



FAO launches platform to measure ecosystem restoration progress

09 June 2021



Rome – FAO today launched a new online platform that will support countries and communities to monitor progress in restoring damaged and degraded ecosystems as the UN Decade on Ecosystem Restoration 2021-2030 officially gets under way.

Ahead of the launch of the UN Decade later this week, countries have committed to restoring up to 1 billion hectares of land - an area roughly the size of China – under various international agreements including the Bonn Challenge.

Launched at the Global Landscapes Forum Africa Digital Conference today, FAO's new Framework for Ecosystem Restoration Monitoring (FERM) will help measure restoration efforts at various levels across key ecosystems and generate the data needed to drive private and public investments in restoration.

"Our planet is in urgent need of ecosystem restoration, and to do this will require both effective restoration projects and investments," said FAO Senior Forestry Officer Julian Fox.

"The new FERM platform will have a pivotal role in building trust and momentum for restoration efforts, which in turn help address climate change, land degradation and biodiversity loss, as well as working towards many of the Sustainable Development Goals."

Geospatial technology

The FERM uses the latest geospatial technology to provide the essential restoration data needed by countries, project designers and investors. It builds on, and was developed in close collaboration with, FAO's Hand-In-Hand geospatial platform, and integrates key data and platforms from across FAO's technical divisions.

"The FERM will collate and integrate data from different platforms to help provide a snapshot on the progress of restoration for different ecosystems," said Fox.

Along these lines, the FERM integrates, the Drylands Restoration Initiatives Platform (DRIP), which will allow users to compile, analyse and share data for restoration projects in drylands. Drylands are critical ecosystems in need of restoration, and measuring progress is key for initiatives such as the Great Green Wall, Africa's flagship initiative to combat climate change and desertification and address food insecurity and poverty.

FERM users are able to interact with key geospatial information related to soil, water and vegetation, and can upload national and sub-national data, enabling integration of geospatial data locally, nationally, regionally, and globally. The platform also includes functionality for creating compelling restoration impact stories, based on user-specific geospatial data for a defined area of interest.

In addition, the FERM platform includes an interactive forest restoration planning tool that allows decision makers to assess the best locations for forest restoration, taking into account both biophysical and socio-economic priorities, and considering benefits, costs and risks. The tool is based on FAO's System for Earth Observation Data Access, Processing, and Analysis for Land Monitoring (SEPAL), which is integrated with the FERM.

"For advanced FERM users, the SEPAL integration enables on-the-fly composite/mosaic creation, drawing on the historical archive of Landsat imagery, the frequency of Sentinel-2 imagery and the cloud-penetrating abilities of Sentinel-1," said Fox.