



Summary of discussions Week 3 – Enabling conditions- How to address knowledge needs

1. Overall Themes Week 3

Integrate and prioritize indigenous and local knowledge, governance, & practices

- Empower indigenous and local knowledge above and beyond recognising the role of their knowledge and practices in safeguarding land conditions and biodiversity
- Localising governance and research, identifying key users/stakeholders
- Need for indicators that can be understood and used by local communities, informed by higher level indicators/goals (e.g. SDGs)
- Different patterns of knowledge validation influence perceptions of credibility of different actors
- Long-term monitoring and evaluation at a local level, to inform better governance
- Capacity-building, awareness-raising and incentivising

Integrate knowledge and data across scales, sectors, & disciplines

- Longer-term and cross-scale feedback loops between the scientific community, users and decision makers for adaptive management and governance; they could be institutionalised
- Establish feedback loops of knowledge and data (ecological and socio-economic)
- 'Practicing cross-sectoral coordination among land resource-based agencies'; to avoid cross-jurisdictional overlap/trade-offs

2. Some of the notable ideas:

These are not exhaustive and represent just a few highlights of what has been discussed and illustrate more the above overall themes:

- Create more focal points at all levels ‘to ensure smooth planning and plan implementation, partnership and networking, as well as easy transfer of knowledge, sharing of experience and dissemination of information on land degradation from their various constituencies’.
- ‘Land resources, land management and land information are three important areas, which deserve consideration with regards to sustainable development. These three areas differ in many ways but must be interlinked
- ‘Identify the challenges that are creating gaps between and within sectors and identify ways of bridging the gaps.’
- More collaboration between stakeholders in the stage of formulating research questions and ensure co-creation thereon.
- ‘People and governments need to be involved in or engage with the co-identification to co-designing measures to address knowledge needs and governance. It requires a multi-level approach to identify the different knowledge needs through collaborating with people in policy and practice (e.g. farmers, land-resources users, extension officers, landowners, government officers from different ministries and levels, community leaders etc.). Researchers could follow such a process with a formative evaluation to identify how to support processes that improve governance.’
- Tasking an individual or organization with bridging the scientist-practitioner gap.

3. Detailed summary of discussions

1. Improving institutional capacities, policy coordination, inter-sectoral collaboration and governance

a) How could institutional capacities be improved? What changes are required to better address knowledge needs on LDR?

- Need for specific institutions that can managed the evaluation and monitoring of ecosystem services with local and remote sensing data; which can then be presented to policymakers and stakeholders.
- A fixed, harmonised methodology is required – even in interdisciplinary teams
- Identify environmental, economic, and social opportunities in ecological restoration projects
- ‘To better address knowledge need on land degradation, institutional capacity building is required at the various levels (international, regional, national, local) and for the different target populations (practitioners, Senior level, planning and implementation level) to avoid isolation and fragmentation.’
- Create more focal points at all levels ‘to ensure smooth planning and plan implementation, partnership and networking, as well as easy transfer of knowledge, sharing of experience and dissemination of information on land degradation from their various constituencies’.

b) Intersectoral policy collaboration has been a wishful recommendation for decades, how could this effectively happen?

- ‘Perhaps make it a precondition for providing funding support to initiatives. Making intersectoral policy effectively happen requires the conviction of those in power of its importance and that the people have the freedom to demand collaboration.’

- Create an indicator for intersectoral work.

'Identify the challenges that are creating gaps between and within sectors and identify ways of bridging the gaps.'

- 'Possible challenges that need to be worked on include:
 - Improving communication;
 - Strengthening support for proposed actions;
 - Promoting leadership within and between sectors;
 - Formalizing intersectoral collaboration through appropriate written agreements;
 and
 - Ensuring availability of resources for proposed actions as well as re-directing available resources to the appropriate levels of operation'
- More collaboration between stakeholders in the stage of formulating research questions and ensure co-creation thereon.
- Co-creation needs to involve a permanent dialogue between stakeholders 'so that consensus is built on factors related to use of ecosystem services, wealth distribution, institutional mission and agendas, sector interests, development models, climate adaptation needs, investment prioritization, etc.'
- Requires open discussions and trust.

c) How could governance be improved to more effectively address knowledge needs at all scales, from local to regional to global?

