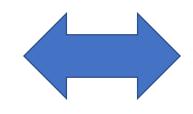
# A collaboration to support countries in improving their national GHGs Inventories







Food and Agriculture Organization of the United Nations

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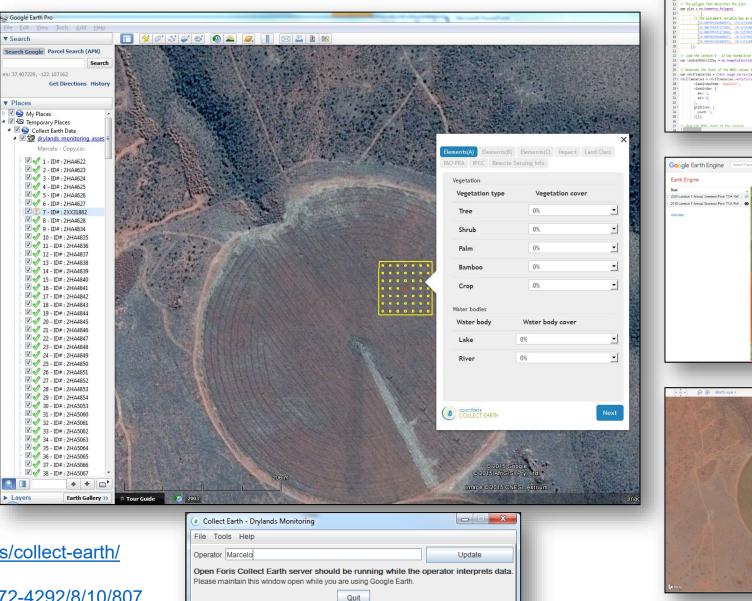
## Collect Earth SEPAL



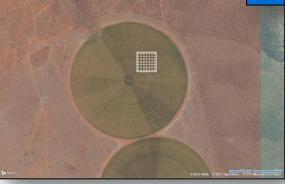
an open source tool for augmented visual interpretation



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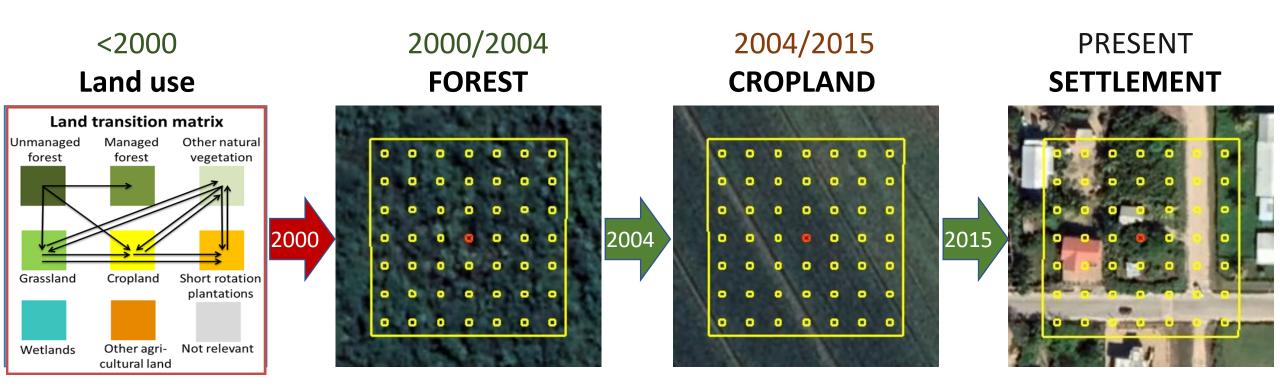
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https://openforis.org/tools/collect-earth/

http://www.mdpi.com/2072-4292/8/10/807

## Consistent Representation of Lands



Collect Earth provides data to measure Land Use and Land Use Changes from 2000. Collect Earth enables users to represent Land Use before 2000 through models regressions

## Collect Earth & IPCC Inventory software

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	• •	Legend • # Dr (1) CO2 net emissions (emissions minus removals)	ocumentation box - 4 Save					
directly in the new IPCC software will be	available early 2023	<ul> <li>(2) Total amount of CO2 captured for long-term storage is to be reported separately for domestic storage and for export in the documentation box.</li> <li>(3) The other halogenated gases for which the CO2 equivalent conversion factor is not available should not be included in this column. Such gases should be reported in the column Other</li> </ul>						
		halogenated gases without CO2 equivalent conversion factors'. (4) When this column is used, gases should be listed separately in IPPU Background Tables and Table 2.11 and the name of the gas should be given in the documentation box.						
		(5) Emissions that are not included in the national total should be reported as memo items.						

\* Cells to report emissions of NOx\_CO\_NMVOC and SO2 have not been shaded although the

Country/Territory: Belize Inventory Year: 2000 Base year for assessment of uncertainty in trend: 1990 CO2 Equivalents: SAR GWPs (100 year time horizon) Database file:

## IPCC Software Wall-to-Wall Land Representation Add-on



### Goal

to support wall-to-wall data collection for land representation and facilitate upload to the IPCC Software



### Timeline Tentative launch: June 2023

#### Join the **Platform** <u>www.sepal.io</u>



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## IPCC Software Wall-to-Wall Land Representation Add-on

#### **1. GOAL: Update IPCC Inventory Software**

Add-on to IPCC software in order to allow countries to have the capacity to prepare a land representation:

- by tracking units of land spatially and temporally (Approach 3)
- or by reporting areas with identified changes in the land stratification for the entire transition period (20 years, IPCC default).

More specific:

1. infer data on land cover/land use through multi-spectral and multi-temporal analysis of remotely sensed image;

2. analyze data collected by producing a time series of annual matrices, for which data are available, of land use and land-use change (approach 2) or a dataset of units of land (approach 3);

3. assess and correct for bias and provides standard error for each area data;



## IPCC Software Wall-to-Wall Land Representation Add-on

4. Gap-fill the time series of annual matrices or datasets of units of land to ensure a complete land representation.

#### 2. STATUS

Collaboration with Boston University, coding part finished with the **C**ontinuous **C**hange Detection and **C**lassification (CCDC) algorithm (Zhu and Woodcock, 2014) to evaluate changes in pixel values over time for a stack of images.

Workflow in SEPAL is ready, using IPCC LCLU categories will be used to monitor changes

**3. EXPECTED TIMELINE** 

Release expected June 2023



# Thank you!

Browse the **Open Foris suite of tools** <u>http://openforis.org/</u>