Partnership on Transparency in the Paris Agreement

United Nations Framework Convention on Climate Change

Food and Agriculture Organization of the United Nations

Anglophone African Regional Workshop "Finance ready mitigation actions: building blocks for NDC achievement"

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CBC Department, FAO

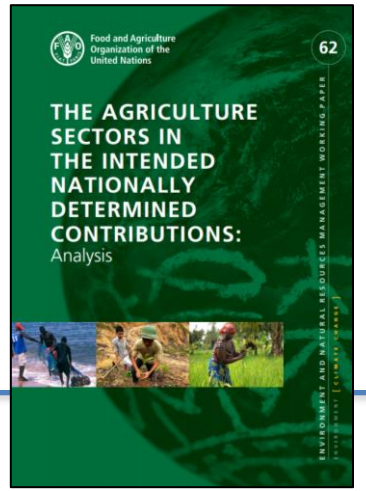
In collaboration with

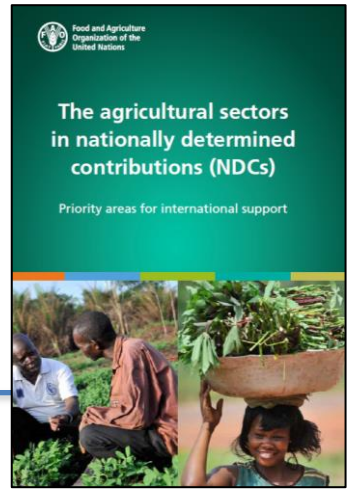
NDC PARTNERSHIP
ACCELERATING CLIMATE AND DEVELOPMENT ACTION

FAO's role

- FAO within the international community has a responsibility to support countries to implement their NDCs, report on progress and enhance ambition in subsequent NDC cycles

- Prioritize support: anticipate and address common challenges





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FAO Support for MRV

- **Sustainable institutional arrangements for MRV, within biennial cycles**
  - dialogue among different national actors
  - identification of roles and responsibilities
  - Focus on sustainable and operational MRV process (on a continuous basis and within a 2 –year cycle)
- **Sustainable and accurate data collection & data analysis**
  - electing methods
  - Providing open access to data and methods
  - Aiming at country ownership of data and methods

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FAO support for MRV cont'

- **Accurate estimates GHG emissions and removals applying IPCC Guidelines**
  - FAO E-learning course
- **Quality Assurance/Quality Control (QA/QC)**
  - QA/QC Verification tool that allows to compare national GHG inventory estimates reported with FAOSTAT emission database
  - *Ad-hoc* country Quality Assurance support to improve GHG Inventory
- **Guidance on mitigation actions for AFOLU**
  - EX-Ante Carbon balance Tool (EX-ACT)
  - Compendium on GHG Baselines and Monitoring (under development)
  - FAO MRV guidance for mitigation actions in the AFOLU sector (under development)

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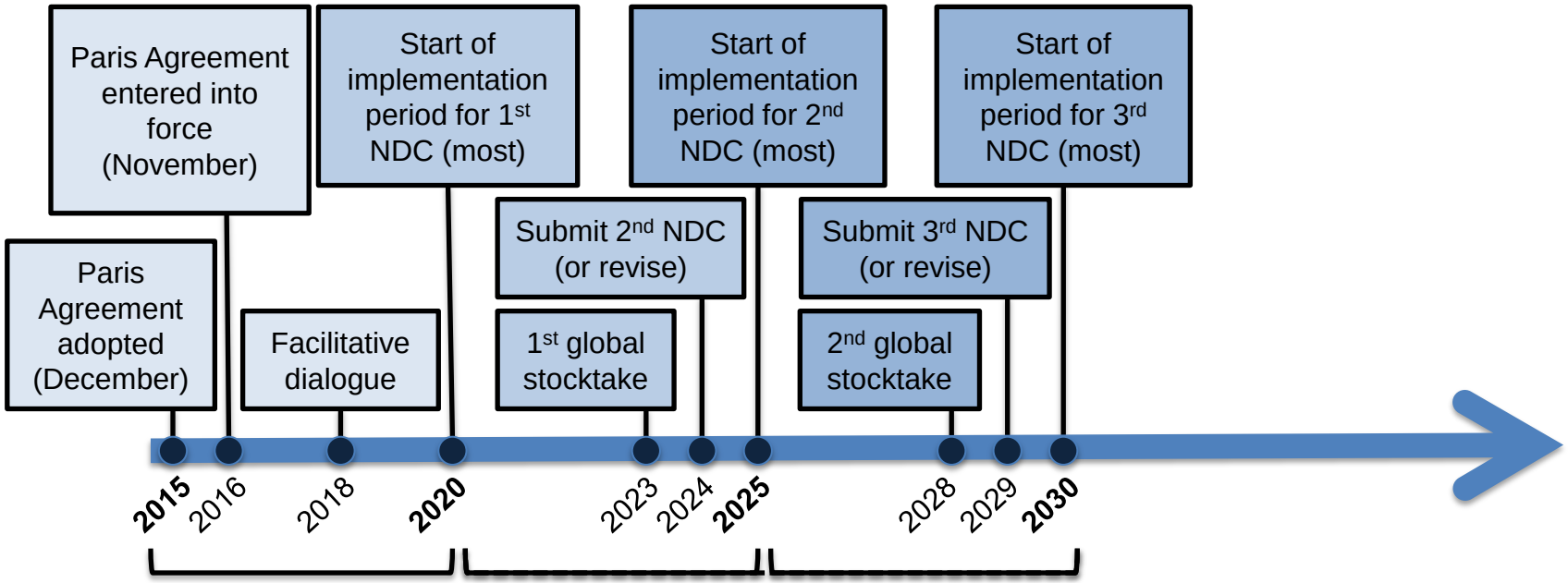
Current activities

- **New partnerships and regional activities:** MRV framework in West Africa (UNFCCC, GSP UNDP/UNEP, Agrhymet), NAMA (4C,GIZ and others)
- **New country support:** LAC (Uruguay, Dominican Republic); Asia (PNG, Myanmar); Africa (Cote d'Ivoire, DRC). Further information on country-activities is available for: Colombia, Costa Rica, Ecuador, Mexico, Paraguay, Kenya, Uruguay, United Republic of Tanzania and Vietnam.
- **Global Peatlands initiative**
- **Regional analysis of the INDC for the agriculture sectors**
- **New infographics:** NAMA (en, fr, es), Peatlands and Climate Change (en, fr, es, ru), FAO's work on climate change: GHG from AFOLU (en, fr, arabic).

