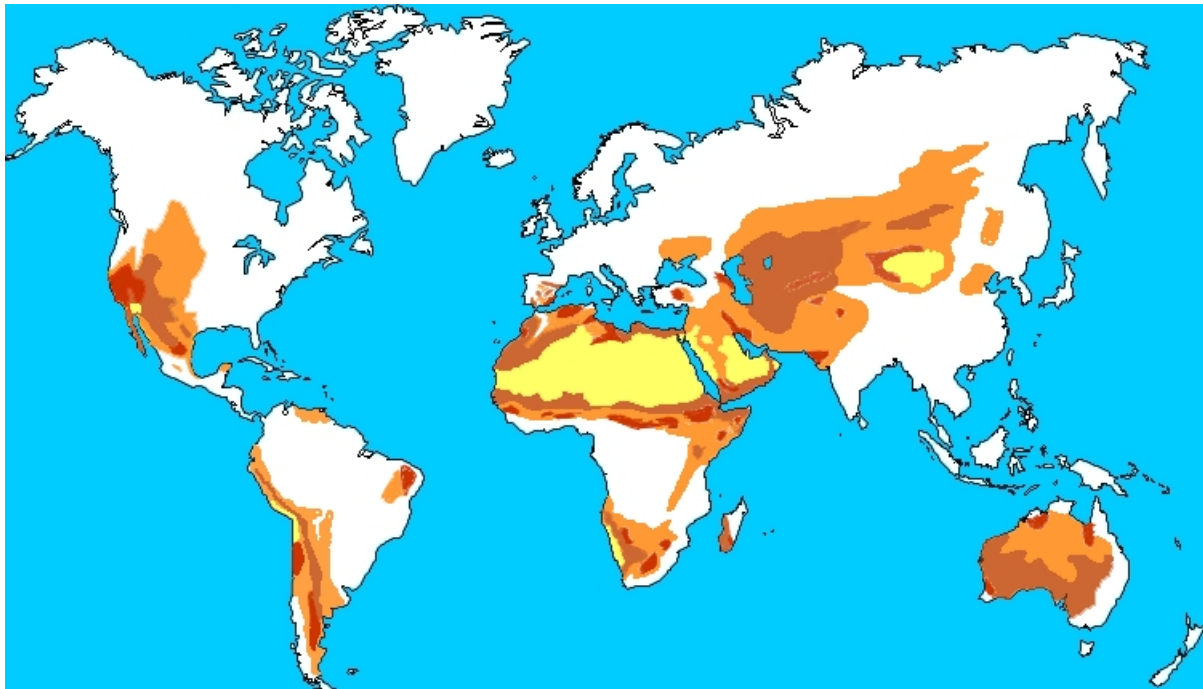


Fig. 1 – On this map, deserts are shown in yellow, while the areas prone to desertification are shown in orange. The darker the colour, the more severe the threat. © Université de Bretagne Sud, France.

The history of E-DN

The history of EDN can be briefly summarized as follows.

The start point was a national German initiative. German desertification researchers felt it necessary to create a national network - 'Desert*Net Germany'. Taking advantage of the third session of the CRIC⁵ (Bonn, Germany, May 2-11, 2005), its representatives informally met their French (CSFD⁶) and Belgian (BELSPO⁷) counterparts. They decided their best efforts to widen the German initiative to an European scale. In summer 2005, a manifesto was formulated and opened for signature. This initiated the EDN momentum. To-day, four key steps can be summarised which built up the present EDN:

- The network was officially launched on October 16-17, 2006 by the so-called '*Challenges in Desertification Research and Answers from Europe - Launching the European DesertNet*' workshop, held in the premises of the UNCCD secretariat in Bonn. At this foundational workshop of EDN, key guidelines were identified and then further consolidated by the ad hoc network structures.
- The first working meeting of the network management structures was held in Brussels in January 2007. The President was elected, the worldwide mission of the network was endorsed, five Working Groups were defined and established, and, last but not least, representatives of the CGIAR⁸ / OASIS⁹ project joined the Users board – further on joined by the Drynet network¹⁰ representatives and MAB/UNESCO.

