RESEARCH FOR ACHIEVING LAND DEGRADATION NEUTRALITY

Achieving the sustainability goal of land degradation neutrality requires new governance, management, monitoring and assessment tools

Why we need to act?

The UN Sustainable Development Goals (SDGs) ask for Land Degradation Neutrality (LDN) by 2030. Land degradation is a global issue and encompasses a variety of impacts including erosion, contamination, soil sealing, land take, desertification. Trends and drivers are different within countries, regions and on the local level. Solutions to measuring and monitoring land degradation are predominantly needed at the local level. Research must contribute to develop scientifically based, measurable and locally applicable indicators that enable regions and countries to evaluate the progress in achieving LDN.

What we will gain?

The global conceptual framework of LDN is aimed at balancing losses and gains of land-based natural capital, including ecosystem services. New degradation must be compensated for by reversing past degradation elsewhere to achieve net neutrality. Research will assist in developing a deeper understanding of the LDN concept and will create a scientific foundation to guide LDN implementation and monitoring. The pros and cons of land use and land management activities will be better understood in terms of their potential to degrade or restore land and associated ecosystem services. Countries, regions and communities will learn how to adjust LDN to local conditions and gain tools to monitor and control LDN. Policy makers will be better able to identify the most effective policy areas for fostering LDN in order to support ecosystem functions and services and thereby enhance food security.

Key research areas

INSPIRATION's bottom up approach revealed pressing research needs for understanding land degradation. Examples are given below (see INSPIRATION's SRA for further details):

- Integrated Environmental Assessment and Soil Monitoring for Europe Monitor changes in soil quality with respect to levels impacting soil function, food security and human health and to measure progress on land degradation neutrality.
- Policies to effectively reduce land consumption for settlement development Knowledge on how to design effective policies given institutional constraints
- Sustainable management to restore the ecological and socio-economic values of degraded land Develop and demonstrate and region-specific restoration and rehabilitation approaches for valorization of different types of degraded areas.
- Prevention of erosion and landslides, natural hazards Develop alternative land use management strategies that will increase natural resilience to floods, fires, land subsidence, erosion and landslides
- Circular land management Understand the patterns of behaviour and interdependencies of stakeholders

How to become active?

Get in contact with your INSPIRATION national contact point to express your interest in funding research on Land Degradation Neutrality.

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Contact your INSPIRATION national contact at www.inspiration-agenda.eu for further information on this topic.