The (I)NDC process



- Pre-2020 action
- NDC submissions
- Process to define 'rule book' for Paris Agreement

FAO (I)NDC analysis

- Mitigation targets and years of implementation (2020, 2030 targets)
- GHG target, non-GHG target and action only
- Business as usual, baseline and intensity reduction
- Sectors (prioritized): Energy, LULUCF, waste, agriculture and Industrial Processes and Product Use (IPPU) sectors
- Conditionality: finance, technology transfer or capacity and partnership building

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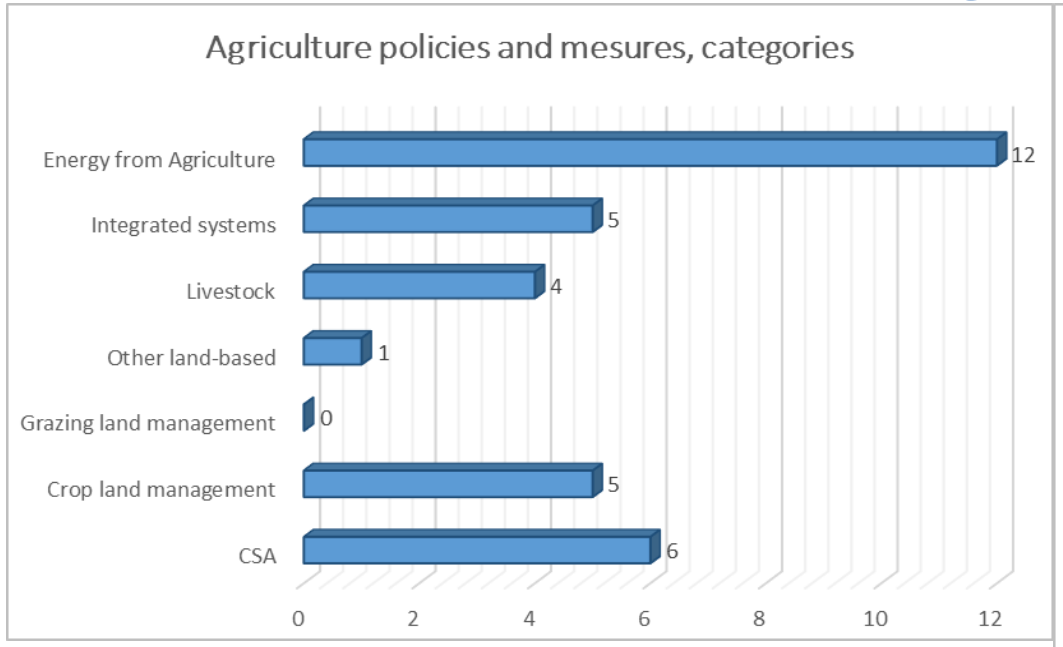
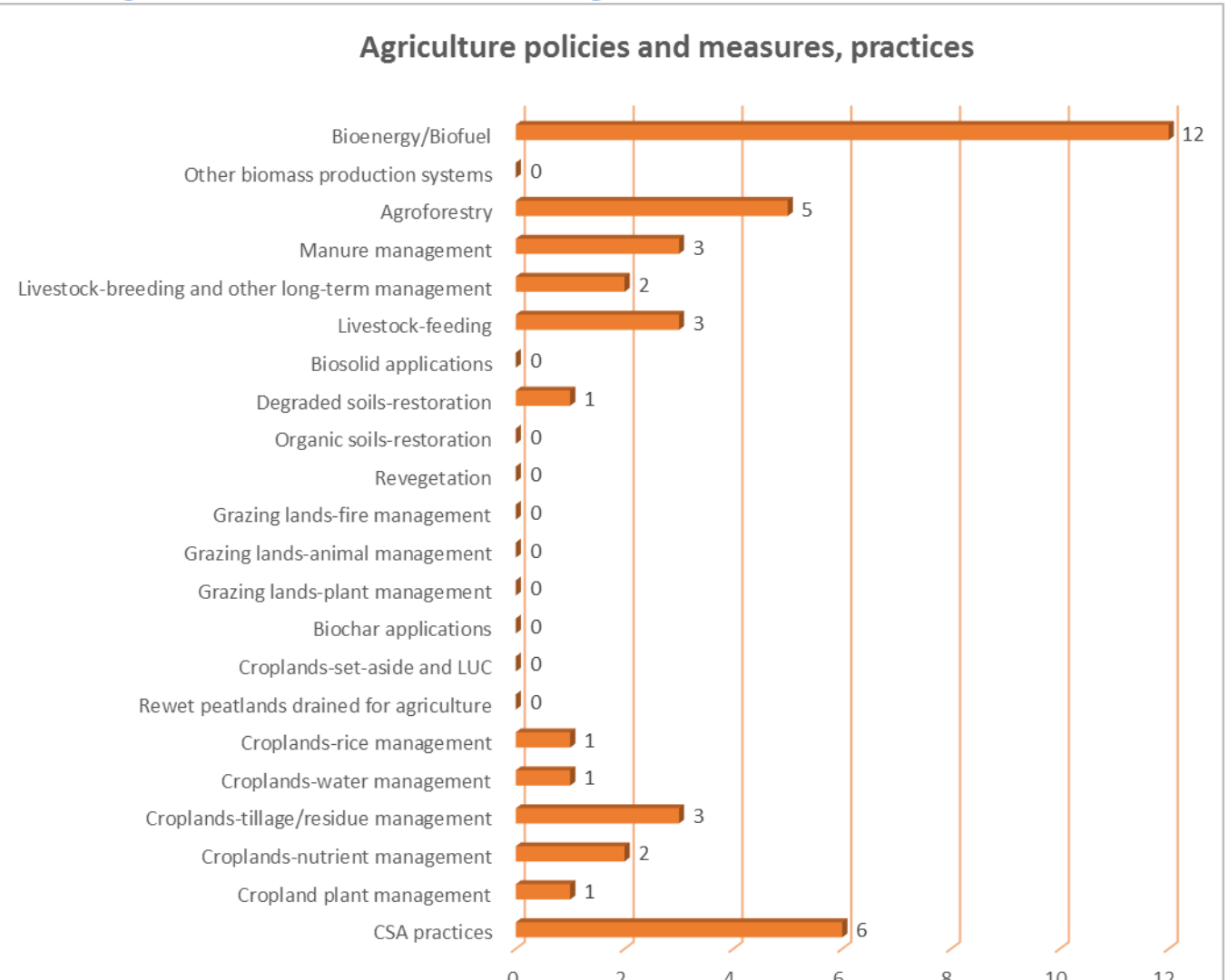
(I)NDCs analysis: preliminary results