5 Committee for the Review of the Implementation of the Convention

6 Comité Scientifique Français sur la Désertification.

7 Belgian Scientific Policy

8 Consultative Group on International Agricultural Research.

9 A global agricultural research-for-development partnership against desertification: <http://www.oasisglobal.net>

10 Supported by the EC, Drynet brings together 14 non-governmental organizations (NGOs) from all over the world.



Photos 1 – The EDN concept was born during an informal meeting of German, French and Belgian scientists at the third session of the UNCCD/CRIC (Bonn, Germany, May 2-11, 2005)

- After having been invited to comment the draft version of the 10-year implementation plan of the UNCCD, EDN was involved in the side events of the Eight Conference of Parties of the UNCCD, held in Madrid, Spain, from 3 to 14 September 2007. It is worthwhile to note that one member of EDN¹¹ was elected as EU candidate to the CST¹² which is made of five members and chaired by the Director of ICRISAT¹³, a member of the alliance of Centres supported by CGIAR. EDN and OASIS jointly organized a side event entitled: *'Desertification: Science, Policy and the Web of Stakeholders'*. During this side event at COP-8, a formal Memorandum of Understanding was signed between OASIS and EDN. Some key conclusions of this side event will be presented hereunder. EDN was also invited to contribute actively to other side events. In parallel, the second working meeting of the network management structures was held at the University Carlos III premises in Madrid. One of the key conclusions was that EDN needed a legal statute in order to more effectively carry out its activities or even make certain tasks possible in the first place from a legal and administrative point of view. The work on creating a legal frame for EDN is currently underway and is being keenly observed by the UNCCD, European ministries, the EC Research Directorate, research institutes and scientists.

¹¹ Dr. Richard Escadafal (France).

¹² Committee for Science and Technology.

¹³ Dr. William Dar (Philippines). ICRISAT (International Crops Research Institute for the Semi-Arid Tropics) is located in India.



Photo 2 - The side event at COP-8 of the UNCCD in Madrid was jointly organized by EDN and OASIS. It was an unique opportunity to sign a Memorandum of Understanding between the two structures (September 4, 2007 – © Michael Bock). From left: Dr. Gérard Begni (Chair of the Side Event and member of the Steering Committee of EDN), Dr. William Dar (Director general of ICRISAT and CST Chairman), Prof. Dr. Carlos San Juan Mesonada (Chair of European DesertNet), Dr. Thomas Richard (ICARDA), Dr. Mariam Akhtar-Schuster (Co-Chair of EDN).

- The 'Dryland Observation Systems' Working Group held its first workshop in Hamburg, Germany (premises of Max-Planck Institute for Meteorology), September 6-7, entitled 'Observation of desertification: Observation and analysis of processes of desertification as controlled by climate change and land use change'. The final objective was to develop a joint vision and roadmap for a dryland observation system. The group decided to focus on a small number of priority areas and to carry out the following specific actions. In order to make these statements more formal, the workshop formulated a Manifesto entitled 'Towards a Dryland Observation System' which was presented immediately by members of EDN to the CST at COP-8 in Madrid. The declaration can be found in the annex.



Photo 3 – Attending the 'Observation of desertification: Observation and analysis of processes of desertification as controlled by climate change and land use change' workshop – Hamburg, MPI for Meteorology, September 6-7, 2007).

In view of these events which were organised and carried out within one year after the foundational workshop of EDN, it can be stated that EDN started as a success story. The challenge is now to keep the momentum. On October 2007, 239 independent scientists from 39 countries had already joined EDN.

The E-DN objectives

The major objectives of EDN have been defined as follows:

- To identify and analyse the pressing problems with regard to drought, land degradation/desertification and poverty;
- To review the state of the art of European scientific knowledge and know-how concerning this global problem;
- To identify, through networking, success stories and best practices resulting from scientific research, and to create multipliers and accelerators for their implementation;
- To identify gaps and develop innovative basic research in these areas;
- To develop applied research in view of its use in arid, semi-arid and dry sub-humid areas, thereby focusing on users' needs, interdisciplinarity and integration;
- To strengthen and support European research capacities in order to promote scientific cooperation;
- To structure and facilitate the communication and transfer of know-how and technologies within the European DesertNet and towards affected countries;
- To establish and intensify linkages with research partners inside and outside Europe;
- To stimulate application of appropriate research findings in the drylands through participatory processes, involving civil society, NGOs and CBOs;
- To establish a mechanism for effective and successful policy advice and for public awareness rising.

