

Emissions - Agriculture

The FAOSTAT Emissions Agriculture database provides country-level estimates of greenhouse gas (GHG) emissions based on FAOSTAT activity data and using Tier 1 computations, following 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories. Technical details of specific activity data used and relevant computational steps employed are given in the *Methodology and Quality Information* section of the metadata for each of the sectors in the domain.

GHG Emissions from agriculture are dominated by non-CO₂ gases methane (CH₄) and nitrous oxide (N₂O) from crop and livestock production and management activities. Sources of carbon dioxide (CO₂) emissions are mainly those from cultivated organic soils, reported for reason of consistency with IPCC, in the FAOSTAT Emissions Land Use domain under cropland. Currently the Emissions Agriculture domain in FAOSTAT does not include Prescribed Burning of Savannah.

The FAOSTAT Emissions Agriculture data contribute to IPCC WGIII Fifth Assessment Report, extending trend analysis of activity data and GHG emissions to the present time, as well as ensuring annual automatic updates in following years. In particular, from 1990 to 2010, agricultural emissions have increased by 0.7 percent annually, accelerating to 1.2 percent yr⁻¹ in the most recent decade of 2000-2010.

The Emissions Agriculture domain contains the following sub-domains:

Agriculture Total	Manure applied to Soils
Enteric Fermentation	Manure left on Pasture
Manure Management	Crop Residues
Rice Cultivation	Cultivated Organic Soils
Synthetic Fertilizers	Burning Crop Residues

The FAOSTAT Emissions database can provide significant support to FAO member countries, along four key dimensions:

- Providing regular updates of global and regional trends in GHG emissions from agriculture and land use;
- Supporting capacity development of member countries in assessing and reporting GHG emissions, considering new requirements under the Durban accords;
- Establishing a GHG emission benchmark for quality control and quality assurance;
- Providing a coherent framework for national-level analysis and dialogue on GHG assessment and gaps.

DISCLAIMER: The FAOSTAT Emissions data are estimates by FAO and do not coincide with GHG data reported by member countries to UNFCCC. The database is intended primarily as a service to help member countries assess and report their emissions, as well as a useful international benchmark. The FAOSTAT Emissions data are disseminated publicly to facilitate continuous feedback from member countries.