- Translate information (beyond just data) into accessible and usable indicators that are then followed-up on at the local/site level (with adaptive planning and management).
- 'People and governments need to be involved in or engage with the co-identification to co-designing measures to address knowledge needs and governance. It requires a multi-level approach to identify the different knowledge needs through collaborating with people in policy and practice (e.g. farmers, land-resources users, extension officers, landowners, government officers from different ministries and levels, community leaders etc.). Researchers could follow such a process with a formative evaluation to identify how to support processes that improve governance.'
- Using easily accessible tools and platforms to provide information to multiple users.
- Need for a transparent peer-reporting/learning mechanism to incentivise greater collaboration
- 'Allocation of adequate resources (labour, skills, money, time etc.) and recognising people's contributions to governance (e.g. societal merit award, funding support) and recognising local institutions, especially indigenous norms and institutions. We need to examine the scale-fit or mismatch, to identify common perspectives as a way to leverage governance and address areas, where involved actors have different opinions/positions on land resources use and governance.'

Good governance =

- 'determining areas where cross-sectoral conflicts impact directly on land outcomes;
- it is about identifying local institutions that are essential actors in land management;
- it is about reviving or supporting traditional practices that local people have used to manage land for centuries;
- it is about acknowledging informal tenure rights;
- it is about establishing innovative cross-scale decision-making bodies that can meet tomorrow's land use challenges;
- it is also about recognising the different actors that intervene directly or indirectly in a landscape to modify it.
- In all cases, improving governance requires a thorough assessment of the context as there is no one way to improve governance to reverse land degradation or promote restoration.'

- Formal cross-scale and interdisciplinary monitoring is necessary within specific institutions and with digestible summaries
- ‘Effective governance relates to proper alignment of policy, institutions, programs and their implementation in line of the contextual factors (stakeholders and their needs/aspirations).’ – need for a holistic approach

2. Raising awareness on responsible consumption, production and trade at all levels

a) *Example of raising awareness of land degradation issues*

- ‘The government of Canada's 2019 recently released the 2019 revised Canada [Food Guide](#), which takes nutritional science, social science and incorporates environmental implications in its guiding principles as well. This indirectly impacts land degradation issues by providing guidance to Canadians on not only what nutrients to consume, but how to consume responsibly - it includes information to assess food marketing strategies -giving culturally relevant considerations, and with consideration for environmental issues by increasing plant based foods.’ (+ <https://www.foodguideconsultation.ca/guiding-principles-detailed>)
- The importance of logos; the example given is the FSC certification logo

3. Strengthening capacity on land information systems, sustainable land management and science policy practice interface

b) *What are the necessary conditions to improve the Science Policy Practice interface at all scales including the local actors?*

- Good brief and responsible institutions
- Example of protected area management in Egypt – where they devised the strategic plan in cooperation with the local community (including a public consultation) and the scientific community.
- Consensus at the local level is what we should focus on
- ‘Target audiences need to include end-users/ inhabitants but in a way that their local and ancestral knowledge, especially concerning indigenous people and local communities, is more valued and taken into consideration in large-scale data collection and analysis initiatives esp. in multicultural territories/countries. In this regard, ongoing and new initiatives need to strive in involving local actors which will demand, above all, an open-mind on the role and importance acknowledged to their understandings, worldviews, respect for nature, sustainability-based concepts, etc.’
- ‘Exchange paradigms. I share our team’s experience with community participation in Central America (Spanish version).[forest regeneration and chorti community-participation in nr mgt in e. guatemala spanish version.pdf](#)’
- Develop local networks (with scientists and policymakers)
- ‘The researchers should have basic knowledge on the local policy processes and challenges related to land degradation and restoration in order to ensure the research policy relevance’
- Invest in new generation of scientists

c) *Land resources, management and information*

- ‘Land resources, land management and land information are three important areas, which deserve consideration with regards to sustainable development. These three areas differ in many ways but must be interlinked to achieve proper and an economic utilization of land for

diverse activities including agriculture, engineering, and technology. In a nutshell, land resources is a general term refers to all components of land in a given environment, these include the soil, plant biomass, water body, vegetation, forest, animals, etc. We use these resources for many economic development; these resources must be preserved and manage properly. This call for what has been considered as 'land management'. Land management refers to preservation, protection, improvement and security of all resources accommodated in a given environment. Information on these two components of land must be obtained primarily to achieve a rewarding economic development. These three areas must be linked together whenever issues related to land degradation are discussed.'

- Downscale and mainstream the SDGs
- The importance of soil across sectors and society à framework for soil evaluation and monitoring

d) How can we make better use of land information systems to address data and information needs on land degradation and restoration?

- Need for indicators that can be understood and used by local communities
- Mapping the degraded lands of the world
- 'Increasing awareness among stakeholders on the link between land information system and its utility for restoration'
- 'Practicing cross-sectoral coordination among land resource-based agencies'; to avoid cross-jurisdictional overlap/trade-offs
- Link land data monitoring and vegetation data monitoring; use vegetation data as proxy

e) The importance of indigenous rights for a sustainable future!

