

## 1. Introduction

There is no shortage of scientific and local/traditional knowledge on the ways in which desertification can be managed. Much of this information is relevant to those charged with implementing the UNCCD and its associated NAPs, yet little of the knowledge generated by researchers, affected communities and civil society organisations (CSOs) reaches this destination. Rather than exploiting a two-way traffic flow of knowledge from researchers, local communities and CSOs, policy makers often find themselves in the middle of a knowledge "traffic jam" with nothing moving in either direction. Under such circumstances, many simply reach for the information that is closest to hand, whether or not it is the most relevant, reliable or up to date.

This discussion paper will ask how the UNCCD can more effectively build on a combination of the most recent, cutting edge research, and the wealth of evolving local knowledge from affected communities and CSOs. In doing so, it seeks to overcome the knowledge traffic jam and free-up the flow of information between different groups.

The UNCCD urgently needs better mechanisms for integrating and exchanging knowledge between researchers, civil society groups and policy makers

To do this, we argue that local and scientific communities offer fundamentally different, yet complementary, perspectives that together can provide policy makers with more holistic, reliable and pragmatic guidance than either source of knowledge alone. While several mechanisms are in place for the influx of scientific information, many of these are dysfunctional and do not serve their intended purpose. Similarly, there has been no formal status of civil society groups within UNCCD processes, and thus no formal mechanism for them to exchange their knowledge with the UNCCD Parties and partners. This is despite several CST decisions in this regard that were never put into practice. Appropriately functioning mechanisms are therefore urgently required within the framework of the UNCCD for effectively integrating and exchanging knowledge between researchers, local communities, civil society groups and policy makers.

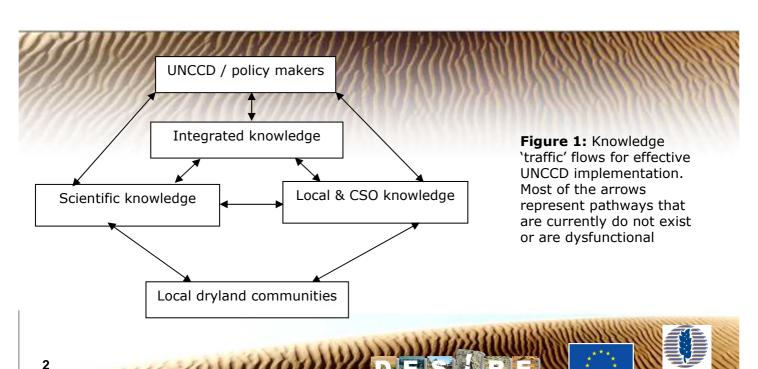


The UNCCD faces many challenges as it attempts to engage with the fast-moving international agendas that its dual environment-development focus spans (for example, debates on food security, biofuels, HIV/AIDS, water, migration, conflict, biodiversity and climate change and so on). Only by unblocking the knowledge traffic jam can cutting-edge policy be developed, which maintains the future relevance of the UNCCD and effectively assists those people living with the challenges of desertification.

To improve the effectiveness of the UNCCD for dryland communities, the government representatives responsible for implementing the convention and its NAPs must base their interventions on relevant and up-to-date information. This includes knowledge from local communities and land users themselves (often channelled via NGOs and CSOs) on the current state of land



degradation and desertification, traditional practices, local successes and obstacles. At the same time, knowledge needs to come from researchers, providing in-depth analyses of desertification processes and impacts, as well as assessments of the technical and financial feasibility of suggested solutions. It is also important to develop ways of monitoring and assessing desertification, as well as determining the impact of the UNCCD in addressing it. This requires the integration of different types of knowledge and for appropriate pathways to be developed to allow this knowledge to flow to those charged with policy- and decision-making (Figure 1).



