Web conference
Land Degradation and Restoration Knowledge Gaps & Needs

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UN environment

United Nations Educational, Scientific and Cultural Organization

Food and Agriculture Organization of the United Nations

UNDP

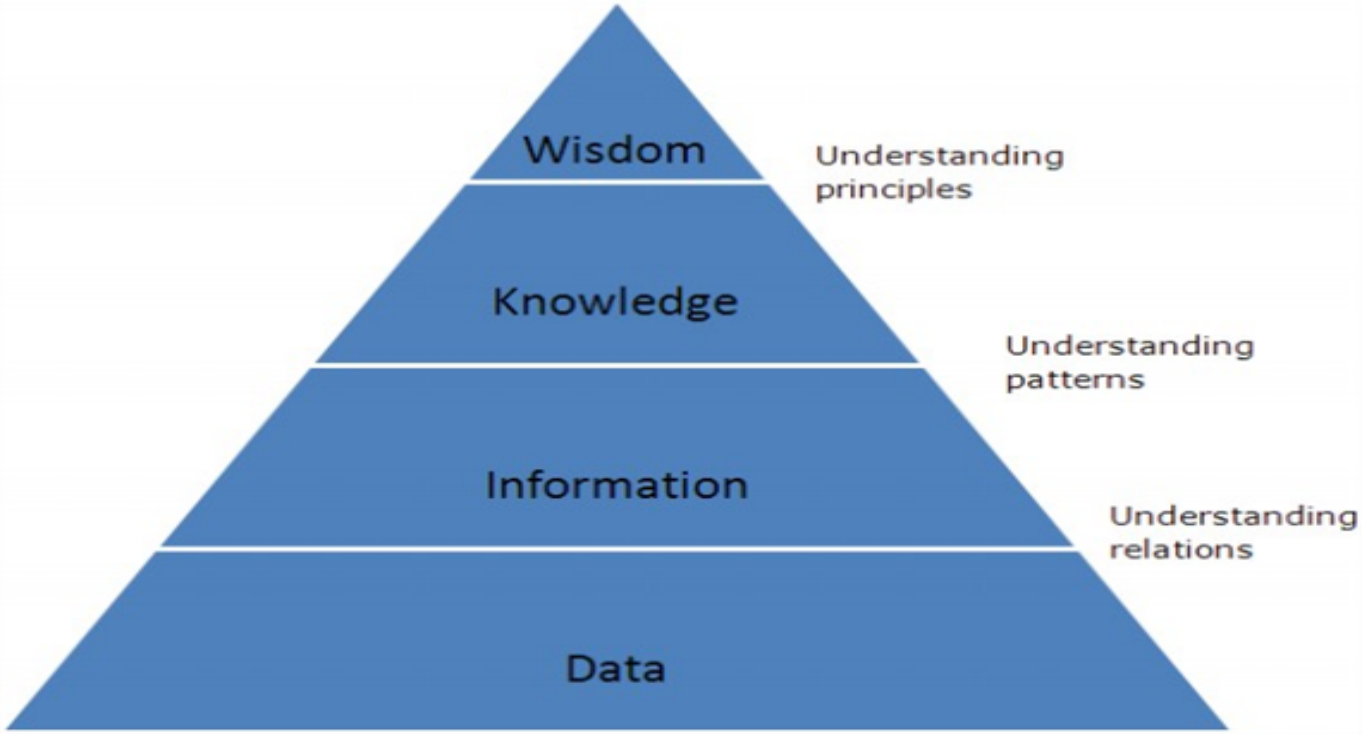
Objectives

- To introduce the structure used to discuss knowledge gaps identified in the Land Degradation and Restoration Assessment.

- To introduce the main discussion areas and topics presented, and provide entry points to trigger conversations and discussion for the first week.

