Reporting requirements of the LULUCF Sector under the UNFCCC and Kyoto Protocol

By
Jenny L. P. Wong
Adaptation, Technology and Science
UNFCCC Secretariat

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Inventories under the UNFCCC

• Inventories reported annually since 1997
• COP9 (2003): Completed the tables of the CRF for reporting the LULUCF sector (Decision 13/CP.9)
• By same decision, Annex I Parties should use the IPCC GPG for LULUCF for preparing inventories under UNFCCC, in 2005 and beyond
• At SBSTA 23 (Nov 2005), based on experiences on use of the CRF tables, Parties technically modified these tables to better meet reporting requirements
• Decision 14/CP.11 – Parties shall use these revised LULUCF tables for inventory submissions due in and after 2007

Requirements for LULUCF sector - NIR

• Chapter 7 LULUCF (CRF Sector 5)
• Description of land-use definitions, land-use classification, methods, activity data and parameters used (transparency)
• Additional information on disaggregation of subdivisions
• Information on incomplete reporting, gaps, other irregularities (completeness, comparability)
• Reporting has links to Agriculture sector. Information on how double counting and omissions between the two sectors avoided
• Information on improvements planned

Reporting Requirements – CRF for LULUCF

• Table 5: Sectoral Report for LULUCF
• Table 5A: Forest land & Land converted to forest land
• Table 5B: Cropland & Land converted to cropland
• Table 5C: Grassland & Land converted to grassland
• Table 5D: Wetlands & Land converted to wetlands
• Table 5E: Settlements & Land converted to settlements
• Table 5F: Other land & Land converted to other land
• Table 5(I): Direct \( N_2O \) emissions from N fertilization
• Table 5(II): \( N_2O \) emissions from drainage of soils
• Table 5(III): \( N_2O \) emissions from disturbance associated with land use conversion to cropland
• Table 5(V): \( C \) emissions from agricultural lime application
• Table 5(V): Biomass burning

Reporting Requirements – Forest Land

• Provide national definitions of forest land and subcategories in NIR
• Land converted to forest land: Report under conversion status for 20 years. After 20 years, land areas reported as forest land remaining forest land
• Non-CO\(_2\) gases (\( N_2O, CH_4 \)) reported for forest fertilization, forest fires and drainage of forest soils
• CO\(_2\) emissions from liming on forest land (total amount limestone and/or dolomite applied Mg/yr)
• CO\(_2\) emissions from forest fires can be reported either as C stock changes or emissions. Fires divided as controlled burning and wildfires.
• Direct \( N_2O \) emissions from fertilizer applied to forest. If cannot report separately, all \( N_2O \) emissions from fertilization reported in Agriculture sector.

Reporting Requirements – Forest Land

• If estimates for land converted to forest land are provided as a total, then information on types of land conversion need to be provided
• Increases and decreases in C stocks in living biomass should be reported separately, except due to method, not possible to separate these
• Methodology and definitions should be the same throughout time series
• Trend of increment in forest growing stock, area information should be explained in NIR
Reporting Requirements – Cropland

- Pools to report as C stock changes: soil organic carbon and living biomass (perennial woody biomass). Dead organic matter not required for cropland remaining cropland
- CO₂ emissions from liming
- N₂O emissions from disturbance due to land converted to cropland
- Non-CO₂ emissions from biomass burning on land converted to cropland.
- Biomass burning (field burning of agriculture residues) on cropland remaining cropland reported in Agriculture sector.

Reporting Requirements – Grassland

- Pools to report as C stock changes: soil organic carbon and living biomass. Dead organic matter not required for grassland remaining grassland
- CO₂ emissions from liming
- CO₂ and non-CO₂ emissions from burning of grasslands outside the tropics
- CO₂ and non-CO₂ emissions from burning on land converted to grasslands

Reporting Requirements – Cropland and Grassland

- Methodologies, AD and parameters under development for many countries
- If emissions or removals are significant, development of area specific activity data on management activities and land-use changes important for more accurate estimates
- Methodologies for mineral soils need data for period of 20 years or more.

Reporting LULUCF activities under the Kyoto Protocol

- Report emissions and removals of CO₂ and other GHG resulting from
  - Article 3.3 activities – Afforestation, Reforestation and Deforestation
  - Article 3.4 activities – Forest management, Cropland management, Grazing land management and Revegetation
  - Definitions of these activities in annex to decision 16/CMP.1
- Information reported is supplementary to that reported under the Convention
- Parties to report annually during the commitment period. But annual reporting does not imply need for annual measurements

Supplementary information required:

- General information - definitions, description of how definitions apply to national circumstances and applied consistently
- Land-related information – identify lands subject to 3.3 and 3.4 activities since 1990, spatial assessment unit used, maps/database to identify geographical locations
- Activity-specific information – methodologies used, uncertainty estimates, year of onset of activity
- Other information – key category analysis
- Information related to Article 6 (Joint Implementation)
Reporting LULUCF activities under the Kyoto Protocol

15 tables of the CRF for LULUCF under the Kyoto Protocol:

- Report on C stock changes in AGB, BGB, litter, dead wood and soils (ARD)
- Report on C stock changes in these pools for each of the elected Article 3.4 activity
- N₂O emissions from N fertilization (AR, FM), drainage of organic/ mineral soils (FM), disturbance associated with land-use conversion to cropland
- C emissions from lime application (all 3.3 and elected 3.4 activities)
- GHG emissions from biomass burning

Reducing emissions from deforestation in developing countries

- SBSTA, this May, initiated discussions of the issues relating to reducing emissions from deforestation in developing countries
- Workshop to discuss issues will be held in late August
- Scientific, technical and methodological aspects that will likely require data and/or information include:
  - Definitions, links between deforestation and degradation;
  - Data availability and quality;
  - Scale, rates and drivers of deforestation;
  - Data for estimation of changes in carbon stocks and forest cover
  - Uncertainties

THANK YOU