## 2. Knowledge flows within the UNCCD process

#### 2.1 Scientific knowledge

The UNCCD's text has always recognised the importance of free-flowing knowledge but its aims have not yet translated into action. Since the UNCCD's negotiation, the formal mechanism for providing scientific knowledge to the Conference of the Parties has been through the Committee on Science and Technology (CST). This is "composed of government representatives competent in the fields of expertise relevant to combat desertification and mitigating the effects of drought" and supported by "a roster of independent experts with expertise and experience in the relevant fields". "Experts" on the Roster are not required to be researchers or scientifically trained, and are nominated by their governments. There was also provision to draw Ad Hoc Panels for specialist consultation (Article 24, 3) from the Roster.

By 2001, this *modus operandii* was deemed "ineffective" by parties at COP5, leading to establishment of an additional body of scientific experts, the Group of Experts. This was initially planned not to exceed 25 persons (again selected from the Roster), representing all UNCCD Annexes, with the idea that a small group might find agreement to make recommendations more easily. At the session of the Committee on Science and Technology at COP6 in Havana in 2003, the chairperson emphasised that "the CST must produce policy-relevant advice". This aim proved to be too ambitious at the time though, and a number of problems have since become apparent, leading to further discussions on the effectiveness of the CST in the framework of the 10 Year Strategy.

Current mechanisms for knowledge exchange between researchers and policy makers within the UNCCD are not sufficient to generate a sound basis for policy

First, there were discontinuities in those attending CST meetings. With different people at different meetings, it was difficult to enter into in-depth discussions. This was exacerbated by poor organisation of the CST's work during the sessions, which gave little time for deliberations before draft decisions had to be presented to the COP. Also there was little work undertaken between meetings. Second, the lack of scientific training of many "experts" meant that the results of cutting-edge research projects that integrated local and scientific knowledge



were not reaching the decision makers. Furthermore, many experts were experienced in working in the confines of narrow scientific disciplines rendering them unable to meaningfully contribute to discussions of an interdisciplinary nature - a necessity when dealing with desertification. This caused the CST to draw on outdated information and exacerbated the knowledge traffic jam. Consequently, it was widely viewed as a body with low levels of authority and little concrete impact. This did not facilitate synergy with the other Rio Conventions as the knowledge base on which COP decisions were being made was unclear. In turn, the uncertainty contributed to the reluctance of donors to put forward adequate funding to support the UNCCD.

By COP8 in Madrid (2007), the ten-year strategic plan to enhance the implementation of the Convention identified, and sought to address, problems such as insufficient financing and difficulties in reaching consensus among Parties. The focus of action shifted from concentrating on physical desertification processes, to integrating that knowledge within socio-economic, institutional, and political contexts. Indeed, Strategic Objective 1 of the ten-year strategy is to "improve the living conditions of affected populations", in exact accordance with the text of the convention. Impoverished farmers often have to put survival ahead of practising sustainable agriculture and combating desertification, and therefore combating desertification may require us to tackle such issues as poverty first. However, to do this requires changes to the ways in which knowledge flows within the UNCCD process. The ten-year Strategy recognises this, and correspondingly, the role of the CST has been redefined. The Strategy outlines the need for the CST to "become a global authority on scientific and technical knowledge pertaining to desertification/land degradation and mitigation of the effects of drought" (Box 1).

Although these ambitious goals provide a clearer sense of direction for the CST, the current mechanisms for knowledge exchange within the UNCCD structures and processes are insufficient to generate a sound basis for policy making to support the convention. For example, it is unclear how the needs of the end-users of scientific research will relate to the structures and formalities of the CST and the COP/CRIC. Mechanisms also need to be developed to incorporate those research outputs that are already in existence and relevant to UNCCD processes, which to date, may have been overlooked.

(Seassy))))iii



# Box 1: UNCCD 10 Year Strategy Operational Objective 3 - Science, Technology and Knowledge

This objective states that the CST needs to become a global authority on scientific and technical knowledge pertaining to desertification/land degradation and mitigation of the effects of drought, facilitating:

- Knowledge on biophysical and socio-economic factors and on their interactions in affected areas is improved to enable better decision-making" (Outcome 3.3);
- "Knowledge of the interactions between climate change adaptation, drought mitigation and restoration of degraded land in affected areas is improved to develop tools to assist decision-making" (Outcome 3.4);
- "Effective knowledge-sharing systems, including traditional knowledge are in place at the global, regional, subregional and national levels to support policymakers and end users, including through the identification and sharing of best practices and success stories" (Outcome 3.5); and
- "Science and technology networks and institutions relevant to desertification/land degradation and drought are engaged to support UNCCD implementation" (Outcome 3.6).



