



Food and Agriculture Organization  
of the United Nations



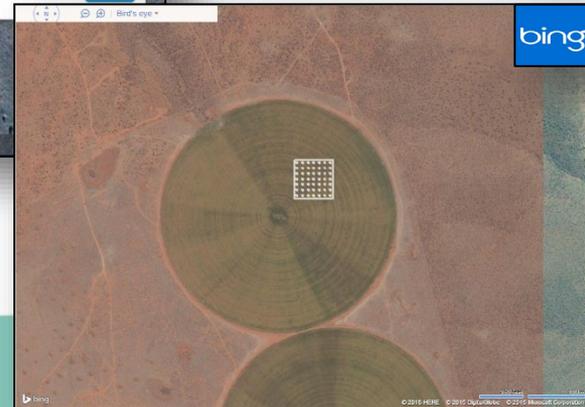
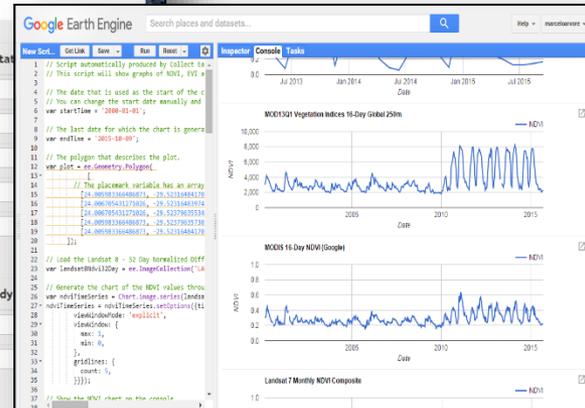
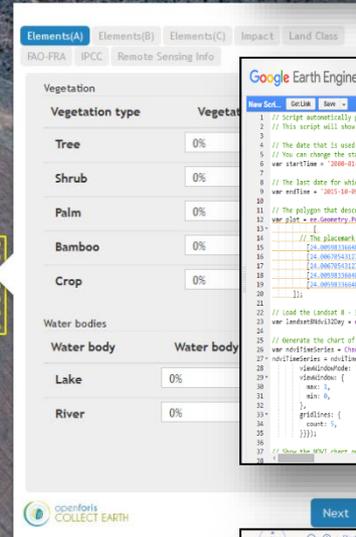
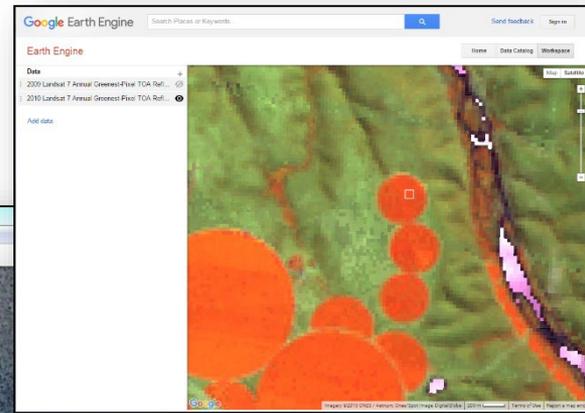
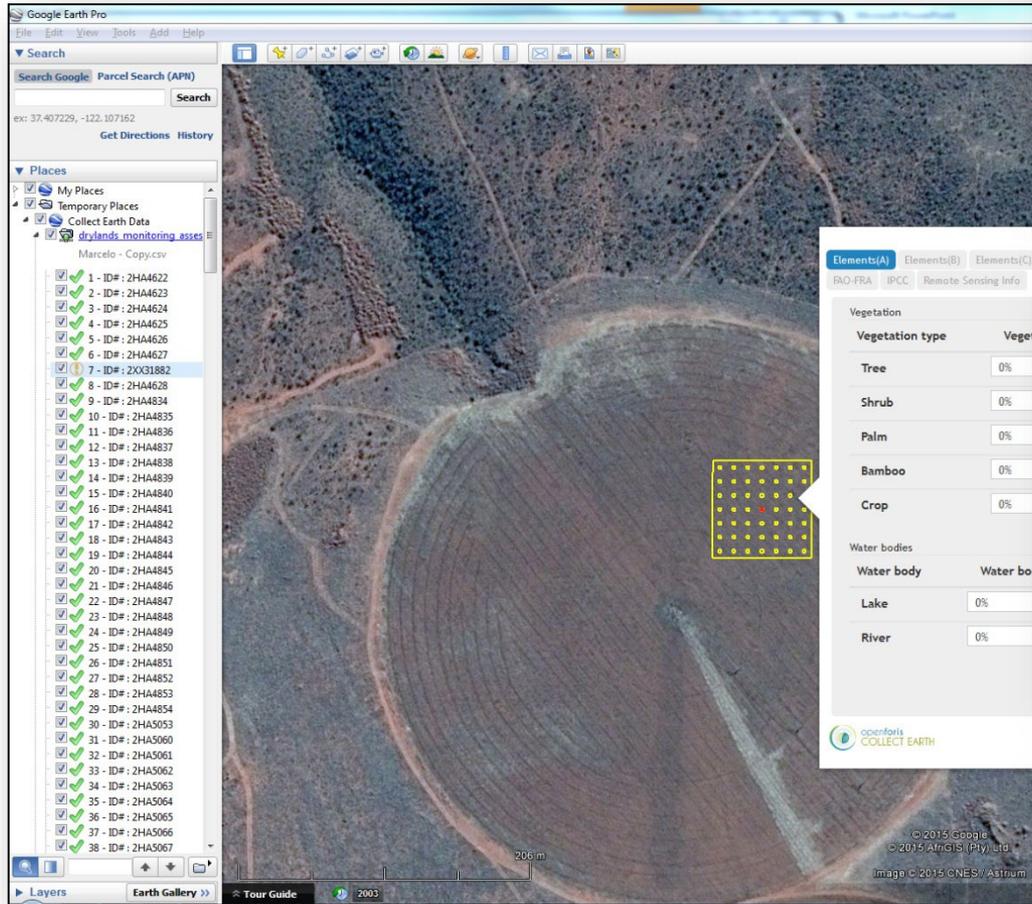
openforis  
COLLECT EARTH