Agriculture sector for Africa (Eastern Africa only)



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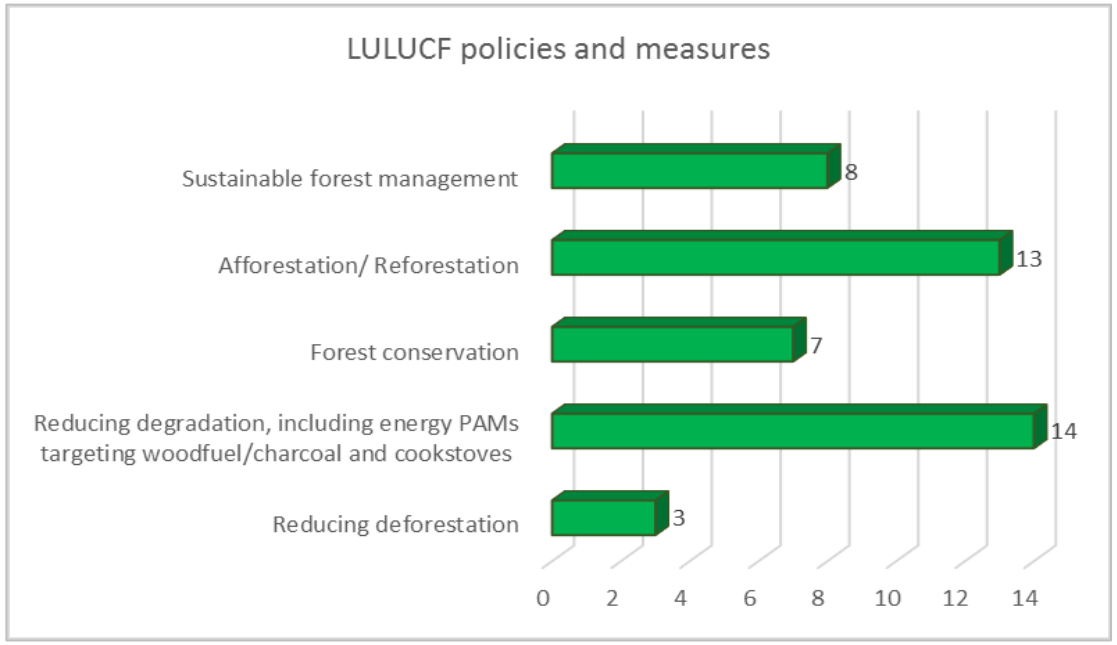
(I)NDCs analysis: preliminary results



LULUCF sector for Africa (Eastern Africa only)

Burundi:	**Within the framework of the national reforestation program, enhance carbon sinks through the reforestation of 4 000 hectares per year during 15 years from 2016 (unconditional).** **Enhance carbon sinks through afforestation of 8 000 hectares per year during 15 years from 2016 (conditional on international support).**
Comoros:	Reforest 12,000 ha during the 2018-2030 period, representing an emission reduction potential of about 70.2 ktCo2eq. Afforest grasslands or other fallow lands, representing an emission reduction potential of about -78 ktCO2eq.
Eritrea:	Reforestation (-1.98 kt/year in 2030) (conditional on international support).
Ethiopia:	Increase its ambition by expanding its forest cover, beyond the initial target for the afforestation and reforestation of 7 Million Hectares (conditional on international support).
Kenya:	Make progress towards achieving a tree cover of at least 10% of the land area of Kenya.
Madagascar:	Increase forested areas by 270,000 hectares through a reforestation program with native species (Conditional on international support).
Malawi:	Afforest (covering tree planting, as well as natural and assisted regeneration) and reforest, representing an emission reduction potential of about 1,000 ktCO2eq (through planned afforestation in plantations and on customary land, projected based on recent afforestation rates, and discounted to reflect realistic survival rates) (unconditional). Upscale the planned afforestation and reforestation to achieve its target of 2% increase in forest cover nationally – the area being afforested on an annual basis would need to increase four times and the mitigation benefit is projected to sequester approximately 2,600 ktCO2e (conditional). Upscale the afforestation (covering tree planting, as well as natural and assisted regeneration) and reforestation (2600 ktCO2eq reduced) (Malawi)

