



FERTILE GROUND?

OPTIONS FOR A SCIENCE-POLICY PLATFORM ON LAND¹

Why is a Platform on Land Needed?

Land and water are under enormous pressures: shifting demographic developments, changes in lifestyles and consumer habits, increasing competition between food and biofuel production and a push towards carbon sequestration are placing considerable demands on land resources. These pressures are advancing land degradation at an alarming rate, raising concerns over food, poverty and political security. Climate change will compound these pressures, increasing the vulnerabilities of populations and their ecosystems. Ways to channel scientifically sound, evidence-based findings and scenarios concerning land use and management into policy arenas are required for informed policy making.

By 2030, about half of the world's population will be living in areas of high water stress, with 24-700 million people at risk of being displaced. As much as 2 billion ha of agricultural land has already been degraded, losing up to \$40 billion worth of production annually from soil erosion alone. Globally, arable land per capita has decreased from around 0.5 ha in the 1960s to a predicted 0.15 ha per capita in 2050. Some 6 million ha of land will have to be brought into production every year up to 2030 to meet the increasing needs under current productivity levels. These demands, together with the recent alarming and unpredictable volatilities in food prices and those in 2007-08, have led those countries with rapidly emerging economies to search for ways to access land beyond their own borders in order to augment their food, water and other resource supplies. Land has thus emerged as a new globally-driven investment sector – and potential source of conflict – with both opportunities and major pressures.

These dynamics call for a careful analysis of the actual, potential and sustainable use of land and water for current and anticipated demands to ensure that land degradation is halted and detrimental effects on socio-economic development and human well-being are diminished. In addition, care has to be taken to ensure that the rights and tenure security of current land users are respected during any change in land use and land management.

Some aspects of land use are considered under the respective

conventions on Climate Change (UNFCCC) and Biodiversity (CBD) whereas the UNCCD addresses land degradation with a focus on dry areas. However, there is currently no international mechanism to address ALL aspects of global land use and land management. Further, there is no strong voice in international agenda-setting to take land issues forward and bring the necessary policy attention at national and local levels.

Reasons behind this lack of progress and attention include a lack of adequate channels to provide continuous scientific information into the policy arena, and the absence of a related platform for the policy community to interface with the scientific community on this information. The scientific community has a vital role to play, not only in the policy arena but also in addressing capacity-building needs, in generating knowledge, raising awareness, assessing the current situation (drawing on local and scientific knowledge) and developing future scenarios via state-of-the-art assessments. These are crucial to the development of policy options and supporting policy-driven actions.



Photo credit: Richard Thomas, UNU-INWEH

The scientific community has already begun to organize itself to better interact at the science-policy interface via associations such as DesertNet International and development projects that take a much more holistic approach to the complex problem of land degradation than was previously taken. Some of these initiatives are also incorporating the knowledge and experiences of NGOs and CSOs (e.g. WOCAT, DESIRE, LADA).

¹ This policy brief draws from the forthcoming article by R.J. Thomas, M. Akhtar-Schuster, L.C. Stringer, M.J. Marques Peres, R. Escadafal, G. Enne, E. Abraham on "Fertile ground? Options for a science-policy platform for land" (under review).

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What Needs to Be Considered for an Effective Platform?

An independent and international e-forum of the scientific land community, conducted between January-June 2010, requested feedback on several options as to how to improve the science-policy interface on the issue of assessing and maintaining land health. Detailed results can be found at: http://www.european-desertnet.org/docs/Final_Report_e-forum_16Feb2011.pdf.

Although discussions principally addressed the dryland community, its outcomes at large can be applied to land

degradation in all climatic zones.

Results from this e-forum demonstrate that the scientific community emphasizes that a platform for land issues needs to learn the lessons from the establishment process and results of current bodies such as the Intergovernmental Panel for Climate change (IPCC) and proposed Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). Key issues for important consideration include questions such as:

- Who should be included in such a platform, i.e. the degree of inclusiveness beyond just the scientific community? E.g. policy makers, land users, etc.
- What is a workable and cost efficient size?
- To whom should such a platform report?
- How can the platform ensure reliable information is produced from multiple knowledge sources, including from the local level?
- How will the scope of such a platform be defined?
- What new structural options are there beyond the current IPCC and IPBES models?
- How can existing expert structures be built upon to create a flexible and manageable platform that can adequately respond to real-time needs?
- What roles would scientific and policy actors play in constituting and commissioning a platform to promote land issues?

