

Thematic event

Support for accelerated actions in urban environment and land use to drive mitigation ambition and facilitate sustainable development

Agriculture, Forestry and Other Land Use (AFOLU)



Compendium. Volume: Agriculture, Forestry and Other Land Use



Support for mitigation actions in AFOLU

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Compendium GHG Baselines and Monitoring AFOLU

General purpose:

- Resource map of approaches, methodologies and tools
- For various AFOLU mitigation actions

Target users:

- Policy makers
- NAMA designers and implementers

Guidance given regarding:

- General considerations when designing AFOLU baselines
 - Selecting and implementing methodologies for baseline design
 - Data sources for activity data and emission factors
 - Effective and cost-effective monitoring
 - Technology-specific suggestions for baseline-setting and monitoring
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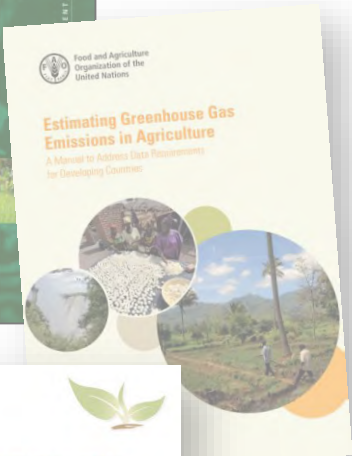
1. Define the purpose of the baseline
2. Identify mitigation actions which will be evaluated
3. Identify relevant GHG emission sources and carbon stocks
4. Define the scope and boundaries of the baseline
5. Determine the methodology for developing the baseline
6. Identify the parameters required
7. Review available data sources
8. Construct a trend baseline if needed
9. Apply the historical data
10. Consider sampling campaigns
11. Design and implement inventory and institutional arrangements
12. Ensure baseline validity, correct as required



Step 6: Parameters for each emission source / carbon sink

| source / stock | Parameters | |
|---|---|---|
| | Tier 1 | Tier 2 |
| SOC stock organic soils (CO ₂) | area affected | |
| | amount of peat extracted before and after | |
| | not measured | fraction of N in SOM |
| Biomass burning (CO ₂ (for land-use change), CH ₄ , N ₂ O) | area affected | |
| | quantity of biomass burnt per area | quantity of biomass and dead organic matter burnt per area |
| Biomass residues (CO ₂ , N ₂ O) | areas residues are left on the field, area burnt, by residue type | |
| Liming + urea application (CO ₂) | quantity of lime, dolomite and urea applied | quantity of lime, dolomite and urea applied, lime purity and C content |
| | not measured | specific emission factors |
| Inorganic and organic fertilizers (N ₂ O) | quantity of manure, crop residues, N-fixing crop residues, synthetic and organic fertilizer applied | quantity of manure, crop residues, N-fixing crop residues, synthetic and organic fertilizer applied at various conditions |
| | number and category of livestock in the country | number and category of grazing livestock |
| | SOC change due to land-use change | SOC change due to land-use change |

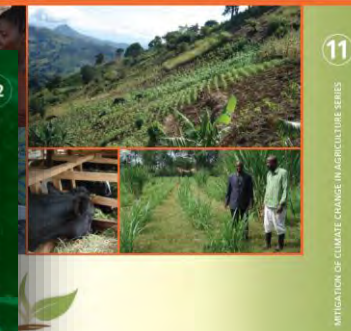
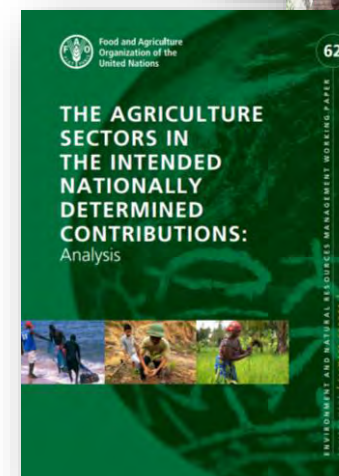
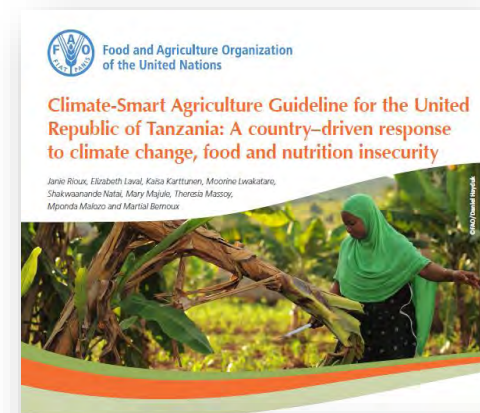
Flagship- Programme: Mitigation of Climate Change in Agriculture (MICCA)