For this purpose, EDN- which started as an European initiative - is open to all scientists within and outside Europe wanting to join it and collaborate with it. EDN supports the UN environmental conventions, in particular the UN Convention to Combat Desertification (UNCCD). It intends to strengthen the cooperation with its scientific body, the Committee on Science and Technology (CST)¹⁴ and is open to collaborate with all other UNCCD panels or groups, in need of scientific input. EDN is also looking forward to collaboration with international organisations, programmes and agencies in need of scientific information or advice. It is prepared to put its knowledge and understanding to the service of combating desertification and creating sustainable livelihoods in drylands through sound scientific work.

To fulfil these challenging objectives, EDN acts both as a network and as a think tank.

As a **network**, EDN

- provides a platform for scientific discussions and exchange of ideas, fosters cutting edge science, identifies topics and research areas,
- identifies and documents scientific state of the art of the main topics in desertification assessment, risk evaluation, mitigation and restoration,
- identifies and articulates the economic drivers and the socio-economic consequences of desertification,
- integrates scientific findings across disciplines, translates these into common language and communicates scientific findings, and
- works in and on affected areas inside and outside Europe.

As a **think tank**, EDN communicates with stakeholders and policy-makers. It

- identifies minimum consensus on consolidated knowledge,
- evaluates scientific knowledge for stakeholders and policy makers,
- disseminates knowledge,

¹⁴ As quoted above, one member of EDN has been elected as EU member of the CST

- responds to demands for assessment and information needs, addresses knowledge gaps,
- translates knowledge to improve governance,
- and identifies issues and priorities for stakeholders and public policies.

How is EDN structured?

The leading structure of EDN is a chair and a co-chair and Secretariat. The persons elected are:

- **Chair:** Prof. Dr. Carlos San Juan Mesonada (Department of Economics, University Carlos III of Madrid, Spain)
- **Co-Chair & secretariat:** Dr. Mariam Akhtar-Schuster (University of Hamburg, Germany)

They work closely with a **Steering Committee (SC)**, which works according to the following guidelines:

- The SC members can represent European DesertNet if chair/co-chair cannot do so,
- The SC identifies topics,
- Chair / co-chair are members of the SC,
- The SC organises or supports working groups (WG's),
- The SC is responsible for quality control,
- The SC is responsible for funds and finances,
- The SC is responsible for membership issues ,
- The SC organises annual meetings of members,
- The SC consolidates and further develops working structures,
- The SC is supported by the secretariat,
- The SC works closely together with the Advisory Board (AB).

The Advisory Board (AB) works according to the following guidelines:

- The AB should cover the different subfields,
- The AB identifies new and emerging topics,
- The AB supports the steering committee on programmatic work and quality control,
- The AB works out concepts for research programmes,
- The AB keeps in contact with research communities,
- SC and AB communicate and meet regularly (apart from organisational and technical issues).

In order to lead the scientific tasks, five Working Groups (WG) have been defined and established in January 2007. The detailed Terms of Reference are under elaboration. Nevertheless, the mission of the Working Groups is clear enough to let them start working. This presentation underlines some outcomes of their activities. The five Working Groups are:

- Science-Policy Interface WG,
- Dryland Observation System WG,
- Economic Drivers and Social-Economic Consequences WG,
- Training and Capacity Building WG,
- Internal Structures WG.

