

National system in Thailand
Dr. Asdaporn Krairapanond

Thailand's Experiences in GHGs Inventories

Dr. Asdaporn Krairapanond

**Ministry of Natural Resources and Environment
Workshop of GHG Inventories in Asia Region**

**November 13-14, 2003
Phuket, Thailand**

Overview

- **1990: 1st official GHGs inventory prepared in 1997**
- **Mainly supported by US Country Study Program**
- **Partly supported by the Royal Thai Government**

Overview (cont.)

- **1994 national inventory of GHGs represents the 2nd official inventory in Thailand**
- **Mainly supported by the Royal Thai Government**
- **Partly supported by GEF**
- **Used as the official data for National Communication**

Methodology used

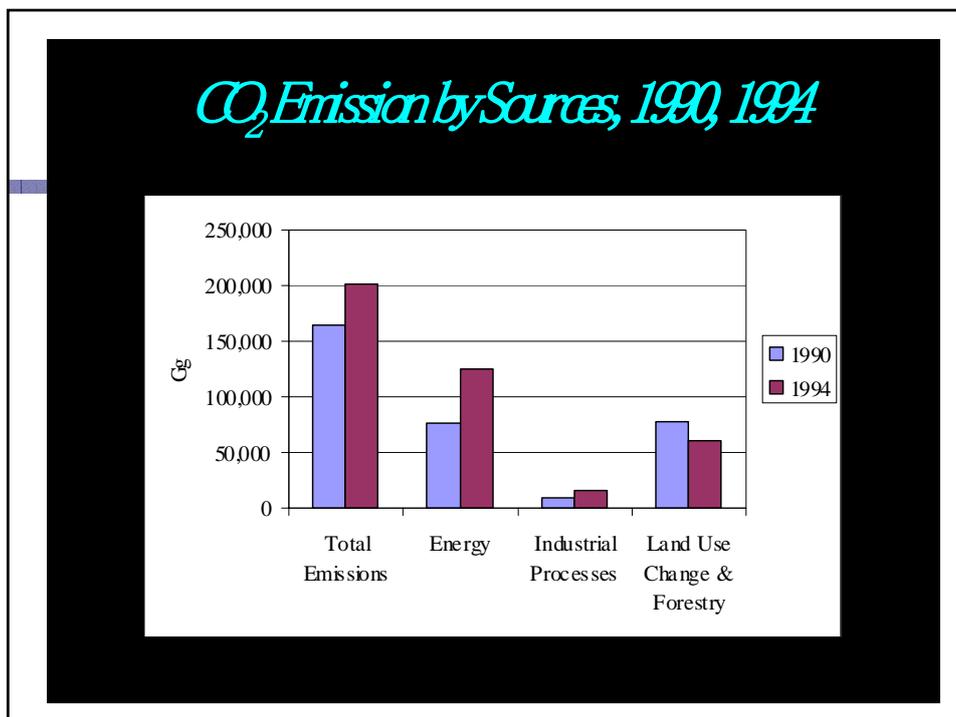
- **1994 inventory is the result of recent studies conducted by researchers from various research and academic institutes**
- **1996 IPCC Revised Guidelines for National Greenhouse Gas Inventories**

Methodology used (cont.)

- **used local activity data to substitute for the default data recommended by IPCC**
- **Inventory was emphasized with task forces for specific sectors**

Methodology used (cont.)

- **Experts from academia were utilized while knowledge and capacities were transferred to relevant government officials**
- **A series of internal review and workshops have been conducted throughout the period of inventory and National Communication preparation**



GHGs Inventory

- **Gross CO₂ 241 Tg (-sink 39 Tg):
Net 202 Tg**
- **Energy emitted more than one-half of
CO₂: forest and landuse emitted less than
that of 1990**
- **Methane 3.2 Tg: About 91 % from rice
and livestock**

GHGs Inventory (cont.)

- **N₂O 56 Gg; mostly from manure and agriculture soils**
- **NO_x 287 Gg; mainly from energy**
- **CO 555 Gg; mainly from land use change and forestry and agriculture**
- **NMVOG 2.5 Tg; mainly from energy**
- ***Total 1994 net emissions = 286 Tg CO₂ equivalent***

Experiences Gained

- **Information and data on climate change accumulated**
- **Experts practiced new methodologies on climate change issues**
- **Capacities of large numbers of scientists and social scientists were enhanced**

Experiences Gained (cont.)

- **Related officials were trained through workshops and seminars**
- **Sub-regional and Regional cooperation: emission factors (Malaysia)**

Problems and Limitations

- **Activity data, local emission factors and methodologies appropriate to national circumstances:**
 - **limited related research activities to support inventory and National Communication preparation**
 - **lack of certain government policy**
 - **lack of high-level decision making awareness**

Problems and Limitations (cont.)

- **Information system and database**
- **Experts with capacity built are difficult to maintain**
- **Trained officials are difficult to maintain**

Beyond NC

- **Enabling Activity Phase II:**
 - **mainly supported by GEF**
 - **focused on Technology need assessment, Observation systematic network and emission factors**

Next Step

- **Information system and database should be established**
- **Activity data, local emission factors and methodologies appropriate national circumstances should be improved**
- **Ways must be searched to maintain and enhance local capacities in preparation of inventory and National Communication**

Next Step (cont.)

- **Establish task forces composed of experts from academia and related official staff to work together in GHGs inventory preparation**
- **Mobilize the experiences and engagement of related officials to develop information system for activity data and emission factors**

Next Step (cont.)

- **Government policy framework and high-level decision making awareness are crucial needed**

Suggestion for Regional Cooperation

- **Encourage the establishment of data bank and information network on activity data and local/sub, regional emission factors in every sector**
- **Invited Japanese Government to support the development of local/sub, regional emission factors in every sectors**

Suggestion for Regional Cooperation (cont.)

- **Call for financial and technical support both through bi- and multilateral cooperation**
- **Encourage IGES and NIES to be the regional cooperation center**
- **Welcome more communication**

Thank you

- ***Dr. Asdaporn
Krairapanond***
- ***Tel./Fax:662 2982014,
662 2982659***
- ***E-mail:
asdaporn@hotmail.com***