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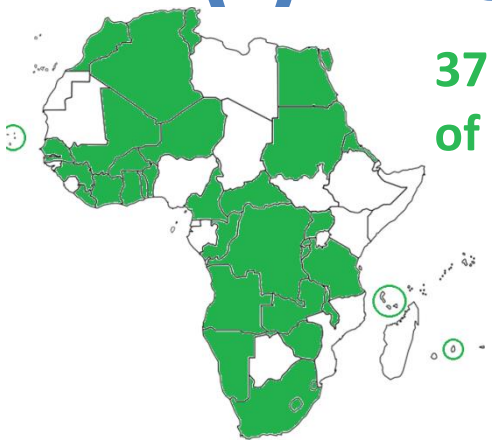
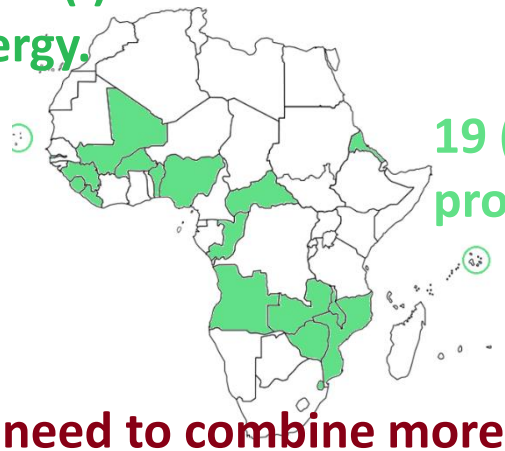
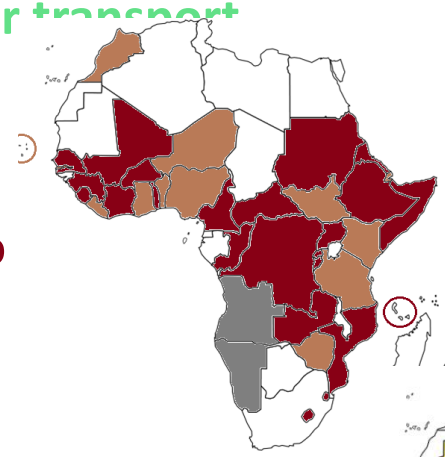
(I)NDCs regional analysis: preliminary results



37 of 53 (I)NDCs* mention biomass for the production of energy.

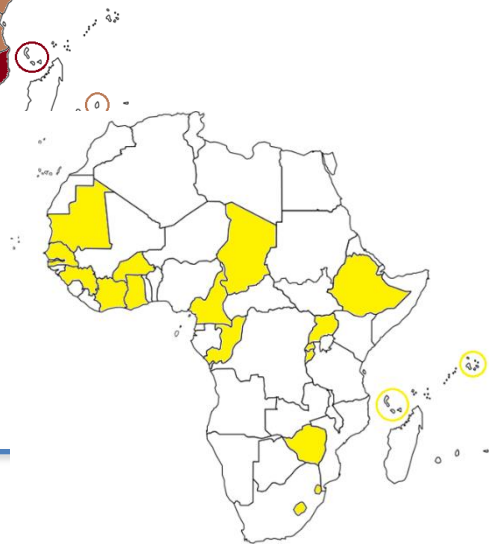


19 (I)NDCs mention the use or the production of biofuel for transport



Energy-agrifood links for Africa

23 (I)NDCs indicate the need to combine more sustainable wood to energy systems with more efficient cook stoves. 14 mention programs to increase the efficiency of cook stoves. 2 would like to improve the sustainability of traditional biomass without distributing efficient cook stoves.



19 (I)NDCs indicate the need to reduce post-harvest losses, improve value added processing and the use of renewable energy in food processing

*All African countries except Libya have published their (I)NDC.

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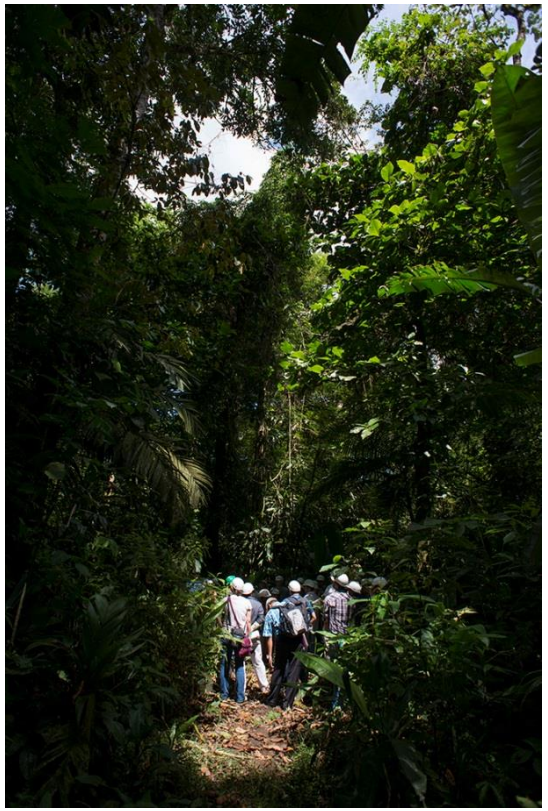
Momentum REDD+



- 15 FREL/FRLs, 4 REDD+ results submitted
- Forests mentioned prominently in Paris Agreement, LULUCF in 77% INDCs
- Green Climate Fund: RFP on REDD+

Require MRV for mitigation actions in the forestry sector

Opportunity to learn from the REDD+ experience

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FAO tools and methods

EX-ACT * has been Used for CPDN of Haiti, Niger and the Mauritania.

openforis COLLECT EARTH

Land Use, Land Use Change and Forestry (LULUCF) assessments Monitoring agricultural land and urban areas (DRC, Zambia, Tanzania, Ghana, etc. / West-African Project / Global Drylands Assessment)

