



Food and Agriculture
Organization of the
United Nations



FAO elearning
ACADEMY



International Technical Webinar
Forest data and free open-source solutions
for Climate Action

Wednesday 07 July 2021
14:30 - 16:00 (Rome time)

©UN-REDD Programme

FAO elearning
ACADEMY
elearning.fao.org

agreenium

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

FUTURE
FOOD
INSTITUTE

Forest data and free open-source solutions for Climate Action

07 July 2021

Recording Link: <https://youtu.be/Nib3b4LaPuw>

Questions and Answers

For more information about the international technical webinars series, please visit
the [FAO elearning Academy website](https://elearning.fao.org)

DISCLAIMER

This document is a compilation of questions relevant to the topics covered during the International Technical Webinar, raised by the participants, and answers provided by the experts from FAO or partner institutions during the event. The answers provided in the Q&A document only reflect the personal views of the experts and do not imply the expression of any opinion whatsoever, endorsement, nor recommendation on the part of FAO or the partner institutions involved in the webinars. FAO reserves the right to alter, limit or discontinue any part of this service at its discretion. Under no circumstances shall FAO be liable nor held responsible for any loss, damage, liability or expense suffered that is claimed to result from the use of information posted on this site, including without limitation, any fault, error, omission, interruption or delay.

- 1) I am REDD + and REDD+ Advanced certified. The NFMS thus, is an important aspect for me to learn all about - as I am looking to be a part of creating, implementing and then evaluating systems that are part of the REDD system. Are there follow ups or any addenda to the REDD programme?**

So far REDD+ requirements are staying the same in the transition from MRV to ETF, however the latest information will be found on the UNFCCC website e.g. after COP26 at the end of the year there may be an update.

- 2) How do you become certified in REDD?**

Of interest to you may be the training offered by the UNFCCC to become part of the Roster of Expert, which includes also REDD+: <https://unfccc.int/process-and-meetings/transparency-and-reporting/training-programmes-for-experts/technical-analysis-of-biennial-update-reports-from-developing-country-parties/training-for-the-technical-analysis-of-biennial-update-reports>

- 3) Is there a course or training available to use the tools which can be used to quantify forest cover loss/land-use changes? If so, could you please provide the links to those tools and associated trainings?**

There are several tools for this purpose. The Open Foris suite tools are all available at <http://www.openforis.org/>. Applicable tools are Collect Earth, Collect Earth Online, EarthMap, and SEPAL. All software contains a User Manual and, in some cases, extra tutorials.

Sites to follow:

GFOI: <http://www.fao.org/gfoi/news-events/events/en/>

OF Collect Earth: <https://www.youtube.com/channel/UCxu8NZPvPxGBjBp0g6LCV4w>

EarthMap: <https://help.earthmap.org/>

Collect Earth Online:

https://drive.google.com/drive/folders/14xqYHu4aP3PRV7HY3EBXj851o_doAhJc

- 4) Is there any web-based platform developed to monitor using open source satellite imagery?**

Yes, Open Foris offers SEPAL platform with access to multiple free satellite image repositories. Also, Collect Earth Online provides methods for sampling-based assessment with access to free RS data.

- 5) Can we look forward to a learning which would be about harnessing Remote Sensing and Geospatial Analysis to aid the REDD+ framework at all levels - start to end? I think RS is a good way to corroborate information and evaluate changes even as they happen, also comparative evaluations become easier and so does mitigation, management of all aspects of forestry-related data (inclusive of land, cover, types, vegetation, water, ground, animals, habitation, people, etc)... So can**



we look forward to integrated learning that encompasses these learnings to create strategic solutions or management guidelines?

Please take a look at <http://openmrv.org/home> whether this is something that you are looking for.

6) Are the ground monitoring plots permanent? Do you intend to make these sample plot observations opened in Ghana?

The coordinates of all the plots are available. As and when needed, the plots are visited. Ordinarily, this is not the best approach as it needs to be checked periodically as appropriate. However, as I indicated earlier in the presentation, the challenge mainly is funding. As we develop an NFMS web portal, such coordinates may be shared for regular checks.

7) Could you provide further information regarding the tools, datasets and trainings available to identify land-use change (deforestation) associated with a specific location (GPS coordinates or country-level data) to assess land use change associated with the supply-chain of a company based on its procurement data?

The SEPAL platform (<https://sepal.io>) offers a wide range of tools and solutions to monitor forest change, at scales ranging from field plot to national or regional. Documentation available at: <http://www.openforis.org/tools/sepal/>.

8) Is there any French documentation for Open Foris?

For most of the tools, not yet. Please see Tools under www.openforis.org There are links to all tutorials too.

9) Will we receive an email informing about the training in Arena in September? Or do we have to look in the web?

We will announce this through FAO networks. The number of participants for the first training will be limited (due to a bit limited access to RStudio Server!), but we will record these sessions and prepare videos. These will be available via: <http://www.openforis.org/materials/>

10) Is the Arena platform available for the whole world to work with or only for certain specific regions?

It will be available to all regions.

11) ARENA has its own configured GIS system to manipulate data - or uses ARCGIS or QGIS plugins? Can data from here be used in external systems?

Not yet connected to these GIS tools. Spatially located (point) data can be exported (as CSVs) into external systems.

12) Are there going to be national level datasets already populated on this tool to be analysed?

We will add a demo dataset with data into Arena, it is not yet there.



Currently, Arena does not contain any real country level datasets. This tool is designed to host users' datasets and these are private in Arena.

