


# **To improve the quality of GHG inventories in Asia Pacific countries ...**



11th Asia Pacific Seminar on Climate Change  
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# Outline

- GHG inventory is one of the most important components in the National Communications.
- This presentation is to introduce the following activities that would help countries improve the quality of their GHG inventories.
  - Network for Asia Pacific to Improve Inventories Database (**NAPIID**) by IGES
  - Establishment of a Database on Greenhouse Gas Emission Factors by IPCC



# Background

- Quality of GHG inventories depends on reliable emission factors and activity data.
- Preferably, emission factors should reflect national circumstances.
- Not all regions or countries are covered by default emission factors in the *IPCC Guidelines / Good Practice Report*.
- Sharing of data/information will avoid duplication of research efforts.



# **IGES/NIES workshop on GHG Inventories for Asia-Pacific Region**

March 9-10, 2000, Hayama, Japan

– Sponsored by

- Environmental Agency of Japan

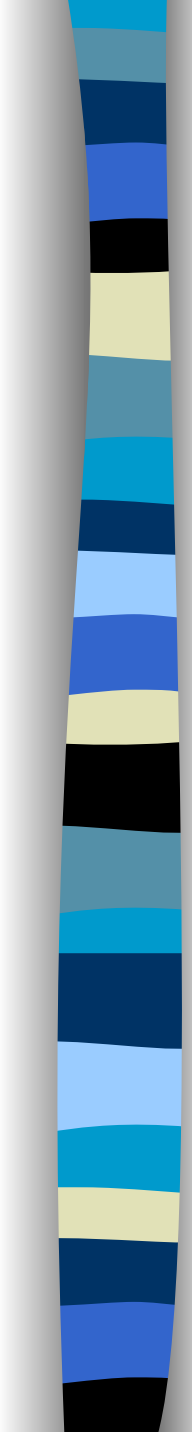
– Hosted by

- Institute for Global Environmental Strategies (IGES)
- National Institute for Environmental Studies (NIES)



# Objectives of the workshop

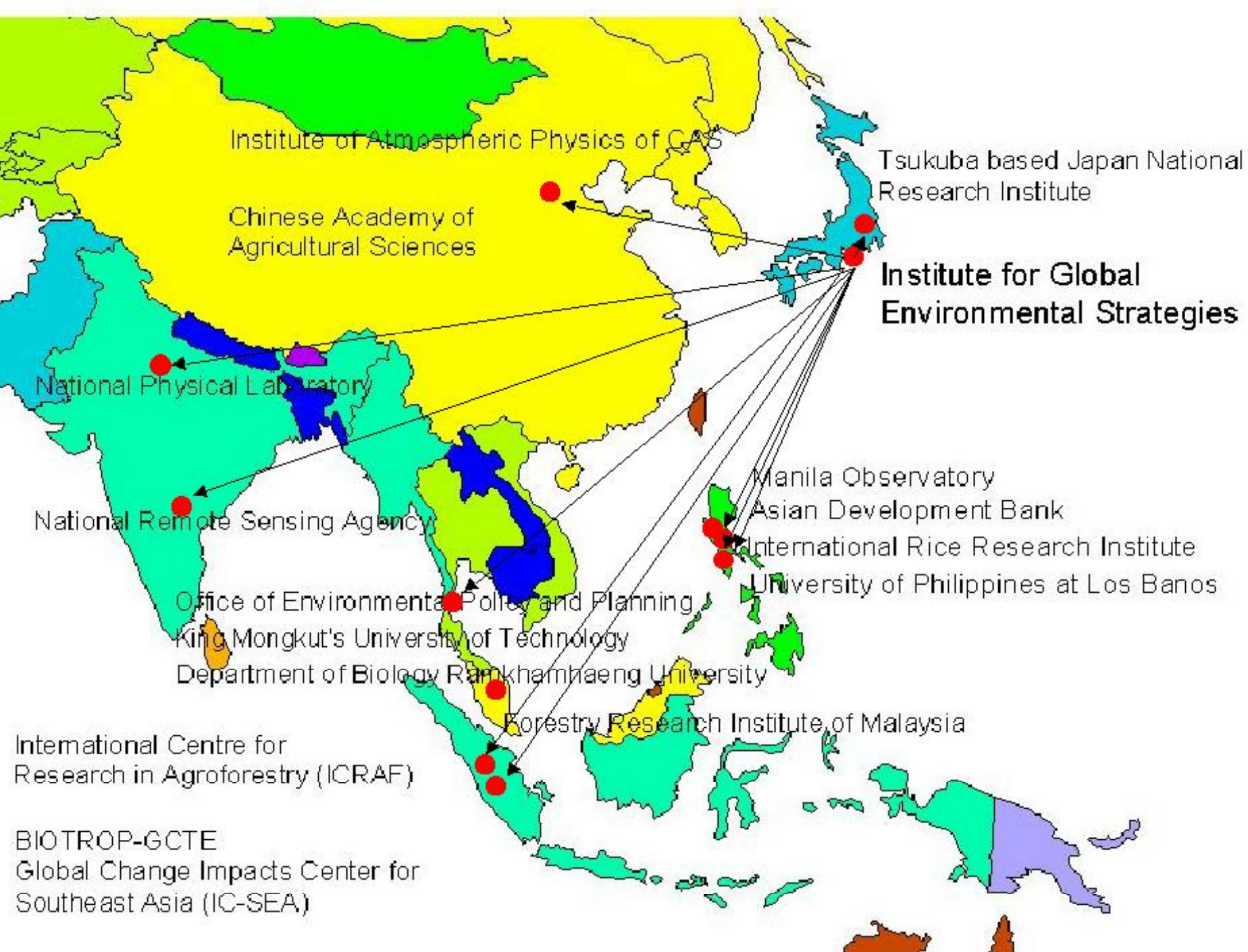
- To present the current state of knowledge on GHG inventories in the AP region;
  - To evaluate and improve the current methods used in compilation of inventories in the AP region;
  - To identify data gaps and problems in GHG inventories for the AP region;
  - To initiate the development of a database for GHG inventories in the AP region;
- ..... Etc.