What are Some Possible Options?

Table 1 outlines some possible options to answer to the need for a platform on land issues. Their advantages and disadvantages that emerged from the results and comments obtained from the e-forum are also listed. Each option requires further consultations and consideration at national, regional and international levels.

Linking to a new body that would succeed UNEP (Option 1) would benefit from being a science-based platform that would address land-related issues; this new body, however, would serve all MEAs and thus its mandate would be divided among many land-related concerns. Also, the time required for such a process to occur would delay addressing the immediate need for a focus and investment on land issues.



Photo credit: Andrew Dansie, UNU-INWEH

Given the inherent connections between food security and land, it may make more sense to link any new strategic body on land with one on food security (Option 2). However, this would need to be done without diluting the focus on land and water issues. It has been suggested that FAO's Committee for World Food Security expand its mandate to include land issues and to operate independently of UN agencies.

The establishment of temporary or permanent ad hoc technical working groups on dryland and land degradation issues under the proposed IPBES (Option 3) is one option that would allow a relatively quick response to address urgent aspects of land management as requested by policy makers. The scope of IPBES

would need to be sufficiently large to encompass the broader interests on land from various MEAs rather than having a main emphasis on biodiversity.

Some of these options need not be independent of each other. For example, a network of independent networks (Option 4) can be established using mainly existing arrangements that can later be connected to a science-policy platform (Option 5). The platform would not conduct its own research but would rely

entirely on existing institutions and networks. A major issue with respect to the network of networks approach is how to ensure robust connections between the stakeholder groups, especially between the network of networks and the science-policy platform.

Option	Description	Advantages	Disadvantages
1. Platform under a new UN agency on environment (which would succeed UNEP – as proposed by France ¹).	An independent advisory platform to a specialised environment agency.	<ul style="list-style-type: none"> • A scientific platform encompassing all global environmental problems. • Would reduce overlaps. 	<ul style="list-style-type: none"> • May dilute needed attention to land degradation. • Extensive time required for its establishment. Would not be independent of UN organizations.
2. Linkage to any new independent strategic body on food security.	A reformed Committee on World Food Security (CFS). ²	<ul style="list-style-type: none"> • Focus on links between land and food. • Cover issues outside IPCC or IPBES. • Currently examining land tenure and food security. 	<ul style="list-style-type: none"> • Currently only linked to FAO; broader representation needed. • Would not consider non-food related land degradation.
3. Linkage to the emerging IPBES.	The proposed IPBES will underpin (all) ‘land issues’. Land issues could be injected into this newly emerging intergovernmental science-policy panel by creating temporary or permanent ad hoc technical working groups.	<ul style="list-style-type: none"> • IPBES would provide the urgency, attention and inclusion into intergovernmental discussions needed for land degradation. • Reduce fragmentation of scientific expertise on land. 	<ul style="list-style-type: none"> • Reduced visibility of land degradation and desertification issues to policy and the general public. Awareness building and political will would be hampered, thus impairing efforts for implementing measures or attracting investments in land. • Prioritisation of biodiversity and ecosystem services may cause the institutional/political dimensions in need of consideration in broader land issues to be diluted or entirely neglected.
4. Network of Networks of international scientific bodies.	Creation of a polycentric, horizontal structure to facilitate networking of existing institutions at the local, national, regional and international levels which would allow a multi-stakeholder community to access programmes and policies at the science-policy interface. ³	<ul style="list-style-type: none"> • All relevant stakeholders would be integrated with solid foundations at the national and international levels, building upon existing structures at the local and regional levels. • Acceptance among a wide range of stakeholders. • Reduce the risk of duplication in structures and actions. • Foster independence of the scientific community. • Creation of easy open access for networks and advocacy groups, addressing concerns over national sovereignty.⁴ 	<ul style="list-style-type: none"> • Decentralised institutions may have a lower visibility and less influence at the policy level, thus reducing the power to influence intergovernmental decisions.
5. International platform on land degradation	Would receive inputs from networks of scientists, IPCC, IPBES, UN agencies, national and regional scientific bodies, civil society organizations. ⁵	<ul style="list-style-type: none"> • Broad participation of interested parties with a focus solely on land issues as a cross-cutting concern. 	<ul style="list-style-type: none"> • No ‘champion’ agency and no widespread donor support. • Would take considerable time and resources to establish. • System might become cumbersome by including all stakeholders.