FAO support for mitigation actions in AFOLU

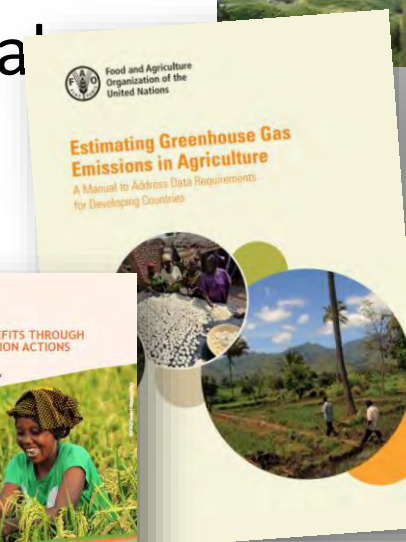
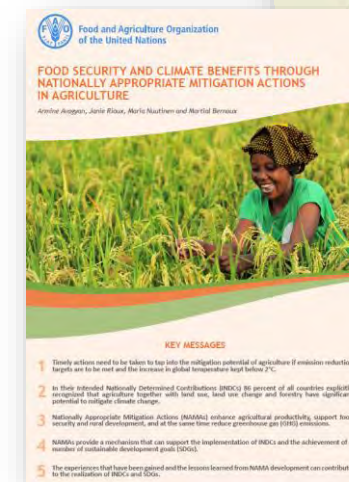
- **Give guidance** on CC mitigation (& adaptation) options;
- **Provide evidence** that CSA practices can reduce GHG emissions, improve farmers' lives and make local communities able to adapt to changing climatic conditions;
- **Evaluate production cost** of mitigation options at farmer level;
- **Analyze AFOLU** commitments in NDC and assess gaps and needs to achieve the Paris Agreement target;
- **Improve the capacity** in the design of NAMAs also as instrument of NDCs implementation.





FAO support for reporting mitigation actions in AFOLU

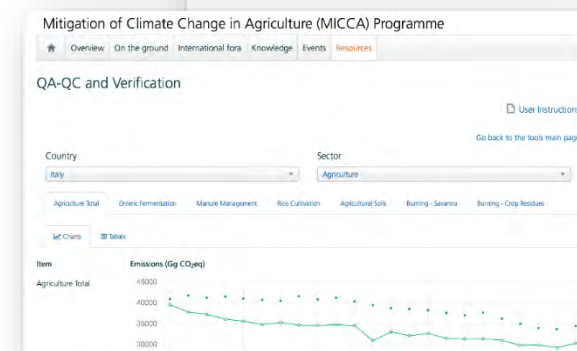
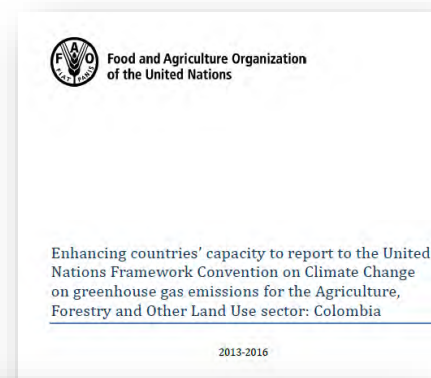
- Monitor and assess GHG emissions and the mitigation potential in agriculture;
- Enhance countries' capacity to build a sustainable National GHG Inventory system;
- Provide data, methodologies and tools to help countries improve GHG estimates;
- MRV guidance tool for mitigation actions





On the ground FAO support – countries' activities

- **Institutional arrangements activities** to facilitate the dialogue among different national actors (Costa Rica); support in identifying roles and responsibilities (Paraguay) and raise awareness on agriculture and land use issues for UNFCCC negotiators (Asia-Pacific)
- **Ad-hoc country QA and verification process** to improve the national GHG inventory ([Colombia](#), [Mexico](#)), validate BUR submissions ([Ecuador](#)) and through the [AFOLU Emissions Analysis Tools](#)





On the ground FAO support – countries' activities

Peer-to-peer country **capacity development** in building a sustainable **National GHG Inventory** and/or design improvement plans for subsequent submissions using different modalities:

- Remote grand-brothering/sistering and in-country experts visits ([Uruguay](#));
- Ad-hoc training sessions in FAO HQs (PNG, Côte d'Ivoire, Benin);
- In-country capacity development workshops (Bangladesh, Myanmar, Ecuador, Dominican Republic);
- Support in the design of **NAMAs** (Kenya, Chad, Mozambique).