#### 2.2 Local knowledge

Since most drylands lie in marginalised rural areas where few investments are made by central decision-makers and donors, communities themselves have a rich experience in developing their own solutions to the challenges of land degradation and drought. Many of these solutions are innovative and deserve more attention, as the largest investments in drylands still come from the local people themselves. Communities draw up their own management and delivery systems with relatively low overhead costs, and contribute labour, materials and skills. In other words, desertification could be tackled much more cost-effectively if local knowledge and action are taken into account when looking for solutions.

Contrary to the process described above regarding the routes for scientific input into the convention process, there is no formal mechanism that ensures local and traditional knowledge is taken into account in UNCCD processes and negotiations. In some ways, this knowledge flow is complicated because it has a longer, more arduous journey to make, all the way from the local level via its intermediaries to the national and international levels. However, it may also be more cost effective than drawing upon knowledge from external experts. For local knowledge to be used effectively, the national roots of the international UNCCD process are therefore crucial.

Until now, the only ways in which local and traditional knowledge have entered the international UNCCD process is via:

1. Participation of representatives of local communities in the process: CSOs such as NGOs, farmers associations, unions and local authorities, each of which have low relative power in the policy arena and do not necessarily represent the diversity of local knowledge in their constituencies; and



2. National UNCCD processes such as NAP consultations, UNCCD national reporting processes, and National Coordinating Bodies – knowledge from the local level can be included in National Reports to be submitted to the CRICs and COPs, or can be taken along in negotiations by the representatives of Parties.

There is no formal mechanism for local and traditional knowledge to enter the UNCCD processes and negotiations

As for the latter, there is no stock-taking mechanism for national reports to gather relevant experiences and knowledge and present it in a practical way for upscaling and/or dissemination. As a result, there is no formalised process or "traffic highway" along which this knowledge can travel all the way to the international arena. Current pathways depend largely on the willingness of individuals and Parties to take this knowledge into account. There is also evidence that many of these national processes do not take a systematic or representative approach to collating local knowledge.

The first pathway mentioned above can easily result into a vicious circle. CSOs are not recognised as formal partners in the international UNCCD process, have no formal role and therefore there is no mechanism to ensure access to information on the UNCCD process reaches them. They depend on information given to them by their National Focal Points, by the NGO liaison officer of the UNCCD, by the UNCCD website and on the ad-hoc information coming from their own networks. These sources are often unreliable; they do not give the information in sufficient time or in a structured way. On top of that, many CSOs do not consider the UNCCD an effective tool to improve the situation for dryland communities because they fail to see its impact at the local level. The UNCCD constituency is not able to counter this image; neither can it raise the amount of critical debate and substance at COPs and CRICs that will attract the kinds of

discussion partners it needs to engage with. So, poor information flows lead to weak contributions by civil society actors at UNCCD events. This causes a reduction in support for these actors, which then further limits their participation. The fact that there is a serious shortage of funds and other resources to facilitate CSO participation, and that the selection of CSOs that do receive funds to participate is made by the Secretariat in a nontransparent way based on criteria that are not public, does not help the participation process either.

Barriers prevent active engagement and coordination between CSOs and threaten the long-term continuity in the knowledge flowing from this sector

In the absence of adequate incentives to participate in an international UNCCD process that is meaningful for the dryland communities they represent, there has been little co-ordination between CSOs. Financial support for attending one session does not necessarily lead to assistance for future sessions, and CSOs rarely know if they will be sponsored to attend long enough in advance to co-ordinate their preparations with other organisations<sup>1</sup>. For these reasons, there is little incentive to establish structures for co-ordination between CSOs or to facilitate long-term continuity in the knowledge flowing from the civil society sector. The same can be said about the international scientific community, which is virtually absent in all UNCCD related processes and negotiations.