# LAND REPRESENTATION BY COLLECT EARTH THE ADD-ON WITH IPCC INVENTORY SOFTWARE

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FAO CLIMATE CHANGE OFFICE

GFOI Plenary 9-11 May 2023, Rome and online

# COLLECT EARTH



**Collect Earth - Drylands Monitoring**

File Tools Help

Operator

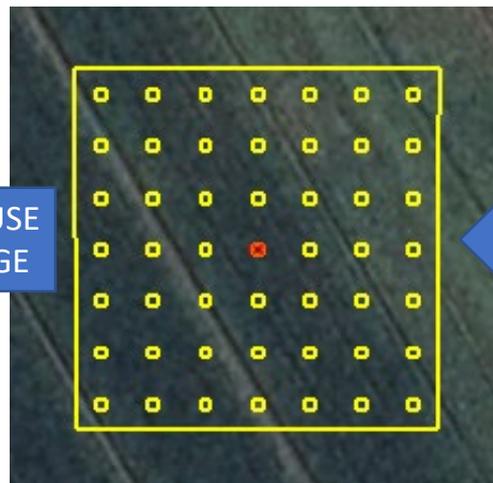
**Open Foris Collect Earth server should be running while the operator interprets data.**  
Please maintain this window open while you are using Google Earth.