On the ground FAO support – regional activities

- Anglophone countries in Africa (Converting INDCs into action: the role of NAMAs in INDC implementation)
- Asia and the Pacific (regional workshop on MRV for the ETF for identifying country specific needs)
- ECOWAS countries (UNDP/UNFCCC/FAO workshop on Sub-Regional Dialogue on MRV framework)
- Francophone countries in Africa (FAO/4C Maroc regional workshop on the financial source for mitigation actions in the energy and AFOLU sectors).



United Nations Framework
Convention on Climate Change



Empowering lives
through science



Partnership on Transparency
in the Paris Agreement

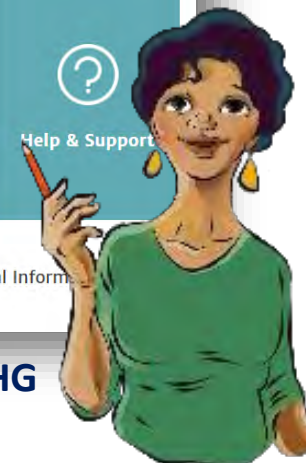
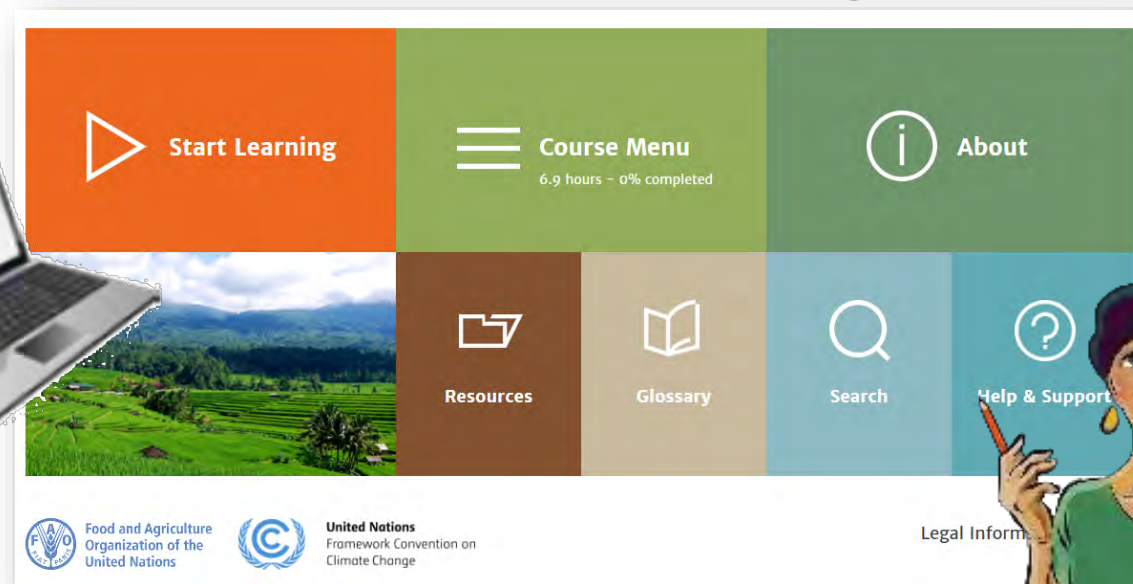




FAO tools for reporting mitigation actions in AFOLU

E-learning “Building a Sustainable National Greenhouse Gas Inventory for Agriculture, Forestry and Other Land Use”

- Interactive tool to guide users to estimate AFOLU emissions following 2006 IPCC Guidelines at Tier 1
- Practical exercises to apply the acquired knowledge
- Transition from 1996 IPCC to 2006 IPCC



<http://bit.ly/FAO-course-GHG>



THANKS FOR THE ATTENTION

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