NAMA and CSA support to countries Pilot Kenya, Tanzania, Vietnam

Modelling of impact of climate change on Agricultural production

GLEAM*i* Modelling of livestock and manure management emissions

MOSAICC

Find out more on the MICCA website

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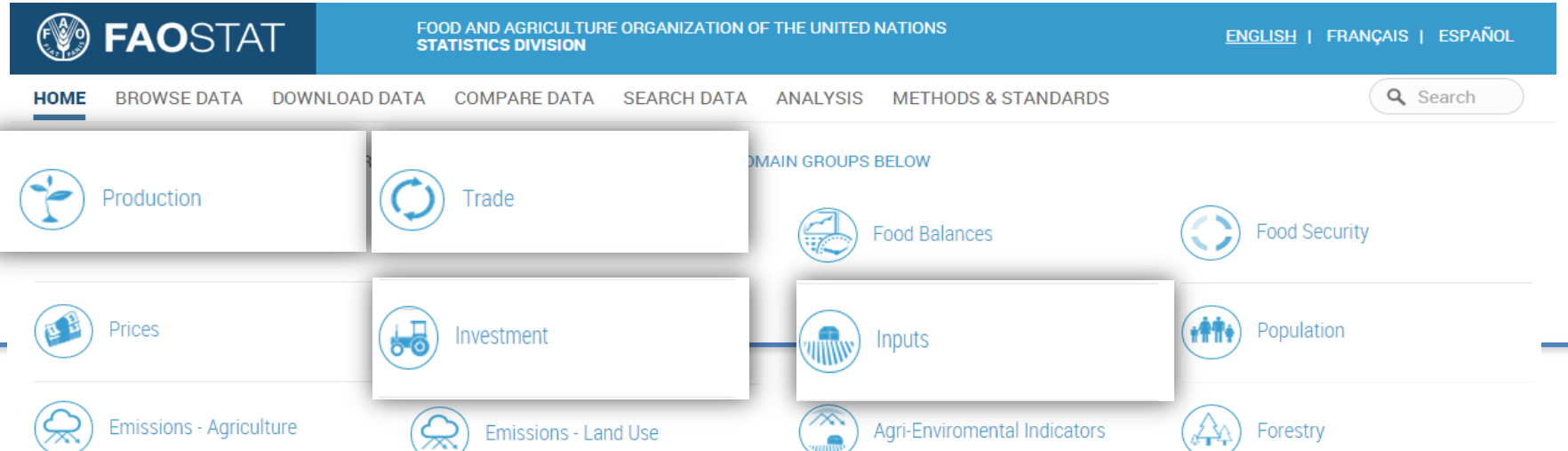
The FAO's corporate database

- FAOSTAT is the main FAO corporate repository for statistical data.
- FAOSTAT contains time-series records from over 245 countries and territories from 1961 covering domains on agriculture
- Data are collected through national questionnaires compiled by National Statistics Offices or Ministers of Agriculture, and sent to FAO Statistics Division on an annual basis.



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The FAO's corporate database

Forest Resource assessment as part of FAOSTAT

- The Global Forest Resources Assessment (FRA) is produced every 5 years
- Primary global source of information on forest resource change

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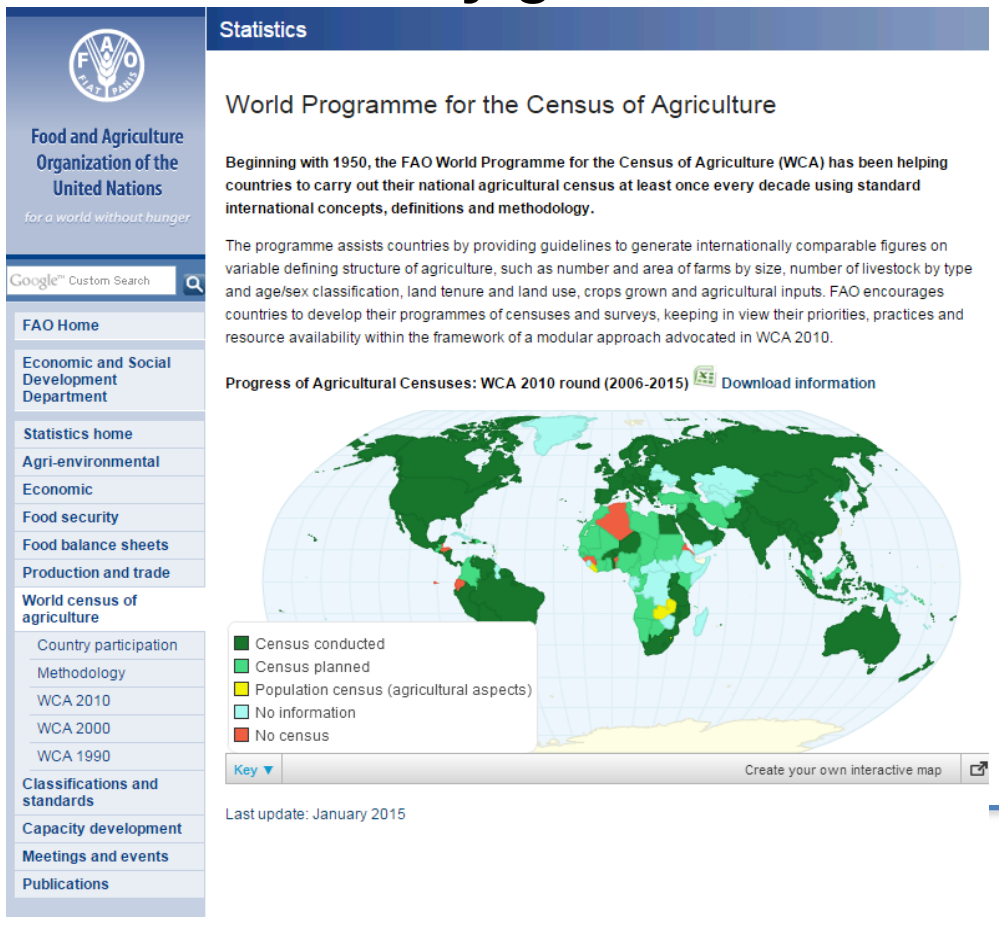
Data collection guidance

- World Programme for the **Census of Agriculture (WCA)**
- **Voluntary guidelines on national forest monitoring**



- Section I - Introduction, rationale, definitions of the main components of national forest monitoring, and sustainability indicators;
- Section II – Definition of the principles guiding national forest monitoring;
- Section III - Recommendations on thematic fields: land use/land cover classification systems, sampling design, field implementation, remote sensing, carbon pools, biodiversity, allometric equations, socio-economics aspects, quality assurance, information systems, data management governance, international reporting, data sharing policy and references to recommended literature and manuals.