Last but not least, EDN has an Users Board (UB). This is an essential structure. It allows EDN to work on actual pressing or medium- to long-term issues raised by actual users. Thus, EDN's applied work is demand-driven and help prevent the auto-definition of a work plan which is a well-known trap and a traditional problem in many similar structures. EDN cannot attain its ambitious goal to "put its knowledge and understanding to the service of combating desertification and creating sustainable livelihoods in drylands through sound scientific work" if it does not address the actual questions raised by relevant structures, by translating these into multidisciplinary research studies and mobilizing the WG's to work on them. The guidelines of the UB are as follows:

- The User Board consists of representatives of organisations that want to use EDN services or cooperate with this international scientific network.
- Every organisation that wants to send a member to the User Board must inform the Steering Committee of EDN.
- The Steering Committee has to approve of the requested membership to the User Board of EDN.
- Members can be for instance. UNCCD, EU-COM (several DGs), UNESCO, research institutes...
- The Steering Committee of EDN develops guidelines how to deal with national organisations or institutions that want to become member.

Now (October 2007), as stated above, three organizations are members of the Users Board: OASIS (which signed a MoU with EDN) Drynet and MAB/UNESCO. This starting point has proved very productive so far, but it is just a start. Contacts with other organizations are underway and will, thus, gradually enlarge the User Board.

An insight on Science /Policy issues

As quoted above, the story of the EDN work started by policy issues, since the network was asked to give a vision of its own about the Ten-year Strategic Plan of the UNCCD as elaborated by the IIWG¹⁵.

The interface between scientists and policy/decision makers is always a touchy issue. No turkey solutions exist, especially not within such a complex issue of desertification with its numerous stakeholders who need to be considered for developing and successfully implementing countermeasures. Improving the dialogue is always a work in progress. Structural evolutions and/or reforms can improve this dialogue in a sustainable way. Actually, it has been proved that organizing forums at several scales – local, national, sub-regional, regional and global – was a positive initiative, provided that it gathered the relevant stakeholders and the messages could be transferred to the relevant actors.

This the reason why EDN and OASIS decided to set up a 'side event' during the COP-8 of the UNCCD (see above), entitled '*Desertification: Science, Policy and the Web of Stakeholders*'. Quite obviously, the Conference of Parties of the UNCCD was an ideal 'umbrella' to meet the conditions listed above.

It was first acknowledged that addressing the multiple and intertwined aspects of desertification phenomena implied a very large network of actors and stakeholders. Some decisions on ways to combat desertification can be taken by local populations themselves, but managing such a pervasive phenomenon requires decisions at all levels: local, provincial, national, sub-regional, regional and global; and engaging a wide range of stakeholders, including policymakers, researchers, development practitioners, communities, farmers, pastoralists, the private sector, and many others, across all geographic scales. These disparate communities have different institutional cultures, and are separated by large distances and even different languages. The web of communications involves elements of social learning as well as communication and exchange between different components/stakeholders, with 'horizontal' and 'vertical' linkages between local, regional and global scales. The debates addressed many issues, bringing into light experiences and thoughts from quite various horizons. Formulating conclusions avoiding gaps and overlaps is somehow touchy. It can be tentatively presented as follows.

Top level: UNCCD and EDN

The way in which EDN is operating must be made more transparent to the UNCCD secretariat and to the CST. As underlined above, the Users Board of EDN must be made as regionally and thematically representative as possible, raising clear questions to be addressed and answered by the ad hoc Working Groups (WG's) of EDN under the supervision of the Steering Committee (SC) and Advisory Board (AB). The whole system has to be consolidated by a peer-review mechanism in order to guarantee the quality of the results which is provided by EDN.

A key question is: what are the organic links between the CST and such networks like EDN? A formal answer to be developed further on can be found in Article 24 of the UNCCD, which establishes the CST, the roster of

¹⁵ Intergovernmental Intersessional Working Group.

independent experts and paves the way to appoint ad hoc panels to provide the COP with information and advice on specific issues¹⁶.

In order to better represent the international community, the AB should be as widely open as possible, representing all relevant topics, countries and regions. Experts have to be identified. When the working meeting took place (September 4, 2007) in depth contacts had been already taken with the Chinese scientific community, while Central Asia was represented in the Science/Policy Interface Working Group. Such contacts are being developed and further deepened.