- Incorporating indigenous practices and knowledge into the very idea of sustainability
- 'About 50% of the total area of the planet (excluding Antarctica) is in the hands of indigenous peoples and local communities, according to a study by Rights and Resources Institute - but only 15% of this figure is legally recognized'
- Secure rights and security for indigenous peoples; not just about given them a platform to contribute but also relegating power...
- Recognising the indigenous/local norms and institutions that have helped to safeguard biodiversity
- Reference Elinor Ostrom's work

f) Increasing local end-users capacity to make better use of available knowledge

- Communicating the various individual benefits of being a sustainable farmer (economic and health aspects for example)
- Point to the change that individual actions can contribute to; so as to incentivise action

g) Principles that can help people in the exchange of environmental management knowledge

- Need for principles to guide knowledge exchange
- 'One option to solve this paradox is the so-called jurisdictional approach. It is an approach where a government leads the use of forests in legally defined territories. As national and regional governments, with a focus on land management, this approach should bring together public and private sectors to integrate relevant issues, such as expanding sustainable food supply chains with efforts to reduce environmental damage.'

4. Existing tools and approaches to promote or get inspired from

a) *Environmental impacts from soil degradation*

- 'Land degradation could negatively affect human health like mechanical noises (vehicle noises). Mechanical (high) noises negatively affect quality of life of inhabitants in urban areas. Natural sounds as tree and water sounds are thought to increase quality of life of inhabitants in urban areas. A trans-disciplinary project at European level is as follows: <https://cordis.europa.eu/project/rcn/104647/factsheet/en>'
- 'Awareness on the extent to which soil degradation has impacted human well being and how best practices and useful policies could halt detrimental practices and processes is therefore imperative.' + 'in addition to FAO and UNCCD, other platforms such as the Global Soil Partnership (GSP), the Intergovernmental Technical Partners on Soil (ITPS) are or could facilitate Awareness on the Environmental impact from soil degradation.'

b) *Integrative approaches -Transdisciplinary initiatives and platforms*

- 'The European Mapping and Assessment of Ecosystems and their Services (MAES) programme (<https://biodiversity.europa.eu/maes>) is a multidisciplinary based approach to assess the ecosystem services of the member states. The preparation of the map is a requirement for all the EU member states along major, commonly developed concept to enable the assessments to be merged to a European level in the future. The assessment uses a four level cascade model there the first level is the state of the biota, the second level is the potential ecosystem service, the third is the actual level of use of the given ecosystem services, and the fourth level is the human well being that the given ecosystem service provides. The outcome of the mapping will be used to plan green infrastructure development. The MAES approach is a good example of how to include ecosystem services in land restoration.'
- 'As a result of the H2020 INSPIRATION project (CSA) on dissemination of the SRA, a SOILveR Platform wants to constitute a long-term network that assures future generations of sustainable soils and land, by developing and sharing relevant knowledge on the sustainable use and management of soil and land. This mission will be implemented through strategic objectives, among which the implementation of the Funding Platform's strategic research agenda (as a starting point developed based on our INSPIRATION agenda) through transnational, collaborative calls.' (www.soilver.eu)
- 'I think it is pretty important too mentioned the amazing work that young people have been developing to stop deforestation in Asia, Africa and LAC such as Global Youth Biodiversity Network - GYBN which has been leading amazing regional workshops with youths from India, Brazil, Colombia, Mexico, among others. In this link you can read more about it: <https://www.gybn.org/>'
- 'The LRP Toolbox is a freely accessible online source for a range of stakeholders, directly or indirectly involved in land use planning. The Toolbox contains a comprehensive number of existing tools and approaches that are used in land resources planning, land degradation and restoration. The overall goal of the Toolbox is to make potential users aware of the existence of these tools, facilitate access to their information, and assist with the selection of those tools that meet the requirements of different stakeholders, operating at different levels, in different regions, and in different sectors. See the users' guide and more information at this link: <http://www.fao.org/land-water/land/land-governance/land-resources-planning-toolbox/category/en/>.'

c) *Mobilizing biodiversity data to support knowledge on land degradation and restoration*

- 'Lack of basic data on which species occur in a particular area or ecosystem of interest, and how species composition changes over time. The accumulation of more than one billion species occurrence records for free and open access through GBIF - the Global Biodiversity

Information Facility <https://www.gbif.org/> - provides an important resource for helping to address this type of gap.' + 'The data available through GBIF includes significant gaps and biases such that some regions of the world and some taxonomic groups are greatly under-represented compared with others.' + 'GBIF is currently working on guidance to help our community prioritize data mobilization based on existing gaps and knowledge needs, and IPBES clearly has a key role in this regard.'