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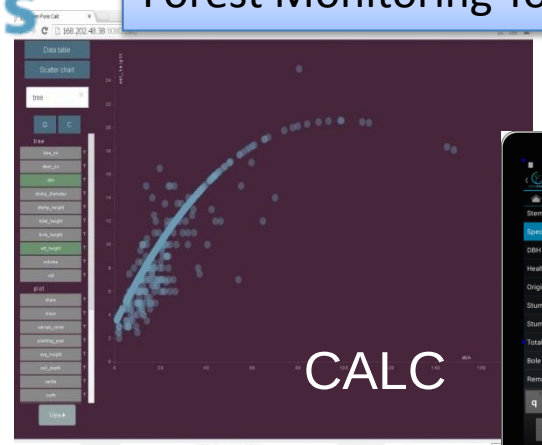
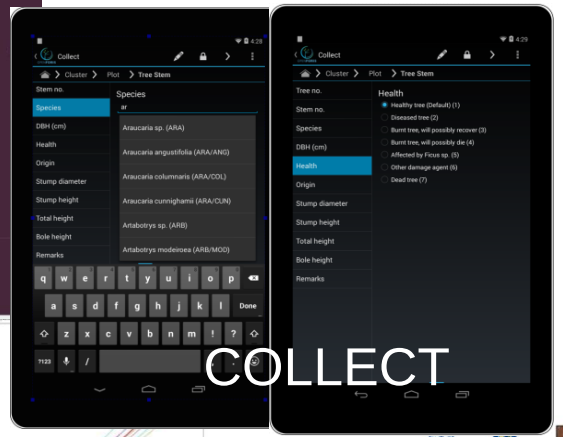
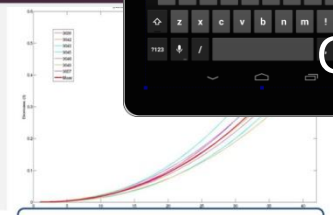
OPENFORIS

FAO Monitoring & Measurement tools

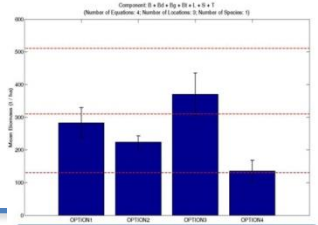
Forest Monitoring Tools

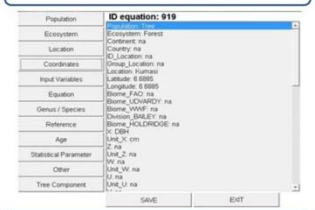






Module 1: Comparison of existing allometric equations

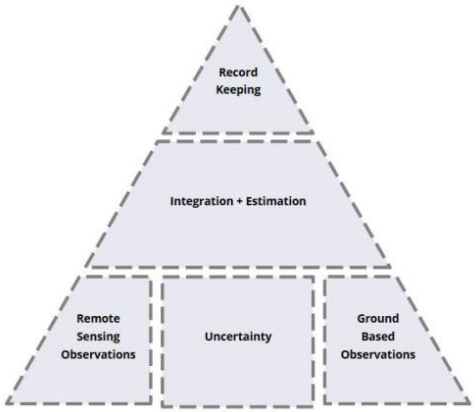


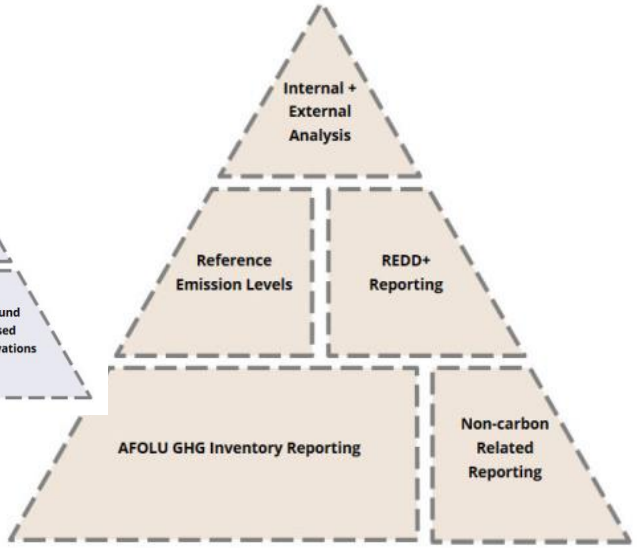


Module 2: Assessment of volume, biomass and carbon stocks

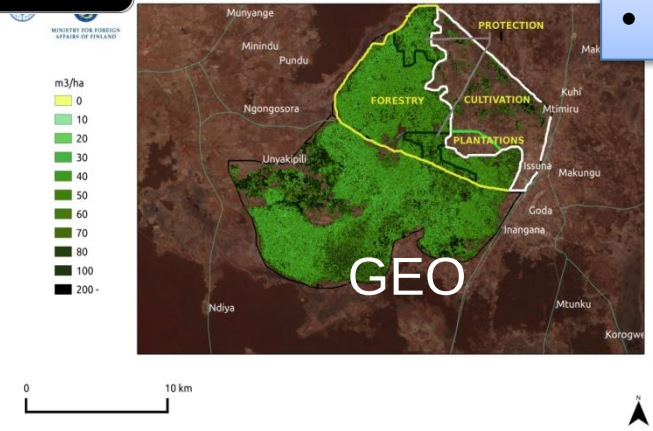
Module 3: Insertion of new allometric equations

