EX-Ante Carbon-balance Tool | EX-ACT

Mainstreaming greenhouse gas accounting into agricultural investments and policies

The 2030 Agenda and Paris Agreement tied the knot between sustainable economic development and a climate-resilient, low greenhouse gas (GHG) emissions future. Moving forward, accounting for potential changes in GHG emissions will be a vital component of any agricultural investment, project, or policy proposal under consideration by any country, institution, or organization.

To support the international community’s efforts with quantifying changes in GHG emissions, the Food and Agriculture Organization of the United Nations (FAO) developed the EX-Ante Carbon-balance Tool (EX-ACT).

Based on the Intergovernmental Panel on Climate Change (IPCC) methodology, EX-ACT provides its users a consistent way of estimating and tracking the impact of agricultural, forestry, and other land-use (AFOLU) investments and policies on GHG emission levels. EX-ACT is a free, open-source, Excel-based model and is available in all UN languages, as well as Bahasa, Vietnamese, Portuguese and German.

Objectives

- Identify the climate mitigation impact of various investments projects and policies.
- Support countries in accessing funds from international financial institutions and international mechanisms to support projects, programmes and policies.
- Strengthen the capacities of national stakeholders in estimating and monitoring emissions reductions goals from a wide range of projects.
- Support policymakers in integrating climate change mitigation objectives into national policies and international commitments (e.g. nationally determined contributions).
- Provide accurate and transparent estimates of GHGs emissions reductions using country or project-specific data if available.
Sample of projects analysed with EX-ACT

- Rural development
- Grassland rehabilitation
- Value chain

- Livestock intensification
- Agroforestry
- Food security

- Peatland restoration
- Coastal wetlands and aquaculture
- Watershed management

- Climate resilience and adaptation
- Sustainable land management

Quick facts
Since 2010, more than 2 500 individuals around the world have received training on EX-ACT, and learned how to calculate and summarize GHG emissions changes from AFOLU-related projects. EX-ACT has been applied to more than 100 countries.

Over 400 agricultural projects funded by various financial institutions (including the World Bank, the International Fund for Agricultural Development, the Green Climate Fund and the Global Environmental Facility), have received GHG emission appraisals.

EX-ACT is the only GHG accounting tool to cover the entire AFOLU sector, including agricultural inputs, energy, infrastructure, management of organic soils, coastal wetlands, fisheries and aquaculture.

EX-ACT technical support
- Technical and general guidance on GHG accounting of AFOLU-related projects.
- Global or geographically tailored training workshops on GHG accounting using EX-ACT to a wide range of audiences.
- Tailored versions of EX-ACT (activities and Tier 2 data) for specific countries, projects and investments.

CONTACTS
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