# NAPIID

**Network for Asia Pacific  
to Improve (GHG) Inventories Database**

- Strong need for exchange of information and data and collaboration among GHG inventory experts in the region.
- NAPIID was established at the IGES/NIES workshop to improve the database of activity data and emission factors in the region.
- Please visit  
<http://www.iges.or.jp/cc/napiid/NAPIID.htm>





# NAPIID collaboration (LUCF)

- Research to improve estimates of annual biomass increment and forest aboveground biomass in Southeast Asia using GIS approach and site- or species- specific allometric regressions  
(Dec. 2000 - Feb. 2001)
  - IGES (Japan)
  - Univ. of the Philippines Los Banos Foundation, Inc.
  - Royal Forest Department of Thailand
  - Department of Geophysics and Meteorology, Bogor Agricultural University (Indonesia)





# NAPIID collaboration (Agriculture)

- Workshop on GHG Emissions from Rice Fields in Asia (Nanjing, China, 26-27 Feb 2001)
  - IGES, NIES (Japan)
  - Laboratory of Material Cycling in Pedosphere, Institute of Soil Sciences, Chinese Academy of Sciences (China)
- To develop applicable methodologies for estimating CH<sub>4</sub> and N<sub>2</sub>O emissions and practicable strategies for mitigating GHG emissions from rice fields in Asia; etc.



# Future development of NAPIID

- Currently, it is...
  - A private network of individual experts
  - Hosted by IGES voluntarily without any specific funds available
  - Focusing on Agriculture and LUCF sectors
- In the future, it is desirable to be...
  - An official network involving National Focal Points, some international organisations
  - Hosted and funded by some government or international organisation.
  - Covering all sectors of GHG sources/sinks



# Future development of NAPIID

- To play a key role in the region, e.g, ...
  - to provide a technical forum to discuss, exchange information and harmonise emission inventories including emission factors, methodologies and guidelines;
  - to conduct in-depth evaluation of emission factors and methodologies in current operation; and
  - to co-operate with other international organisations working on emission inventories with the aim of harmonising methodologies and avoiding duplication of work.
- N.B. These are the objectives of Task Force on Emission Inventories and Projections (TFEIP) for UNECE Convention on Long-Range Transboundary Air Pollution.



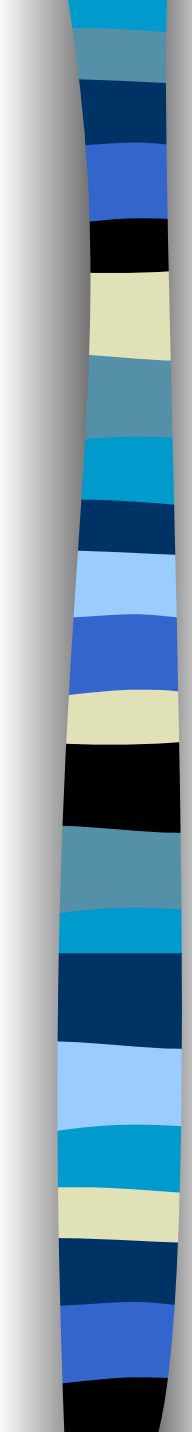
# Future development of NAPIID

## Contribution to the IPCC-NGGIP

- One of the objectives of the current NAPIID is to support the Technical Support Unit of the IPCC National Greenhouse Gas Inventories Programme (**IPCC-NGGIP**).