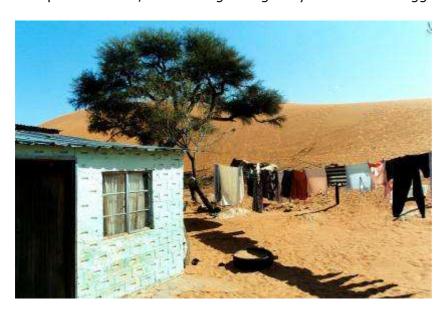
Thus, even though the UNCCD claims to be the Convention affording the most attention to the participation of civil society and local communities in its implementation<sup>2</sup>, local knowledge traffic gets stuck within local communities and civil society organisations, with no possibility to make that knowledge useful to the UNCCD process. Often, the same structural obstacles can be seen in the UNCCD's national level implementation.



<sup>&</sup>lt;sup>1</sup> This was the case also for the current CRIC7 session; the Secretariat first informed CSOs officially no sponsorship would be available, and no NGO preparatory meeting would be organised as is usual, due to lack of funds. Only ONE WEEK in advance, the Secretariat confirmed the sponsorship of 32 (anonymous) NGOs and a preparatory meeting in the weekend before CRIC7. All DESIRE, Drynet and eniD members attending CRIC had by then long planned and booked their journeys.

<sup>&</sup>lt;sup>2</sup> See for example Articles 3, 9 10 and 14 of the Convention text

The 10-year Strategy emphasises the need to integrate knowledge between researchers and CSOs (operational objective 1, outcome 1.3), and drawing together different knowledges is mentioned in the Convention itself. The UNCCD grew out of a recognition that the top-down, science-led technology transfer paradigm was inadequate for combating desertification. It was argued that by tapping into local and traditional knowledge, more complete information could lead to more robust solutions to environmental problems. There is now empirical evidence that this is indeed the case. However, local knowledge cannot be unquestioningly accepted. Instead, there is a growing body of literature suggesting that a combination of



local and scientific knowledge may empower local communities to monitor and manage environmental change more easily and accurately. Scientific knowledge is typically understood to be explicit, systematised, decontextualised and hence widely transferable. This is sometimes referred to as "know-why", since scientific knowledge partly attempts to understand the underlying principles and theory behind observable phenomena. This contrasts with the

"know-how" of local knowledge, that is primarily tacit, implicit, informal, context-dependant, and resulting from the collective experience of generations of observation and practice. By combining and hybridising these knowledges, researchers and local communities, with their different understandings, can interact to produce more relevant and effective policy and practice to combat desertification. In a growing number of cases, this has involved researchers, CSOs and communities working together from proposal development through fieldwork to analysis and completion. This is happening in practice in the EU-funded DESIRE and Drynet projects (see http://www.desire-project.eu/ and www.dry-net.org).

All current cross-fertilisation between scientists and CSOs depends on the initiatives of individual scientists or CSO representatives. A more formal mechanism to foster this integration would mark an important step forward. For example, CSOs and leading scientists could be included in CST discussions and on the roster of experts.

By combining and hybridising their knowledge, researchers and local communities can interact to produce more relevant and effective policy and practice to combat desertification



## 3. Is the 10-year Strategy stuck in the knowledge traffic jam?

The knowledge traffic jam presents a number of administrative, financial and political barriers to the effective implementation of the 10-year Strategy.

