

Raising Awareness on National GHG Inventories in Developing Countries: A Proposal

The 7th Workshop on GHG Inventories in Asia (WGIA7)

7-10 July 2009, Seoul, Republic of Korea

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Outline

- What are the issues?
- What are the needs?
- What is being proposed?
- Conclusion and Recommendation

What are the issues?

- Data are not available
- High uncertainty associated with AD and EF
- Improving the quality of AD and to develop country-specific EF will require resources, strong coordination/collaboration, research and planning
- In most cases, GHG Inventory is given low priority; less financial support; less resources!
- No permanent staff or inventory agency; no continuity
- **Consequences: the quality of national GHG inventory is poor and the system is not sustainable!**

What are the needs?

- Need to improve on data collection and reliability
- Need to develop country-specific EF (CSEF)
- Need to enhance support (funding, coordination) for GHG Inventory activities
- Need to have a sustainable and high quality GHG inventory
- **Challenges:** How to **increase awareness** on the importance of national GHG Inventories so that these needs can be addressed (funding, coordination and management, etc.).

What is being proposed?

- SEA GHG Project Meeting in May 2009 in Cambodia
 - Draft **Summary for Policymakers (SPM)** about the GHG Inventory Chapter of the SNC
 - **Facts:** An informed policymakers and Inventory Managers will help enhance inter-agency coordination and the needed resources.

Draft SPM Outline (Cambodia Meeting)

- A. Background
- B. National GHG Inventory
- C. Building Sustainable National Inventory Management System
- D. Conclusion and Recommendation
 - **Feedback on draft SPM:** should be **clear on purpose, intended users, and contents**
 - **Revise the SPM for future discussion**

Approach to SPM revision

- Points to consider in revising the SPM template:
 - What should be the purpose?
 - Who are the clienteles?
 - What format or medium?
 - What should be the structure?
 - What message to convey?

What is the purpose of SPM?

General:

- To highlight information that should be conveyed to policymakers (and GHG Inventory Managers) about the importance of GHG Inventory and the information it provides.

Specific:

- To inform policymakers of:
 - Why we do GHG Inventory?
 - the needs (gaps) for having a sustainable and high quality GHG inventory
 - the benefits of having a sustainable and high quality GHG inventory

Who are the clientele?

General:

- **Policymakers and Inventory Managers:** To inform of the needed resources and coordination to develop a sustainable and high quality inventory

Specific:

- **Statistics Office and other relevant agencies:** To encourage to contribute in the improvement of AD quality
- **Researchers in relevant institutions and academes:** To encourage them to contribute in developing the needed country-specific EFs

What format or medium?

- SPM should:
 - be simple, clear, concise and not overly technical
 - be no more than 2-4 pages of information
 - adapt the language to national circumstances (if possible)
- Information can be presented in several ways:
 - Using headlines with short paragraphs or bullets
 - Using key questions and answers
 - Combination of the above

What format or medium?

- The SPM template can be adapted to national circumstances by:
 - Adding information on mitigation opportunities
 - Adding information on public awareness and outreach plans
- The template can be used to complement an “agency/ministry” planning process to provide justification for a request for resources

What should be the SPM Structure?

The Country's National GHG Inventory
in 2000

Why are we doing National GHG
inventories?

Why a high quality National GHG
inventory important?

Why a sustainable National GHG
inventory necessary?

Possible approaches to establish a sustainable
and high quality National GHG inventory

Benefits of having high quality
National GHG Inventory

Conclusion and Recommendation

Country X National GHG Inventory in 2000

- Total GHG emission in 2000 (use summary table and figure; by sector, by gas)
- Key sectors and sources
- Major greenhouse gases
- Trend in emissions; increase over 1994 estimate; projections

