FAO learning tool to support NAMAs preparation in agriculture

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Contribution of agriculture to climate change

- **24 %** of global GHG emissions from AFOLU (2nd largest after energy, IPCC 2014)
- **10-12 %** of global GHG emissions from agriculture (IPCC 2014)

In Latin America the largest emitters in agriculture are:

60%	25%	5%	3%	2%	2%
Fermentación entérica	Estiércol depositado en las pasturas	Fertilizantes sintéticos	Gestión del estiércol	Estiércol aplicado a los suelos	Resíduos agrícolas

(FAO Infographic)

- In Latin America, emissions from agriculture increased by 130 **% in the last 50 years** (FAOSTAT).
- Growing population and changes in food consumption patterns (e.g., increased protein-rich diet) will lead to additional increase in GHG emissions, **unless efficiency and productivity increases will limit emissions per unit of product**.

Role of agriculture in GHG reduction and other benefits

Many agricultural practices that reduce and remove GHG emissions can also deliver many other important benefits:

- Promoting **sustainable intensification** and **higher yield**
- Improving **farm efficiency**
- supporting **climate change adaptation**
- addressing **agriculture as a driver of deforestation and other land use changes**
- reducing **pollution from agriculture**
- increasing the potential for **scaling up climate-smart agriculture (CSA) practices**
- promoting **access to energy in rural areas**

With appropriate mitigation actions it is possible not only to reduce GHG emissions **but also to strengthen food security and rural income and livelihoods**.

Objectives of the FAO NAMA tool

Available NAMA guides do not address specific questions related to AFOLU.

Objectives of the FAO NAMA tool:

- help agriculture stakeholders overcome knowledge barriers and get started with NAMA identification and planning.

- provide information on the type and quantity of resources (technical, human and financial) needed to develop and implement NAMAs.

- advice on how to achieve reductions in net GHG emissions in the AFOLU sector while supporting other sustainable development goals, such as food security.

Organización de las Naciones Unidas para la Alimentación y la Agricultura

Herramienta de aprendizaje sobre Medidas de Mitigación Apropiadas para cada País (NAMA) en el sector de la agricultura, silvicultura y otros usos de la tierra (AFOLU)

(Avagyan, Karttunen, De Vit, and Rioux, FAO, 2015)

Format of the FAO NAMA tool

- Launched at SBSTA in June 2015 in Bonn
- Available online on the MICCA FAO website
- **Spanish translation now available!**

- Web-based training package for individual learning
- Can be adapted for face to face training

The tool includes:

- exercises at the end of each module
- > 30 case studies on country examples and mitigation options
- > 50 references including 20 on methods for MRV and 10 on financing sources

Structure of the tool

Module 1
Climate change and agriculture

Module 2
Background on NAMAs
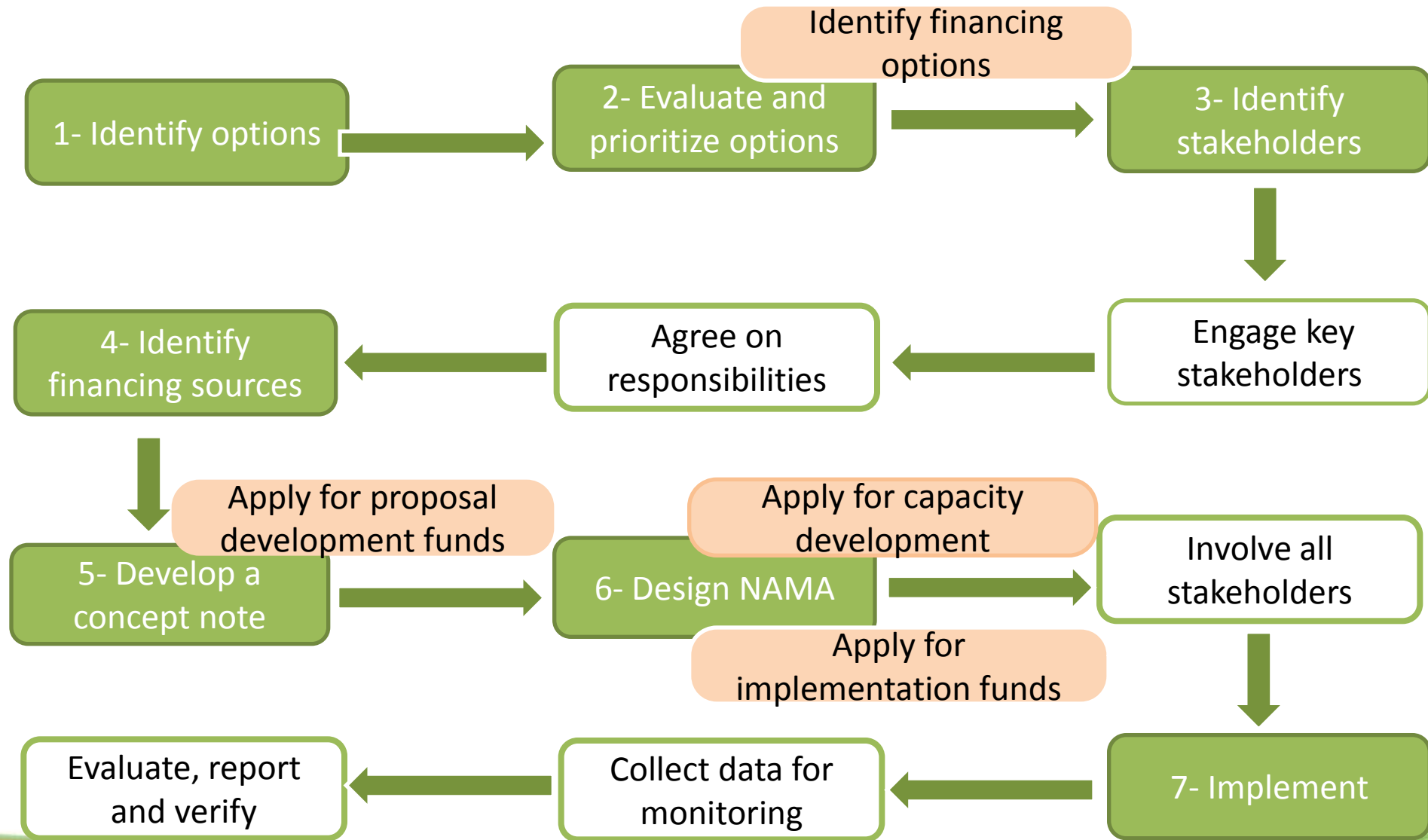
Module 3
Step by Step NAMA development