FANTALLOMETRIK





MULTI-SOURCE PILOT - Volume



GEO

Forest Monitoring Training materials

- REDD+ compass

GFOI Global Forest Observations Initiative

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Collect Earth

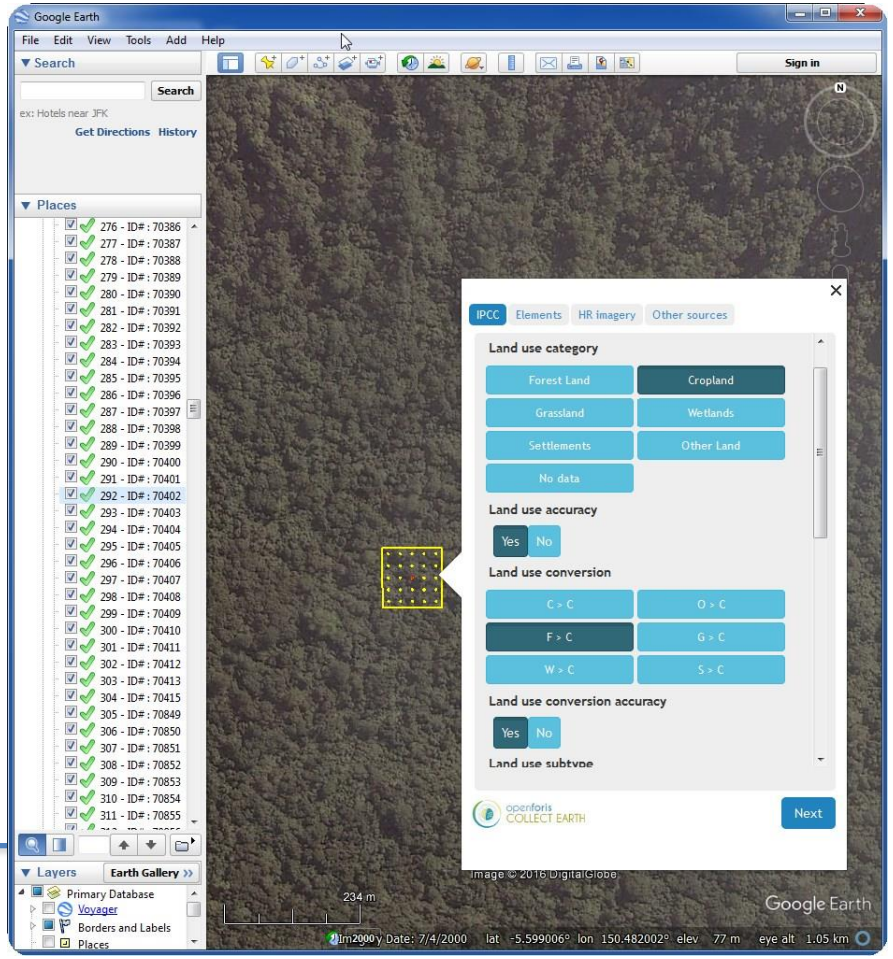
Collect Earth is a land assessment tool through freely available satellite imagery.

Collect Earth uses:

HR multi-temporal images from Google Earth and Bing Maps
Landsat 7 and 8 datasets from Google Earth Engine
Data Analysis through Saiku.

Collect Earth provides:

- Support multi-phase National Forest Inventories
- Collection of spatially explicit socio-economic data
- Quantifying deforestation, reforestation and desertification
- LULUCF assessments
- Monitoring agricultural land and urban areas
- Validation of existing maps



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FAO monitoring tools

Land Cover Classification System (LCCS) Tool

Geonetwork and Land cover classification: Collection and harmonization of maps

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Collaboration

Visits

www.globallometree.org

GlobAllomeTree

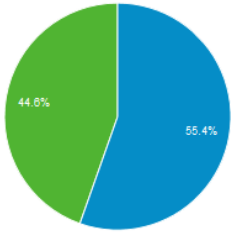
Assessing volume, biomass and carbon stocks of trees and forests.

cirad

Home | About | Data | Software | Documents | Contributors | h_matieu

Field inventory

New Visitor Returning Visitor



1 893

Launched in July 2013

Registration:

- >1930 registered users
- 125 countries
- 38 countries have > 10 registered users
- > 102 institutions with > 2 users

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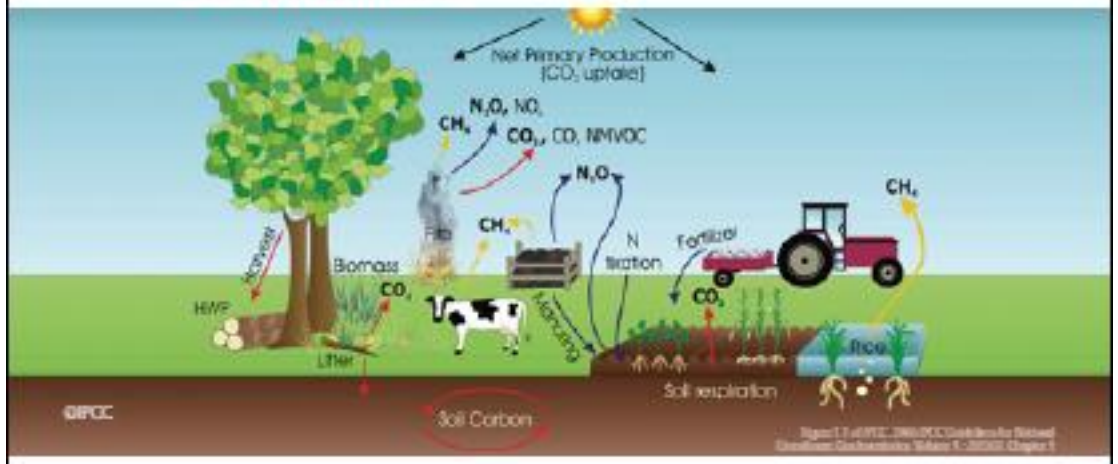
FAO reporting and verification tools

Course: The National Greenhouse Gas Inventory (NGHGI) for Agriculture



This course provides the necessary knowledge to build a sustainable National Greenhouse Gas Inventory (NGHGI) and assess greenhouse gas (GHG) emissions from the agriculture sector. It focuses on the biological and physical process that lead to the production of emissions from agriculture-related activities.

7 hours

Available in English

Aperçu régional

L'outil donne aux l'utilisateurs un aperçu des émissions provenant des secteurs de l'agriculture et de l'utilisation des terres pour un ou plusieurs pays, ainsi que la possibilité de comparer les résultats avec la région (ou bien les régions) et continent (ou bien les continents) correspondantes, et le monde.