Example of Summary Tables

Table 1. Net GHG emissions and removals (Mt CO₂-e) by sector, 1994 and 2000

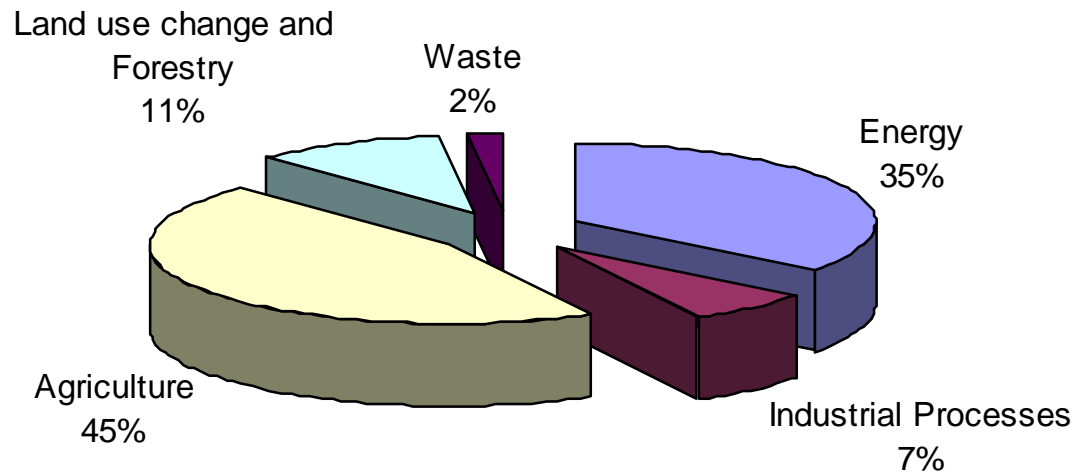
Sector	1994	2000	Change (Mt CO₂-e)
Energy	25.6	50.4	24.8
Industrial Processes	3.8	10.0	6.2
Agriculture	52.4	65.1	12.7
Land use change and Forestry	19.4	15.1	-4.3
Waste	2.6	2.6	0.0
Total net national emissions	103.8	143.2	39.4

Table 2. Net greenhouse gas emissions and changes (Mt CO₂-e) by gas, 1994 and 2000

Greenhouse Gas	1994	2000	Change (Mt CO₂-e)
Carbon dioxide (CO ₂)	40.6	68.7	28.1
Methane (CH ₄)	52.7	58.2	5.5
Nitrous Oxide (N ₂ O)	10.6	16.3	5.7
Total CO₂-e	103.8	143.2	39.4

Example of Summary Chart

GHG emissions by sector in 2000 (Total = 143.2 Mt CO₂-e)



Why are we doing national GHG Inventories?

- It is a component of the country's National Communication to fulfil its reporting obligation to UNFCCC
- The UNFCCC objective is to stabilise GHGs concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system.
- The ability to achieve this objective is dependent on accurate knowledge of emissions and trends
- The key mechanism for reporting is the National Communication.

Why a high quality National GHG Inventory important?

- A high quality National GHG Inventory is critical to tracking GHG emissions (and removals) that contribute to climate change.
- National GHG inventory is the foundation for developing policies and measures to address climate change

Why a sustainable National GHG inventory necessary?

- It will help countries produce more accurate inventories
- It may enhance efficiency and ensure optimum use of scarce financial and human resources

Possible approaches to establish a sustainable and high quality National GHG inventory

- Important role of government in resource allocation and coordination (e.g. institutional, legal, and procedural arrangements for generating and collecting data, archiving, and reporting)
- There are available tools and techniques to assist countries such as:
 - IPCC Guidelines and Good Practice Guidance
 - Handbook on Managing National GHG Inventory Process (UNDP)
 - UNFCCC Software
 - USEPA Template Workbooks (and software) for Developing a National GHG Inventory System
- Importance of Regional Cooperation and Initiatives
 - SEA GHG Project
 - WGIA

Benefits of having high quality National GHG Inventory

- Provides information useful to economic development assessment and planning, such as information on the supply and utilization of natural resources (e.g., croplands, forests, energy resources) and information on industrial demand and production;
- Emissions trend information in combination with economic data can be used to develop emissions projections
- Provides information useful for addressing other environmental issues (e.g., air quality, land use, waste management, etc.);
- Clarifies national data gaps that, if filled, may be beneficial for other reasons (e.g., vehicle fleet data)
- Useful in evaluating GHG mitigation options and opportunities; and
- Provides the foundation for emissions trading schemes or other market-based programs.

Conclusion and Recommendation

- The government has an important role to play in building a sustainable and high quality National GHG Inventory System
- A high quality national GHG Inventory is important as a foundation for developing policies and measures to address climate change particularly on mitigation
- There are a number tools and techniques that can be used but will entail strong coordination and resources
- There are a number of other benefits that could be obtained in developing a sustainable and high quality National GHG Inventory

Thank you!