A collaboration to support countries in improving their national GHGs Inventories
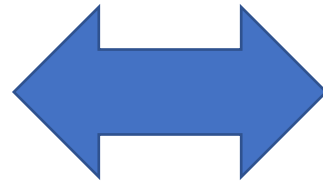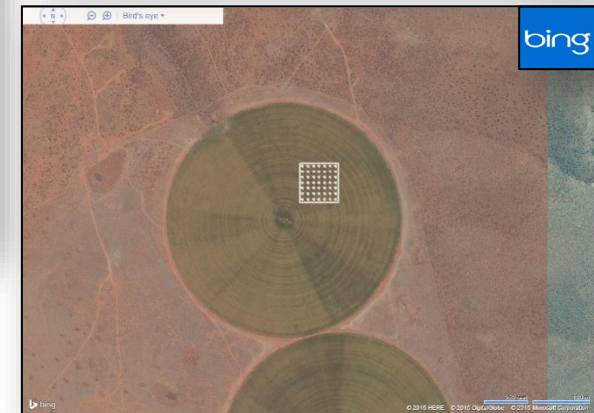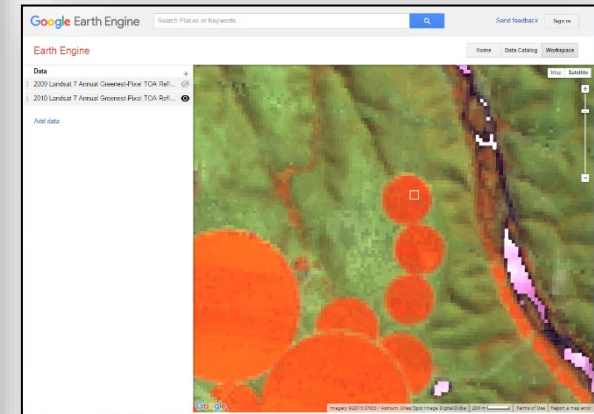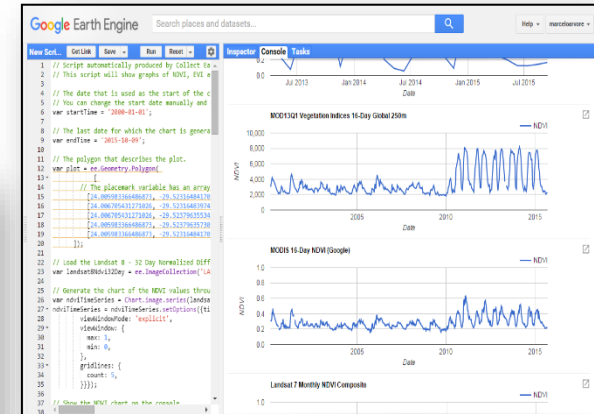
Collect Earth

an open source tool for augmented visual interpretation

Food and Agriculture Organization of the United Nations

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

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

Consistent Representation of Lands

<2000
Land use

2000/2004
FOREST

2004/2015
CROPLAND

PRESENT
SETTLEMENT

Land transition matrix

Unmanaged forest   Managed forest   Other natural vegetation

Grassland   Cropland   Short rotation plantations

Wetlands   Other agri-cultural land   Not relevant
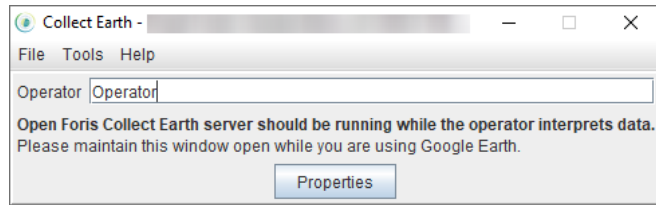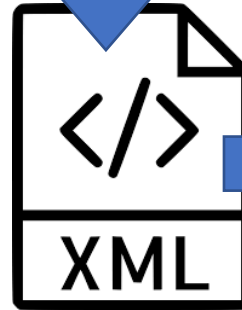
2000

2004

2015
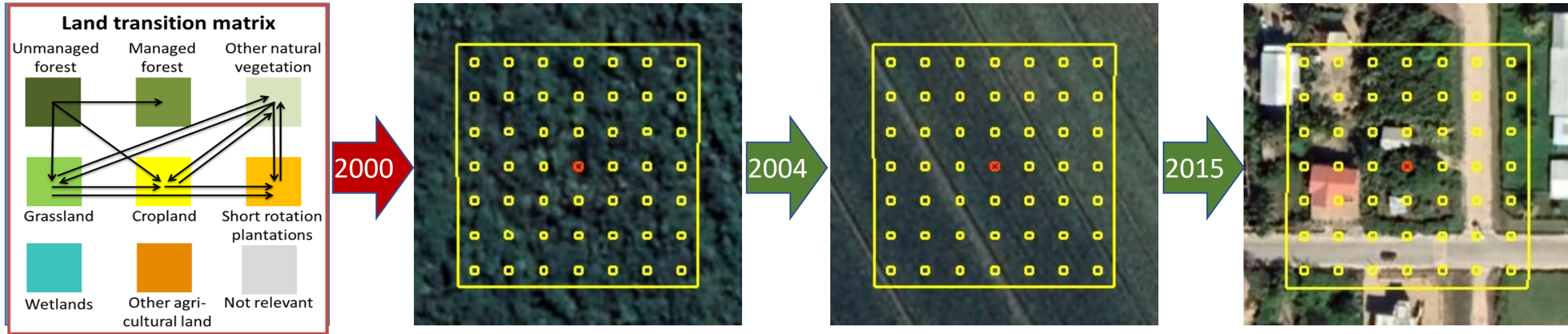
Collect Earth provides data to measure Land Use and Land Use Changes from 2000.
Collect Earth enables users to represent Land Use before 2000 through models regressions

Collect Earth & IPCC Inventory software

CE Export the LU timeseries of the data in the DB to an XML or CSV file (to be specified)

IPCC Inventory Software imports the file building the land representation sheet

The Collect Earth module (adds-on) to export activity data directly in the new IPCC software **will be available early 2023**

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**
www.sepal.io

Food and Agriculture Organization of the United Nations

SEPAL

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;

SEPAL

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

SEPAL

Thank you!

Browse the **Open Foris suite of tools**

http://openforis.org/