# CONSISTENT LAND USE TIME-SERIES

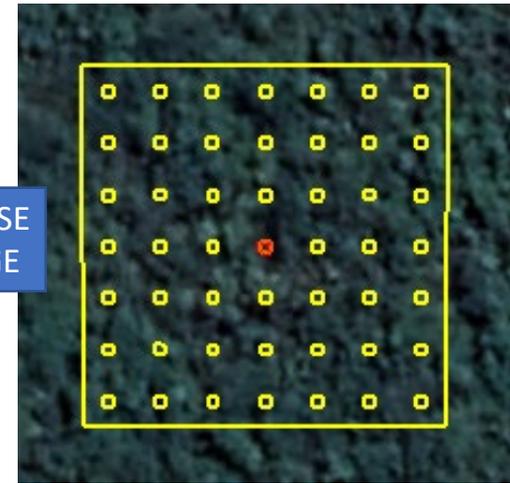
between 2022-2015  
**SETTLEMENT**



between 2015-2004  
**CROPLAND**



between 2004 -2000  
**FOREST**



In Collect Earth the analysis is done starting from the present. Then the user needs to assess if there was LU changes. Each plot is a potential reporting line within the GHGs inventory

# CONSISTENT LAND USE TIME-SERIES

PRESENT (between 2022-2015)  
**SETTLEMENT**

Land Use - 2022

Forest Cropland

Grassland **Settlement**

Otherland Wetland

Land Use Category 2022 - Confidence <sup>i</sup>

Yes  No

Land Use Subdivision - 2022

Built up areas

between 2015-2004  
**CROPLAND**

Land Use Conversion

S > S O > S

F > S **C > S**

G > S W > S

Land Use Conversion - Confidence <sup>i</sup> *C > S Cropland to Settlement*

Yes  No

Land Use Change - Year of change

2015

Previous Land Use Subdivision

Intensive Agriculture

between 2004 -2000  
**FOREST**

Has there been a previous land use? <sup>i</sup>

Yes  No

Oldest Land Use

**Forest** Cropland

Grassland Settlement

Otherland Wetland

Year of the conversion from the oldest land use <sup>i</sup>

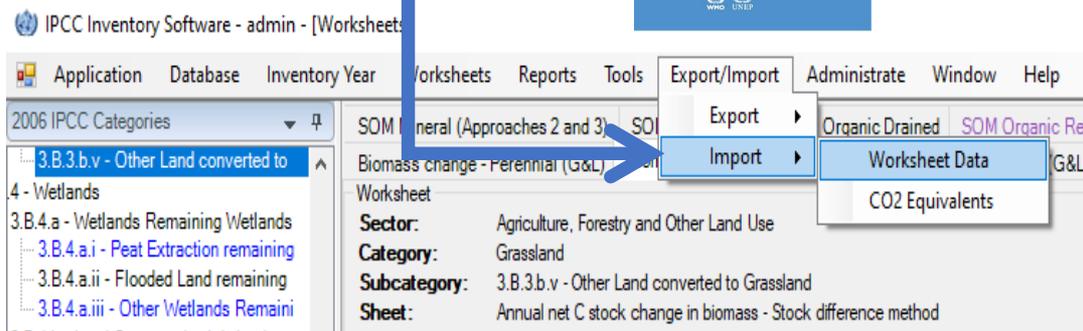
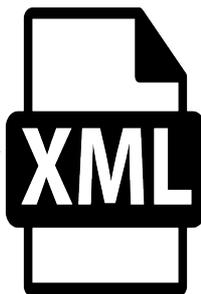
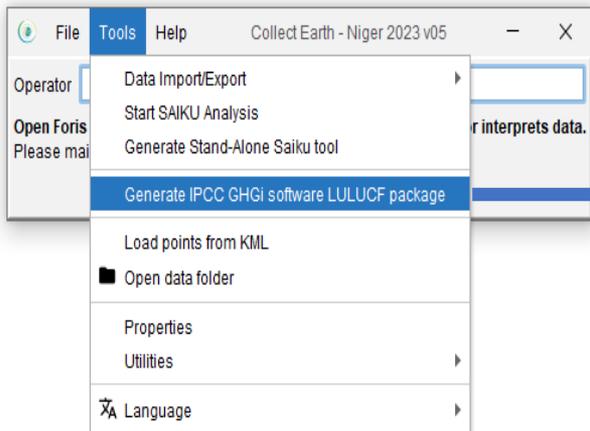
2004