- There remains a lack of scientific knowledge flowing into the COP. Those involved in the CST are still predominantly government representatives rather than scientists and it is not clear how the most recent cutting-edge scientific analyses will reach the decision-making realm. While scientific meetings led by a consortium are proposed in the Strategy, details of the routes through which this knowledge will be brought to the COP are missing. Although progress has been made towards setting up a science-policy dialogue, this currently appears to be more of a "consultation" with the international research community on the part of the CST. Indeed, while this is a necessary (and positive) first step, for true dialogue to take place, it will require a more formally embedded structure enabling both researchers and policymakers to learn from each other, and for adequate representation of local perspectives too.
- 2. It is unclear whose responsibility it is to bring local knowledge to the Parties and how this will take place. NGOs and CSOs undoubtedly play a key role. However, their work needs to be supported with appropriate acknowledgement, opportunities, capacities and resources in order for this knowledge to be brought to the negotiation tables. The problem of how to select legitimate and representative CSOs to speak on behalf of the whole CSO group also



presents challenges, especially because it is difficult for the UNCCD process to deal with different positions and input coming from diverse civil society representatives. This too needs to be addressed.

3. It is **unclear how different types of knowledge will be integrated** and whose remit and responsibility this falls within. This is the case both at international as well as national levels. While some (e.g. EU-funded) research projects make considerable effort to bring together scientists, CSOs and local people, these remain the exception rather than the norm. More structured efforts are thus needed to facilitate this process in all aspects.



- 4. It is unclear how the **international UNCCD process can benefit most from knowledge generated in national processes**. Although the submission of National Reports to the COP represents one possible pathway, in many cases the linkages between scientists, CSOs and policy makers at the national level remain weak or are completely lacking.
- 5. Many of the **resourcing** challenges the Convention faces relate to the lack of synergy between the UNCCD and the other Rio Conventions, as well as the UNCCD and other global concerns (food security, energy, water and so on). Unless stronger relationships are built with other initiatives that address problems that cross-cut the desertification issue, the UNCCD may find itself redundant within the global institutional



architecture as donors put their money into initiatives with better scientific support. The research, knowledge and understanding are there, but the political weight to finance action is still lacking.

6. The real challenge is for Parties to **be aware of the urgency with which action needs to be taken**. If the UNCCD fails to capitalise on the niche it currently occupies at the interface of environment and development issues, other initiatives will lead the way. This is already starting to happen with the development of UNFCCC National Adaptation



Programmes of Action (NAPAs). These documents strive to involve local stakeholders in the development of efforts to adapt to climate change, integrating their efforts with attempts to address challenges of poverty, migration and so on. Greater political will is needed if desertification is to be effectively addressed as an issue separate from climate change, and the CST needs to be re-evaluated and presented as a tool for providing advice to support decision making.

### 4. A way forward: helping the knowledge traffic flow freely

It is often easier to identify problems than it is to offer solutions. However, here we outline some of our proposals which may help to overcome some of the barriers identified above.

- Since the COP is charged with decision making authority, it is vital that everyone attending the COP, in addition to being well versed with their national situation, is made aware of the state of the art in the field of desertification knowledge and combating desertification at the international level. This could take the form of a short synthesis presentation drawing on a series of key pre-determined headings. This could be given by a scientifically-informed CST member with interdisciplinary experience at the start of each COP, thus providing a sound evidence-base upon which decisions can be made. Each CRIC should also see a scientific review on where we stand globally in its opening segment.
- 2. Lessons can be learnt from the role that scientists play in other UN environment conventions. Suggestions have been made for an intergovernmental knowledge panel, whose role would be to place land degradation higher on the research agenda. However, this would require the involvement of independent scientists, not politicallynominated representatives as is currently the case with the Roster of Experts. If this interdisciplinary panel included social scientists, it may be possible to include local knowledge that has been collected, evaluated and integrated with scientific knowledge through projects like DESIRE. This would require the development of new and innovative mechanisms for information transfer e.g. via a Clearing House Mechanism (see below).
- 3. Knowledge and information (scientific and local) on desertification needs to be more readily accessible to all groups. This would avoid the continual "reinvention of the wheel" and help to identify those areas in which knowledge is lacking. Simultaneously, it might also enable wider dissemination of available success stories to prevent and mitigate desertification. While the UNCCD secretariat in Bonn already has a useful library, its potential as an information node and repository has been largely overlooked and should be put forward more prominently. A first step in this regard might be for the library to house an open access database or Clearing House Mechanism, publicised to focal points, national science correspondents and a number of CSO representatives, who in turn should encourage national stakeholders to record their results and information on the database. Alternatively, the library could refer enquiries to regional reference centres

where stakeholders could be encouraged to deposit their work. This would not only facilitate the spread of scientific knowledge but would also allow greater networking and knowledge sharing between scientists in different parts of the world.