¹ http://www.diplomatie.gouv.fr/en/france-priorities_1/environment-sustainable-development_1097/united-nations-environment-organization-uneo_1966/index.html

² As proposed by von Braun (2010). See: Braun von, J. 2010. Strategic body needed to beat food crises. *Nature* 465, 548-549.

³ Based on the approach outlined by Ostrom (2010). See: Ostrom, E. 2010. Polycentric systems for coping with collective action and global environmental change. *Global Environmental Change* 20, 550-557.

⁴ See: Larigauderie, A., Mooney, H.A. 2010. The Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services: moving a step closer to an IPCC-like mechanism for biodiversity. *Current Opinion on Environmental Sustainability* 2, 9-14.

⁵ See: Akhtar-Schuster, M., Thomas, R.J., Stringer, L.C., Chasek, P., Seely, M. 2011. Improving the enabling environment to combat land degradation: Institutional, financial, legal and science-policy challenges and solutions. *Land Degradation and Development* 22, 299-312.

The international platform on land degradation (Option 5) would mainly be linked with the UNCCD via its Committee for Science and Technology (CST), and would thus be a panel similar in structure and scope to the IPCC. It could also serve

other MEAs and thus function in similar ways as proposed for IPBES. This independent panel would channel scientific advice to the Convention’s Conference of the Parties through the CST.

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What Next Steps are Needed?

To take these suggestions forward, the following next steps would be required:

- A high-level body will need to facilitate opening discussions, establish continuity in further discussions and take on responsibility for identifying relevant stakeholders for future developments. A suitable forum would be the United Nations General Assembly or the upcoming Rio +20.
- Stimulation of national and regional dialogues and consultations, perhaps via the UNCCD and its existing mechanisms.
- Consideration of how to link the development of advice for policy-making with the much-needed capacity building and latent capacity in order to develop an effective mechanism for inducing change on land issues.

Conclusion

The recent critical assessment by the international scientific community on the needs and options for a science-policy platform on pressing land issues demonstrates the readiness of the scientific community to bring land issues to the international policy agenda. This needs to be matched by a discussion and willingness at the policy level amongst governments

and agencies, including but not exclusive to, the UN system. Considerations must be given to the need to be inclusive of all interested parties on major environmental issues such as land degradation but not at the cost of creating an over-sized, cumbersome mechanism that is not be able to deliver advice and scenarios in a timely manner.

To this end, we believe a focus on first developing a network of networks by the scientific community is an essential and necessary step forward in beginning this process. The policy arena should, in parallel, begin to develop the basis for an international panel on land issues that can achieve the required legitimacy to inform policy-making.

About DesertNet International

DesertNet International (DNI) is a non-governmental, non-profit scientific association. Its scientific members research the biophysical, economic and human aspects of land degradation and desertification at the national and international levels.



The aims of DNI are to encourage research and promote concerted efforts in and across all disciplines concerning human and biophysical issues of dryland development and degradation.

DNI supports mechanisms that will provide academically sound data and information to combat desertification and land degradation, recover degraded land, support sustainable social and economic development in drylands and identify preventive measures for safeguarding the natural resources of drylands worldwide.

The scientific network also aims to cooperate with policy and other decision-makers to help meet their information needs and to translate scientifically sound knowledge to improve the governance and land management of drylands.

To find out more about DesertNet International, including how to become a member, please visit:

www.desertnet-international.org



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