13) Can previous survey data be entered and seen for revisit plots? For example, if a crew shows up at cycle 2, can they see what was recorded at time 1? same with tree data?

Currently not, we need to add this feature into the list of requirements.

14) What is the different between ARENA and collect earth?

Arena is more targeted to handle field survey type of data. Collect Earth is a tool for Land Use/Cover Assessment. In Arena, there are no linkage to remote Sensing materials, yet.

15) Is there a mobile version of Open Foris Arena?

Not yet. First (in next 2 weeks) we will have data import from OF Collect Mobile.

16) Is there any REDD program in Nigeria? how can I get involved?

Nigeria already submitted two reference levels to the UNFCCC (Cross River State and National). The technical assistance to the UNREDD program in Nigeria is completed. Nigeria has recently proposed a GCF readiness program that may open opportunities to pursue with REDD+ work.

17) Why does PNG have two reporting systems and how do these systems interact?

Yes, two systems are part of the MRV. Even though its two separate systems are used to verify the information/data. As well Collect Earth is point based sampling and Terra PNG is wall-wall. Collect Earth is more detailed assessment compared to Terra PNG.

18) Do you use satellite remote sensing data in ARENA? It looks that the in-situ data you collect can be used for training algorithms to enforce forestry monitoring using satellites. From my experience satellites proved to be highly effective in monitoring illegal logging and fire events. For insurance it can help with better risk rating, more accurate underwriting and reducing claim leakage. Great benefits in early estimation of area damaged or lost due to insured events as well as saving time for loss adjusters.

Great question. The idea is not to use ARENA as a tool for processing RS data. SEPAL offers a better platform for that. Data needs to be exported from Arena. We are building an easy method to get (tabular, vector) data back from SEPAL into Arena.

19) There is the need to collect earth mobile data, which can also collect NFI data. please can you clarify how do Arena and Collect earth mobile differ?

Arena is more oriented to host and manage (field) survey data with not access to RS data. Collect Mobile data can be imported into Arena (in 2 weeks from now!), if the survey is imported from Collect.



20) How can I get involved in the REDD program in Iran? you know the Hyrcanian Forests World Heritage property is situated in Iran but is under bad management

Please consult the following web page: <https://www.un-redd.org/>

21) How effective are the tools for biodiversity and complexity monitoring - not just forest cover?

All depends that what is your data. If it is field assessment data, then Open Foris Collect, Collect Mobile, Calc, Arena can be applicable tools.

If you work with remote sensing data, all depends on the type of analysis methods. Please see whether SEPAL can offer any solutions (<https://docs.sepal.io/en/latest/>)

22) Is the OPEN FORIS suite of applications comprehensive or are there more applications to be added in order to complete the suite for all the indicators needed, under the Enhanced Transparency Framework? The real question is does the suite of tools allow for a decentralized type of governance, where the need for a fulltime forester is not necessary? Does the suite allow for only part time consultancy from Forester?

Open Foris tools are not a replacement of human expertise, they are tools to collect, manage, process, and analyze data in order to get information.

Open Foris is an open initiative. There is space for new open-source tools, as separate applications or tools under existing platforms. It cannot be considered “comprehensive” because new ideas, data needs or technical solutions may emerge over the time, but Open Foris suite offers tools for many of those tasks needed when implementing a robust national forest monitoring system.

Useful links

Building global capacity to increase transparency in the forest sector (CBIT-Forest):

<http://www.fao.org/in-action/boosting-transparency-forest-data/en/>

The FAO course on Forests and transparency under the Paris Agreement is available via the link:

English: <https://elearning.fao.org/course/view.php?id=587>

Spanish: <https://elearning.fao.org/course/view.php?id=610>

French: <https://elearning.fao.org/course/view.php?id=616>

Chinese: <https://elearning.fao.org/course/view.php?id=647>

Educational video forests and transparency under the Paris Agreement: bit.ly/30TQSmu

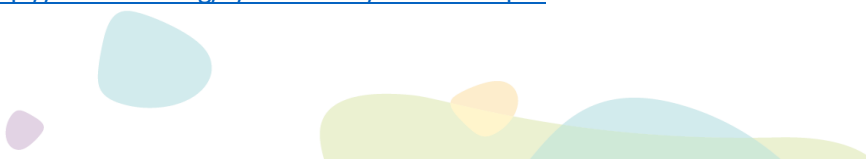
Building global capacity to increase transparency in the forest sector – One year in numbers:

<http://www.fao.org/3/cb3094en/cb3094en.pdf>

Institutionalization of forest data: Establishing legal frameworks for sustainable forest monitoring in REDD+ countries:

English: <http://www.fao.org/3/CB3525EN/CB3525EN.pdf>

Spanish: <http://www.fao.org/3/CB3525ES/CB3525ES.pdf>



French: <http://www.fao.org/3/CB3525FR/CB3525FR.pdf>

Information note - Legal assessment to set up and operationalize a national forest monitoring system in

English: <http://www.fao.org/3/cb3759en/cb3759en.pdf>

Spanish : <http://www.fao.org/3/cb3759es/cb3759es.pdf>

French: <http://www.fao.org/3/cb3759fr/cb3759fr.pdf>

Compilation of case studies on forests and transparency in English, French and Spanish from all regions:

<http://www.fao.org/in-action/boosting-transparency-forest-data/news/detail/en/c/1415104/>

Please visit the **FAO elearning Academy** elearning.fao.org, which offers free multilingual courses on the thematic areas covered in the Technical Webinar.



You can access all webinar recordings [here](#).

<https://elearning.fao.org/course/view.php?id=715>