Aller au module

AQ-CQ et vérification

L'outil permet aux utilisateurs de comparer les émissions et les données d'activité des secteurs agriculture et utilisation des terres rapportées par les pays dans les communications nationales à la CCNUCC, avec la base de données sur les émissions de FAOSTAT.

Aller au module

Indicateurs

L'outil permet aux utilisateurs d'analyser des indicateurs d'émissions, exprimés en intensité de carbone par unité de produit et productivité, au niveau national et régional. L'outil utilise les données FAOSTAT et offre un niveau d'analyse détaillé, tout en facilitant les comparaisons entre pays et régionaux.

Aller au module

Données Géoréférencées

L'outil permet aux utilisateurs d'accéder et examiner des données géoréférencées globales utilisées dans la base de données sur les émissions de FAOSTAT pour estimer les émissions de catégories spécifiques de l'agriculture et de l'utilisation des terres. Les données sont téléchargeables au niveau des pays.

Aller au module

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FAO reporting : NAMA tool

Module 1

Climate change and agriculture: Module 1 provides an overview of the impacts of climate on agriculture and the AFOLU sector's contribution to the total global net GHG emissions. The module also indicates the synergies between climate change mitigation, food security, rural development and climate change adaptation.

Module 2

Overview of Nationally Appropriate Mitigation Actions (NAMAs): Module 2 introduces the concept of NAMA and situates NAMAs in the context of global climate change negotiations. Examples of NAMA initiatives in the agriculture sector are also given.

Module 3

Step-by-step NAMA development: Module 3 describes the step-by-step processes for developing NAMAs. It covers the preparations for concept notes and proposals. It also addresses topics such as feasibility, technological choices and the differences between a fast-track NAMA development and a more thorough NAMA preparation process.

Module 4

Measurement, Reporting and Verification (MRV) for an AFOLU NAMA: Module 4 looks at different aspects of monitoring systems and MRV processes for NAMAs. It reviews how MRV systems assess a NAMA's impact on the GHG emissions and the sustainable development benefits it delivers.

Module 5

Financing mechanisms and sources: Module 5 focuses on NAMA financing questions. It covers domestic, international, public and private financing and elaborates different criteria attached to NAMA financing by donors, climate funds and financing institutions.

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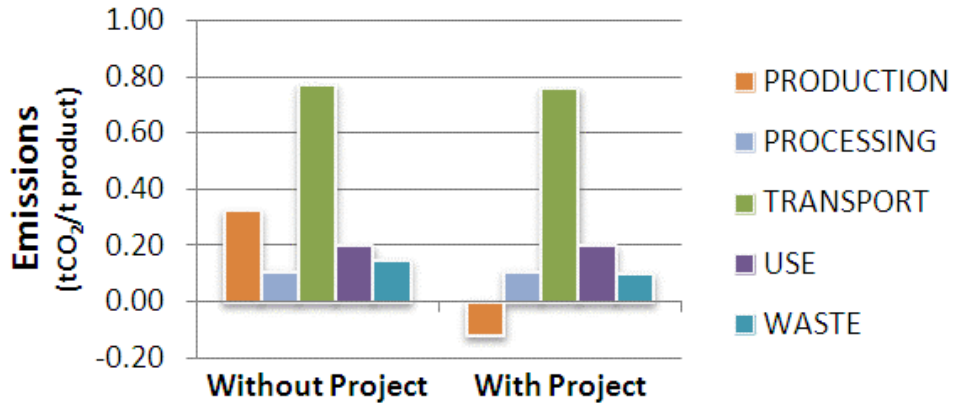
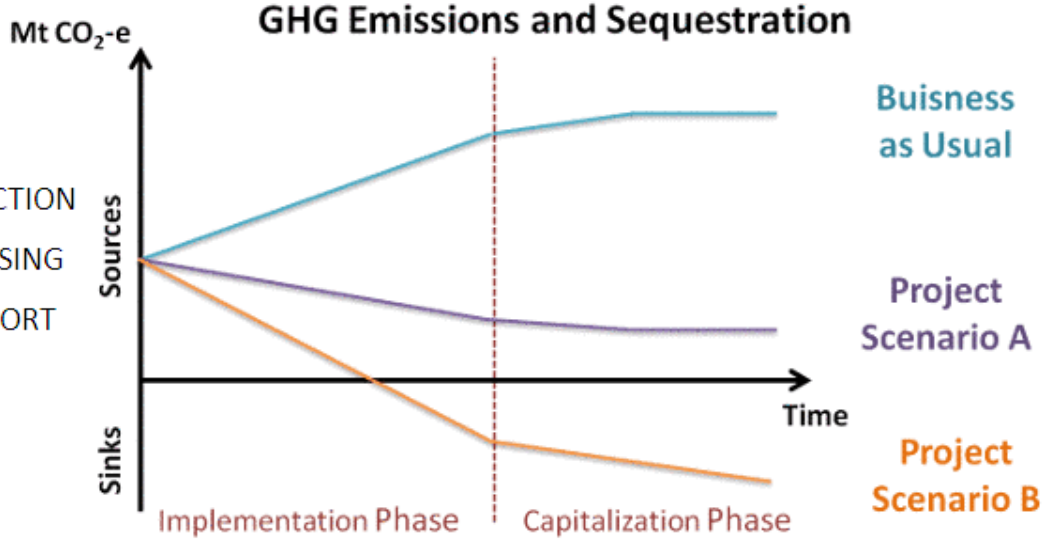
FAO reporting tools: EX-ACT

- Tool for screening the mitigation potential of different actions.
- Calculates ex-ante estimates of the GHG impact of AFOLU measures.
- Specifies the type of carbon pool (biomass, soil, other) is impacted.
- Results help project designers to prioritize project activities.





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FAO reporting tools: GLEAM *I interactive*

- Publicly available, user-friendly tool for calculating emissions using IPCC Tier 2 methods in a single Excel file
- Designed to support governments, project planners and civil society organizations
- Can be used in the preparation of national inventories and in ex-ante evaluation of projects with interventions in livestock

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Thank you