Module 4
Monitoring, reporting and verification (MRV)

Module 5
NAMA financing

Module 3: Step by step NAMA development

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1- Identify options  →  2- Evaluate and prioritize options  →  [Identify financing options]  →  3- Identify stakeholders
                                                                                                        ↓
4- Identify financing sources  ←  Agree on responsibilities  ←  Engage key stakeholders
        ↓
5- Develop a concept note  [Apply for proposal development funds]  →  6- Design NAMA  [Apply for capacity development]  →  Involve all stakeholders
                                                                      [Apply for implementation funds]                          ↓
Evaluate, report and verify  ←  Collect data for monitoring  ←  7- Implement
```

Example: The first financing for an AFOLU NAMA (Costa Rica)

- Costa Rica was the first country to receive international financing from the NAMA Facility (7 million Euro) for a NAMA in the agriculture sector. Costa Rica's NAMA, Low-Carbon Coffee Project (2014 – 2018), is a sector-wide project designed to bring a climate-friendly transformation of the entire coffee value chain. The NAMA Project offers technical and policy advice to transform the production and processing practices in the sector. The project will:

- provide aggregated **1.85 million tonnes CO_2eq** emission reduction potential amounts to over 20 years from which **250 000 tons CO_2eq** that are directly attributable to the NAMA;

- contribute to enabling farmers and millers to develop sustainable livelihoods, potentially improving the standard of living of more than **400 000 people**; and

- provides incentives to the private sector to make investments in climate-friendly innovations by providing grants, loans and guarantees for coffee farmers and millers to acquire GHG-efficient fertilizer and milling technologies.

- **Success in accessing financing was due to:**
- the demonstration of transformational impacts,
- the full endorsement and support by the national government,
- significant GHG reduction potential and
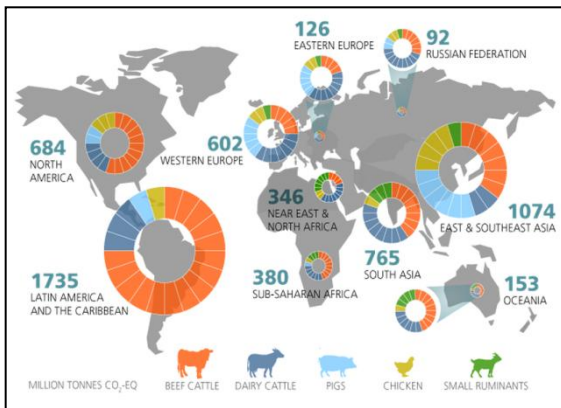- the provision of improved livelihoods.

Identifying NAMA options
Identifying GHG emissions caused by the AFOLU sector
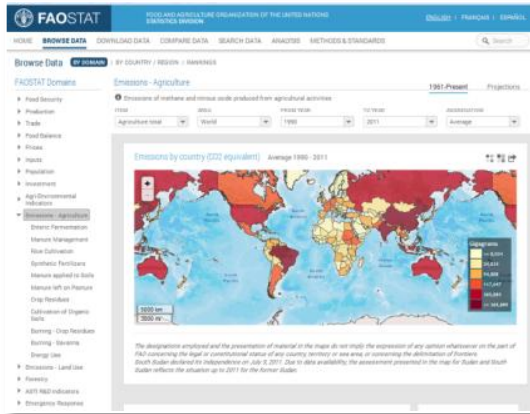
FAOSTAT Emissions Database :

- Calculates GHG emissions estimates based on activity data from countries and Tier 1 IPCC default values

- Provides baselines based on FAO projections to 2030 and 2050 for agriculture categories

Global Livestock Environmental Assessment Model (GLEAM):

- Support countries to identify and set priorities for the livestock sector
- Define baseline scenario and measure impacts of mitigation actions for the livestock sector
- Quantify productivity gains

FAO's support for NAMA development

FAO's technical support

- Reviewing and harmonizing policies and plans

- Institutional mapping and inter-ministerial coordination

- Building capacities and readiness for NAMAs

- Setting emission baselines and identifying mitigation options

- Supporting NAMA proposal preparation

Knowledge sharing

- Publications, workshops, trainings, webinars

Tools

- Data development: **FAOSTAT**, **GLEAM**

- GHG monitoring and scenarios comparison: **FAO EX-ACT tool**

- Land use change monitoring: **FAO Collect Earth**

Thank you for your attention

For further information on the FAO NAMA tool and country support please contact:
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http://www.fao.org/climatechange/micca/nama-tool/en/