## ROLE OF MONITORING FOR LANDSCAPE RESTORATION

The world's ecosystems are in crisis. Deforestation and the degradation of land across the planet is accelerating climate change and biodiversity loss, harming livelihoods and putting humanity at risk.

By 2050, it is estimated that 4 billion people will be living on degraded landscapes. Already over 3.2 billion people are highly vulnerable to land degradation and the serious threat it poses to their livelihood, food and nutrition security (IPBES, 2018).

Massive investments in restoration are needed now more than ever before.

Given the extent of land degradation at both the local and global scale, it is critical that restoration efforts are effective in the long term and have multiple benefits. Key to this is developing methods and approaches that are successful in monitoring and building capacity across various different communities, landscapes and restoration projects.

The challenge - and opportunity - is to scale locally appropriate options with large numbers of farmers to ensure sustainable land restoration.

For this, we need innovative, scalable and complimentary tools and methods to measure and track not only greening, but also the underlying drivers of land degradation, in real time and with multiple stakeholders.







# Monitoring frameworks must address barriers to data collection:



Assessing variability



Cost



Data sharing/accessibility



Data reliability



**Timeliness** 



Capacity



Stakeholder engagement



The combined impacts of land degradation and climate change mean that landscape restoration is urgently needed at scale.

This cannot be achieved without engaging farmers and communities directly in the restoration process.



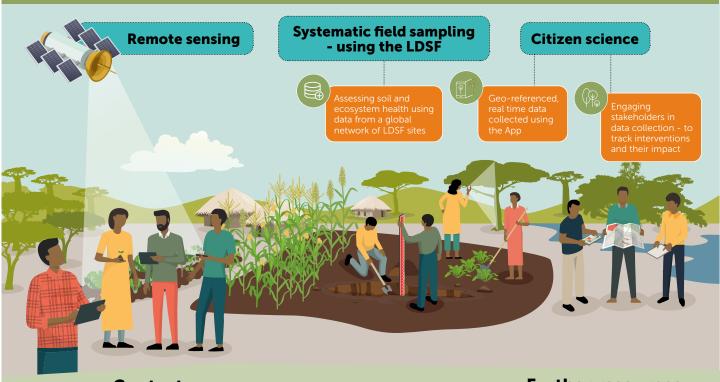
### **Key Message**

- There is a real opportunity to integrate systematic assessments of ecosystem health with citizen science to track the interventions on the ground and also the understand the processes (of degradation and restoration)
- 2 In order to contribute to the restoration agenda, we need to assess multiple indicators at relevant spatial scales
- We have the tools and methods to measure and track not only regreening, but also the underlying processes of land degradation and the impacts of project interventions on soil health.
- 4 This means that we can measure the effectiveness of interventions on SOC sequestration and climate change mitigation, for example.
- 5 Developing capacity in target countries to conduct assessments (and see the value) and to interpret the results/data.

Through structured stakeholder engagement using the SHARED process, the data and evidence are fed back into the decision making cycle through co-learning and decision dashboards.



By combining multiple innovative monitoring techniques, we can understand drivers of land degradation and better target and track restoration progress in real time with multiple partners



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#### **Further resources**



Soil and Land Health



**LDSF Resource Blog** 



**LDSF Field Guide** 

This evidence series was developed by researchers and practitioners spearheading the new Landscape Restoration TPP, with support from GLF **www.globallandscapesforum.org** 