4. At the national level, the National Focal Points for the UNCCD should be given enough means and capacities to perform a similar role as information window at national level. In this way, they could help draw together knowledge from scientific, civil society, donor and policy stakeholders.



- 5. Further assessment should be undertaken with regard to how to **link up with current nodes of knowledge**, such as scientific and civil society networks, with development aid partners financing scientific research relevant for the UNCCD and for local dryland communities. Partners such as the EU, which makes a substantial financial contribution to dryland and related research through its Framework Programmes, could play a larger role in influencing the research focus on the basis of the needs of the end-users. In this regard, not only are further projects needed to synthesise the results from EU-funded research but also for those in Brussels to be better informed about the breadth of projects funded to date and the nature of the results they have generated. The EC could also play a key role in the broader dissemination of results within the framework of the UNCCD.
- 6. **CSOs should have a role in determining the focus of the CST's work programme**, based on their experience in dealing with the knowledge gaps hampering sustainable land management at the local level.
- 7. There is a need for the Parties to agree on a more formal status of CSOs in the **UNCCD meetings** and related activities. Such mandates need to be formalised in a document prepared by a number of CSOs from different geographical regions, the NGO liaison officer of the Secretariat, the Global Mechanism (GM), and a few committed Parties and scientists. Information should be provided to indicate



which COP negotiation sessions CSOs will have access to, not just as an observer but as a full negotiating stakeholder. The formal role of CSOs in relation to the CRIC and CST processes and sessions should be clearly defined, including possibilities for CSOs to give feedback on the implementation status of the UNCCD, share experiences on traditional knowledge, scientific research needed in the field, success stories and lessons learned. This role should also extend to playing an active part in rethinking CRIC and CST procedures and set-ups, as well as in reporting. Funding mechanisms for the participation of CSOs and members of the scientific community at national and international levels should accompany these decisions.

To achieve the above will require coordination of the work and the clear division of tasks (including their costs) between the CST, the bureau of the CST and the Secretariat, before, during and after the CRICs and COPs.

#### 5. Conclusion

The dynamic institutional context of the UNCCD in relation to the Ten-year Strategy presents a number of challenges and opportunities for the future. In this paper we have highlighted a number of key concerns, as well as ways forward, which will potentially allow more effective

incorporation of scientific research, local knowledge, CSO inputs and integrated knowledge into the UNCCD process. In doing so, we have provided extensive "food for thought", relevant to several different discussion sessions within the overall programme of the CRIC (Box 2).

Our main tenet has been that local and scientific communities offer fundamentally different and yet complementary perspectives, that together can provide policy makers with more holistic, reliable and pragmatic guidance than either source of knowledge alone.



Indeed, integrated knowledge from each perspective (science, CSOs and local knowledge) is vital. Mechanisms are urgently needed within the UNCCD process to increase the potential for this knowledge to be shared and exploited.



## Box 2: CRIC 7 sessions relevant to the knowledge traffic jam

- Friday 7th November (afternoon):
   Consideration of the 2008–2011 draft work plan and 2008–2009 costed draft work programme of the secretariat (particularly in discussions about the creation of a civil society network)
- Monday 10th November (afternoon):
   Consideration of the 2008–2011 draft work plan and 2008–2009 costed draft work programme of the Committee on Science and Technology
- Tuesday 11 November (morning):
   Consideration of the input from the Committee on Science and Technology at its first Special Intersessional Session
- Thursday 13 November (morning): Wrap-up session and panel discussion on the reporting process, including cross feeding between the Subsidiary Bodies of the Conference of the Parties.

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