Should these questions be answered in a convincing way for the Secretariat of UNCCD, EDN could play a somehow similar role like the IPCC for the UNFCCC which is a quite challenging vision. At the COP-8 in Madrid EDN was mentioned as one of the three organisations (the other two being WMO and CGIAR) which could potentially support the CST by organising scientific conferences on topics of high relevance to the implementation process of the UNCCD.

Finding the way for a fruitful dialog is a major issue

Either under quite centralized political regimes (e.g. Aral Sea environmental situation) or in more decentralized ones (e.g. production of biofuel) decision makers consider short-term issues as a priority, while most of scientific issues and sustainable development in itself are usually long-term issues. These scientific long-term issues may be conflicting with short-term specific questions or public interests. So, scientists are often considered as 'radical' minded people and their conclusions and recommendations are often pushed away as such from the political agenda.

One issue could be to consider those people who are in charge of supporting the decision process of policy makers themselves. They often consider medium-scale issues and can understand and take into account long-term concerns. A major role can be played here by NGO's and CBO's in close contact with scientists, who most often do not have the right language to be understood by these staffs. It is important for scientists to make efforts to channel information and knowledge through quite short arguments and documents which are based on sound scientific knowledge and worded to convey proper messages to the decision making world. For instance, such an effort is currently being made by CSFD, the French Scientific Committee on Desertification. The actual question to be kept in mind is: how to convince a decision maker in five minutes?

Similar considerations can be developed about finding a proper and understandable language between scientists and people involved. Here also, NGO's and CBO's can play a key role. The private sector (a large and somehow fuzzy concept) and especially the industry sector are key actors in the related mechanisms but can face some reservations from population and decision makers since the interests that they support can be quite different from those of the local populations and/or of the countries in which they are operating.

About interdisciplinary research

Leading international interdisciplinary research is quite mandatory. Research programmes on combating desertification, or restoration, conservation and prevention must be user-driven (see the comments about the UB of EDN). Trans-national discussions are mandatory to define the objectives of research projects and programmes and then coordinated them to implementation for achieving results for realistic policies on sustainable development. To reach these goals, it is important to create a common language. This was illustrated by the following motto: *'invite scientists, NGO's and policy makers to change frontiers'*.

Scientists are often considered to produce irrelevant outputs. It is not only a matter of dialogue with decision makers and other stakeholders, as underlined above. It also implies an interdisciplinary approach between physical and social sciences. Integrated research does not mean that targets have not to be segmented in terms

¹⁶ The contact between UNCCD, CST and EDN can be greatly eased by the nomination of Dr. Richard Escadafal, an active EDN member, as European representative within the CST, and Dr. Dar from OASIS as Chairman of the CST.

of final applications, which is quite different from basic disciplines. Such sectors as education, health, agriculture have to be developed. But for instance, agriculture also implies economic and social sciences.

Large development and longer term projects have to be developed and established. Such projects imply integration at a wide scale. This means in particular integrated science and integration of science with action. This implies in turn a better definition of scientific issues to be addressed by researchers, and a better way to make a proper use of them.

Ways to communicate

EDN is considered as a right start. The network needs to be extended to create a forum that makes it more proactive and push its members to be better involved. Communicating means first that the questions described above about finding a proper language for properly addressing stakeholders has to be solved.

Issues related to information technologies, in particular diffusion of information through Internet, were widely debated. This appeared a key issue.

Linkages between EDN and THEMANET are going on. THEMANET is the master directory on combating desertification devoted to improve information and communication flow between and within the scientific and policy community of UNCCD.

The EDN Website should be developed and be made more interactive. Developing a forum to exchange ideas would be beneficial to debates within and between regional scientists, for instance in Central Asia. This could also be beneficial to disseminate important information, such as for instance relevant call for proposal opportunities.

EDN managers fully agree but underline that this requires a minimum funding, which in turn raises several key organisational and management questions that led to the decisions taken during the second SC and AB meeting (see above). The Side Event conclusions were key inputs for that meeting.