Knowledge Pyramid

Knowledge in this web conference will include all levels of the Knowledge: Data, Information, Knowledge (including Scientific knowledge and other types of knowledge)



Knowledge Gaps and Knowledge Needs

This web conference differentiates between
"Knowledge Gaps" which include a lack of:
data
Information
Research studies
Other types of knowledge sources

and arises from knowledge provided by the authors of IPBES assessments

"Knowledge Needs" which are:
a prioritization of the knowledge gaps identified by the potential users, experts and knowledge holders

Knowledge Needs are specifically related to
policy contexts and
targeted objectives

Definitions used within the Assessment

"LAND DEGRADATION" is defined as the many human-caused processes that drive the decline or loss in biodiversity, ecosystem functions or ecosystem services in any terrestrial and associated aquatic ecosystems. "DEGRADED LAND" is defined as the state of land which results from the persistent decline or loss in biodiversity and ecosystem functions and services that cannot fully recover unaided within decadal time scales. "Degraded land" takes many forms: in some cases, all biodiversity, ecosystem functions and services are adversely affected in others, only some aspects are negatively affected while others have been increased. Transforming natural ecosystems into human-oriented production ecosystems—for instance agriculture or managed forests—often creates benefits to society but simultaneously can result in losses of biodiversity and some ecosystem services. Valuing and balancing these trade-offs is a challenge for society as a whole (Figure SPM.3; Figure SPM.10).

"RESTORATION" is defined as any intentional activity that initiates or accelerates the recovery of an ecosystem from a degraded state. "REHABILITATION" is used to refer to restoration activities that may fall short of fully restoring the biotic community to its pre-degradation state {1.1, 2.2.1.1}.

Proposed knowledge gaps- Main discussion areas and topics

1- related to data, information management, monitoring, indicators and scales that are limiting the current understanding of status and trends of land degradation and restoration

Proposed topics for knowledge gaps:

1.1 Data availability and coverage

1.2 Monitoring

1.3 Evaluation/verification systems and Monitoring of policy effectiveness

1.4 Indicators

1.5 Scaling

Proposed knowledge gaps- Main discussion areas and topics

2- related to drivers/causes of land degradation

Proposed topics for knowledge gaps:

2.1 related to indirect drivers/ linkages with distant social, economic and political processes

2.1 related to direct drivers and their interactions

Proposed knowledge gaps- Main discussion areas and topics

3- related to impacts and consequences of land degradation and restoration

Proposed topics for knowledge gaps:

3.1 Better understanding of ecological impacts and consequences

3.2 Better understanding of consequences of land degradation and restoration for physical (including infectious diseases) and mental health and spiritual well-being

3.3 Better understanding of consequences of interactions among land degradation and restoration, poverty, climate change and the risk of conflict and migration

3.4 Better understanding of consequences and solutions to land degradation and restoration for local and Indigenous communities

Proposed knowledge gaps- Main areas of discussion and topics

4- related to facilitating factors and possible solutions for avoiding land degradation, and restoring land (reducing and reversing land degradation)

Proposed topics for knowledge gaps:

4.1 Better understanding of various enabling Institutions and governance for avoiding land degradation and restoring land (reducing and reversing land degradation) in different social, cultural, economic and governance contexts

4.2 Better understanding of the importance and role of local and indigenous communities' knowledge and engagement. This would aim to achieve a more broadly-based understanding of the causes and consequences of land degradation, its progression over time (including future projections) and potential solutions

4.3 Better understanding of Interactions amongst policies and land and resource management practices to address Sustainable Development Goals and other multilateral agreements

4.4 related to Models and Scenarios of land degradation and restoration

Proposed knowledge gaps- Main areas of discussion and topics

5- related to transdisciplinary approaches

Proposed topics

5.1 Human and Nature relationships and societal changes

5.2 How to incorporate in scientific studies and assessments other types of knowledge (ILK, Faith based knowledge systems, etc.)

5.3 Baseline and reference state

5.4 Evaluation of restoration response effectiveness

Example of trigger

Topic 4.2: Better understanding of the importance and role of local and indigenous communities' s knowledge and engagement

Local and indigenous communities hold significant knowledge and understandings of both the consequences of land degradation and on solutions to overcome/reverse land degradation. The importance of these communities' knowledge is not well accepted and not well included in restoration decision making, planning and implementation or in policy documents which aim to avoid, reduce and reverse land degradation. Traditional knowledge and practices, developed from centuries of connections to, close associations with and understandings of land and water can provide solutions to improve the state of degradation and enhance restoration of landscapes. However, such solutions which can operate at local levels are, more often than not, unrecognised or included and considered when seeking viable solutions.

Thank you!

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