



Training in monitoring and assessment (land degradation analysis) for Uganda country project team

What approach did the team take to achieve the impact?



- **Conservation International** has developed tools for monitoring and assessment of ecosystem and environmental conditions, which will be used during this training. These include **Trends.Earth**, and **Google Earth Engine (GEE)**.
- **Trends.Earth (formerly the Land Degradation Monitoring Toolbox)** is a platform from Conservation International for monitoring land change using earth observations in an innovative desktop and cloud-based system. The tool also supports countries in analyzing data to prepare for their reporting commitments to the United Nations **Convention to Combat Desertification (UNCCD)**. To assess the area degraded, SDG Indicator 15.3.1 uses information from the following 3 sub-indicators:
 1. Vegetation productivity
 2. Land cover
 3. Soil organic carbon
- **The training was administered virtually combining two main approaches, power point presentations** and hands-on sessions where participants were taken through all the steps starting from installing QGIS, understanding the datasets within the trends.earth, calculation of the individual sub-indicators, land degradation analysis, interpreting the excel files and the maps and finally generating land degradation maps. Throughout the sessions, participants actively asked questions.



What impact did the effort have and on/for whom?

- **Participants understood and apply GIS and remote sensing skills** in routine data collection and analysis e.g. in land use land cover.
- **Conduct analysis to establish baselines for their project** for the relevant GEF 7 Core indicators and Project targets.
- **Conduct LD analysis** (including land productivity, land cover and soil organic carbon) on the project sites using **Trends.Earth**.
- **Collect, analyze and map data farm and vegetation cover data using the Vital Signs tools.**
- **Access complementary data from Global data sources** to help in assessing progress of the project.
- **Measure Project's progress in achieving its targets on:**
 - Land restoration
 - Carbon emission estimation
- **Supply information on ecosystem improvements** and socio-economic status to be used by policy makers.
- Train others on the use of remote sensing for project monitoring and on the use of **Trends.Earth tools**.





What were the main ingredients that led to the impact?

Despite the challenges of internet connectivity and participant availability (It was towards the end of the year and participants were busy to close the year) were able to achieve what we intended. This was possible due to commitment from the Uganda team to take part in the virtual training. Slotting time early in the morning or late in the evening. Another strategy was to actively use WhatsApp where we could engage before and after the training. This gave us the opportunity to not only interact but solve issues the Uganda team were facing on trends.earth, interpretation of the results among others.

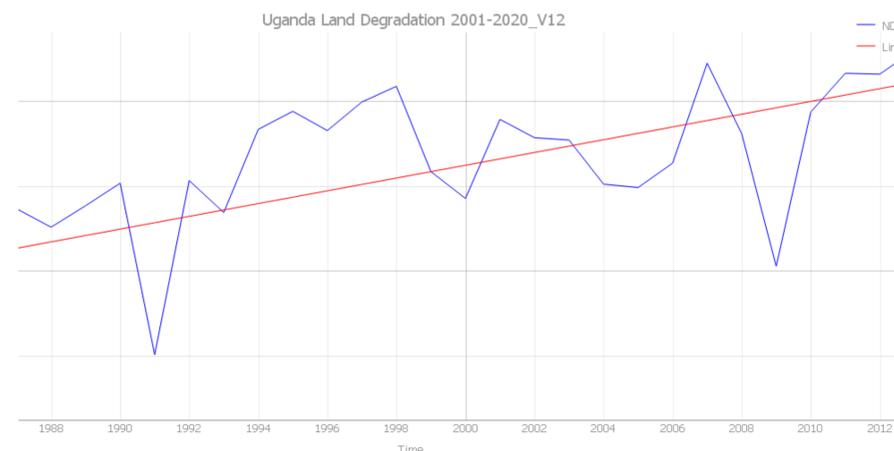
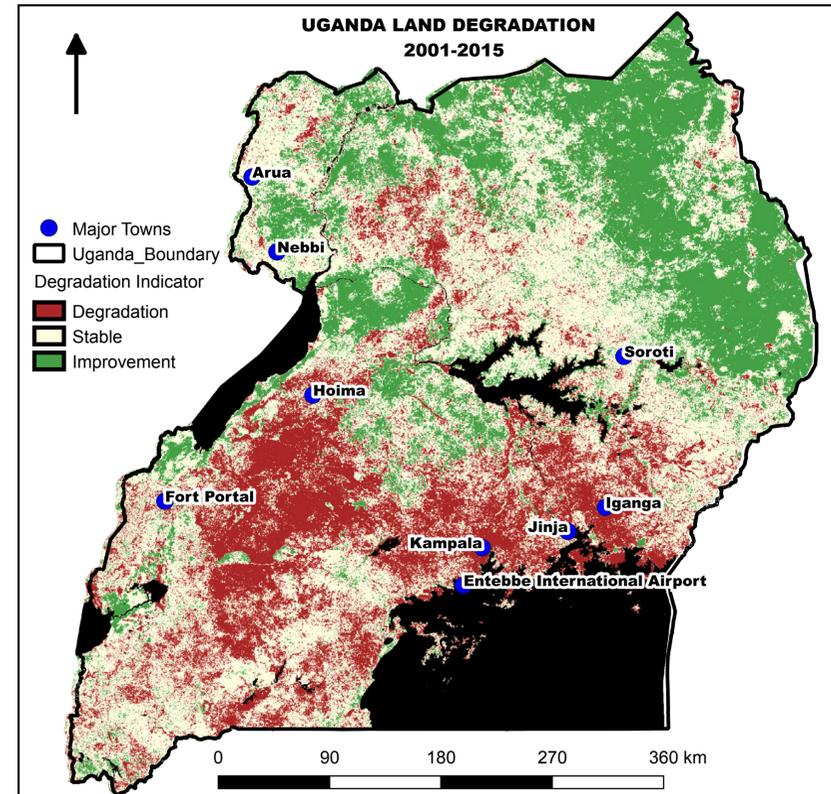
We recommend continuous practice on using remote sensing tools to derive data for monitoring and assessment of the project. Vital Signs team will continue to train and backstop the Uganda RFS team to apply remote sensing tools such Trends.Earth in their monitoring and assessment.



Where or under which circumstances could this effort be scaled?

We were looking forward to a physical training that will allow more participants to take part in particularly those from the fields in Karamoja. There is also a possibility of merging several countries together during both physical and virtual trainings.

The greatest challenge to achieving this would be due to the fact that some countries were already at the tail end of their projects and synchronizing various countries would also be a tall order as they are at different phases of their projects.



What are the main lessons that were learned?

While virtual training are an alternate to physical training, a lot is lost in terms of interest of the participants to be part of the training, there is the lack of face-to-face interactions which hampers proper understanding of concepts and ideas.

Consequently, it is highly encouraged that as we plan for virtual trainings, there is a need to conduct physical training as this comes with numerous benefits including increased active participation among others.