Conclusions

The story of EDN can be considered as a success story so far. Starting from a national initiative, European scientists generated a bottom-up network firmly structured, which was asked to address such key issues as reviewing the ten-year Implementation Plan of the UNCCD. The network took some key initiatives of its own: addressing the complex interfaces between Science, Policy and the Web of Stakeholders, leading a workshop to develop a joint vision and roadmap for dryland observation system. These results give a flavour of the achievements that the network is in a position to obtain.

Nevertheless, the EDN network is still in a consolidation process, mainly in terms of formalization of functioning rules and legal statute. In particular, this will regulate the way how the issues addressed by the network are defined and analyzed and which answers are given according to which rationale. The managing structures of the network need to be widened to include countries and regions affected by desertification in a representative way. This consolidation phase needs to be led in a very ambitious way in order to avoid both dysfunctions linked to a poorly controlled growing and lack of motivation of individuals that can feel lost in a too large 'engine'. This is the challenge that EDN has to face now.

Setting up EDN was a complex and enthusiastic story. The pioneering mind should not be lost, but proper management and harmonious growth control is now the challenge. This can be perceived as the next logical step in the evolution of EDN. Quoting again Koffi Annan, '*Drought and desertification threaten the livelihood of over 1 billion people in more than 110 countries around the world*'. The 239 independent scientists from 39 countries who had joined EDN as of October 2007 know that they are simply not allowed to fail. The evaluation of the policies undertaken to combat desertification will be in the future a regular EDN activity to select the most appropriate mechanisms to link the scientific innovation with the practical design of policies. The policy evaluation will include an assessment of the actions to combat desertification from the point of view of the cost-effectiveness. That will include not only the proposals of direct action but also the indirect related activities like education and long live training, research and development, transference activities and governance proposals.

Photo 4 – Fighting against desertification in Burkina Faso © SPORE

ANNEX – Declaration of the EDN ‘Towards a Dryland Observation System’

The international community has long recognized that Desertification is an important economic, social and environmental constraint for development in drylands. Despite long-term efforts, land degradation and desertification are progressing in many drylands. With regard to the scientific components of the United Nations Convention to Combat Desertification, the main priority theme of the Committee on Science and Technology (CST), as recommended at the CST sessions in the COP8 in Madrid / Spain (3.-14. September 2007), will be bio-physical and socio-economic monitoring and assessment of desertification and land degradation, to support decision-making in land and water management.

Towards a Dryland Observation System

The working group “Dryland Observation System” of the European DesertNet organised a workshop on the 6th and 7th September 2007 at Hamburg, Germany, to develop a joint vision and roadmap for dryland observation. The group included specialists from relevant disciplines, e.g. meteorology, geography, remote sensing, GIS, hydrology, biodiversity, ecology, land use science, political science and other social sciences.

The group decided to focus on a small number of priority areas. These include:

- **To assess, monitor and improve our understanding of the present state of, and trends in, dryland ecosystems and their services as a tool for supporting actions leading to sustainable use and mitigating desertification.**
- **To identify a suitable and focused set of harmonized variables and protocols for use in remote sensing and ground observations.**
- **To support the goals of the UN Conventions on Desertification, Biological Diversity and Climate Change and promote synergies between them.**

To realize these three goals the group decided to carry out the following specific actions:

1. Outline the **mission** of the group for broader communication, identifying gaps and the steps needed to fill these, and addressing some issues of global concern such as food security, carbon sequestration and biofuels.
2. **Develop a network** of partners (international, national, institutions, and individual researchers), who already actively observe ecosystems in the drylands (e.g. CEOS, GTOS, GEOSS, GMES, ILTER, OSS, BIOTA, ROSELT, ELTOSA, ...).
3. Prepare and organise **workshops on** ground observations, field studies, remote sensing and modelling to recommend a minimum set of variables and methods for assessment and monitoring, and communicate these to ongoing global observation initiatives.
4. **Review existing** observation activities and data in order to identify gaps in their thematic focus and spatial distribution of ground observation sites, with the goal of supplementing these through new activities by the Dryland Observation System.
5. Stimulate and support **research project proposals** promoting the above goals.

(7th September 2007 Hamburg, Germany)