Oldest Land Use Subdivision

Evergreen Oak forest

LU 2022	LU 2021	LU 2020	LU 2019	LU 2018	LU 2017	LU 2016	LU 2015	LU 2014	LU 2013	LU 2012	LU 2011	LU 2010	LU 2009	LU 2008	LU 2007	LU 2006	LU 2005	LU 2004	LU 2003	LU 2002	LU 2001	LU 2000
<b>S</b>	<b>C</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>																	

# COLLECT EARTH INTEGRATION WITH IPCC INVENTORY SOFTWARE



# DIRECT COMPILATION OF THE LAND REPRESENTATION IN THE IPCC INVENTORY SOFTWARE

Land Representation Manager

Regions Land representation table Annual land representation matrix (Approach 2 & 3)

Region Benin Region area (ha) 942,660,000 Discrepancy (ha) OK Approach 2 2012

Land use category		Area (2012) (ha)		Remark					
Forest Land		396992.77							
Land use subcategory		Area (2012) (ha)		Remark					
Managed Forest Land		396992.77							
Current Land use subdivision				Remark					
foret_claire_TMM_HAC_12									
foret_galerie_TMM_HAC_12									
savane_arb_TMM_HAC_12									
Land unit code (Automatic)	Land unit code (User defined)	Previous Land use subcategory	Previous Land use subdivision	Transition Period (D) (years)	Year of conversion	Area (2012) (ha)	Remark	P	M
MFL-S-NF-OC-541	FF--1-savane_arb--1--1--1-	NA	NA	20	NA	1541_			
Current Land use subdivision				Remark					
plantation_TMM_HAC_12									
Land unit code (Automatic)	Land unit code (User defined)	Previous Land use subcategory	Previous Land use subdivision	Transition Period (D) (years)	Year of conversion	Area (2012) (ha)	Remark	P	M
MFL-P-NF-OC-544	FF--1-plantation--1--1--1-	NA	NA	20	NA	7799_			
Current Land use subdivision				Remark					
savane_arb_TMM_LAC_12									
Land unit code (Automatic)	Land unit code (User defined)	Previous Land use subcategory	Previous Land use subdivision	Transition Period (D) (years)	Year of conversion	Area (2012) (ha)	Remark	P	M
MFL-S-NF-OC-546	FF--1-savane_arb--1--1--1-	NA	NA	20	NA	2473_			
Current Land use subdivision				Remark					
foret_claire_TMM_LAC_12									
foret_dense_TMM_HAC_12									

Save Undo Close

IPCC Land Representation Manager

# EXAMPLE OF AN ANNUAL LAND USE CHANGE MATRIX WITHIN THE IPCC INVENTORY SOFTWARE

Regions		Land representation table	Annual land representation matrix (Approach 2 & 3)														
Region	Borgou	Region area (ha)	380,408.170	Approach 2												2012	
Initial		Forest Land		Cropland		Grassland		Wetlands		Settlements		Other Land		Final Area (ha)	Net change (ha)		
Final		Managed Forest Land	Unmanaged Forest Land	Cropland Annual Crops	Cropland Perennial Crops	Managed Grassland	Unmanaged Grassland	Managed Wetlands	Unmanaged Wetlands	Settlements (Treed)	Settlements (Other)	Managed Other Land	Unmanaged Other Land				
Forest Land	Managed Forest Land	219630												219630	-47903.05		
	Unmanaged Forest Land													0	0		
Cropland	Cropland Annual Crops	8058.4		79175.78										87234.18	8058.4		
	Cropland Perennial Crops													0	0		
Grassland	Managed Grassland	30944.65				33310.03								64254.68	30944.65		
	Unmanaged Grassland													0	0		
Wetlands	Managed Wetlands													0	0		
	Unmanaged Wetlands								360.88					360.88	0		
Settlements	Settlements (Treed)													0	0		
	Settlements (Other)	8900									28.43			8928.43	8900		
Other Land	Managed Other Land													0	0		
	Unmanaged Other Land													0	0		
Initial Area (ha)		267533.05	0	79175.78	0	33310.03	0	0	360.88	0	28.43	0	0	380408.17	0		