Hosted by IGES with financial support from Government of Japan

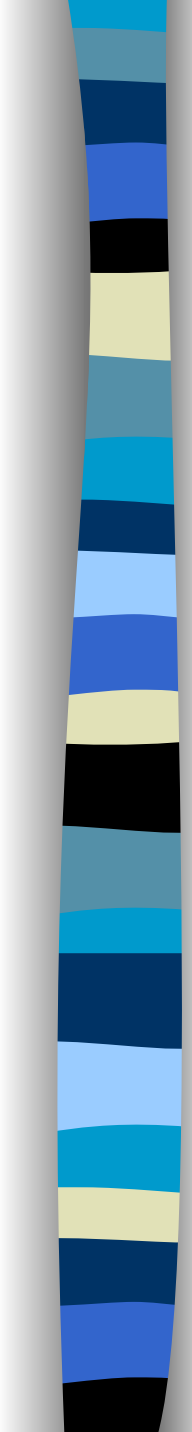
- To this end, NAPIID will make an effort to:
  - disseminate information on NGGIP activities to the inventory experts in the region;
  - input data on emission factors in the region into the **IPCC Emission Factors Database**



# IPCC NGGIP project

## Establishment of a Database on Greenhouse Gas Emission Factors

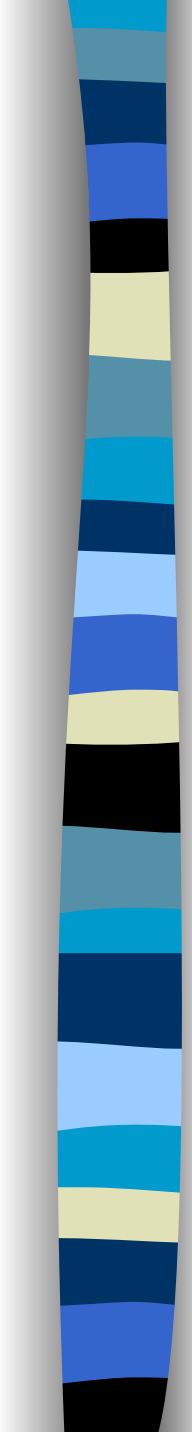
- Objective of the project
  - To develop a database of emission factors and underlying information for the purposes of securing and disseminating the most current scientific information on emission factors and assisting in increasing transparency and reliability of national inventories.
    - The database would include, as far as possible, details of the information source and the derivation of the factors as well as the uncertainties.
    - This is especially important for those countries that lack good data and cannot ensure reliable estimates.



# IPCC NGGIP project

## Establishment of a Database on Greenhouse Gas Emission Factors

- This database would serve:
  - Inventory compilers (Inventory agencies);
  - IPCC (for future update of the IPCC Guidelines);
  - Inventory review teams;
  - Scientists;
  - Project developers, involved in e.g. CDM & JI;
  - Corporation & others who engage in ET;
  - General public and NGOs
  - Consultants involved in GHG inventories work



# IPCC NGGIP project

## Establishment of a Database on Greenhouse Gas Emission Factors

- **Phase I : Planning, Design and Pilot Testing**
  - 1) **First expert meeting** for determining functional design, etc. (July 2001)
  - 2) **Development of Prototype Database**  
(September - December 2001)
  - 3) **Pilot testing** (January - March 2002)
  - 4) **Second expert meeting** for review of the prototype database (April 2002)
  - 5) **Finalisation of the EFDB construction**  
(May - October 2002, by COP8)
  
- **Phase II : Dissemination and Maintenance**



## INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

## National Greenhouse Gas Inventories Programme



IPCC web sites

[Organization](#)[Technical Support Unit](#)[Publications](#)[Meetings](#)[Electronic Discussion Group \(EDG\)](#)[Links](#)

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) in 1988. Its main objective was to assess scientific, technical and socio-economic information relevant to the understanding of human induced climate change, potential impacts of climate change and options for mitigation and adaptation. The IPCC has completed two assessment reports, developed methodology guidelines for national greenhouse gas inventories, special reports and technical papers. For more information on the IPCC, its activities and publications, please see the [IPCC homepage](#).

The IPCC has three working groups and a task force.

- [Working Group I \(WG I\)](#) : The science of climate change
- [Working Group II \(WG II\)](#) : Impacts, adaptation and vulnerability
- [Working Group III \(WG III\)](#) : Mitigation of climate change
- **Task Force on National Greenhouse Gas Inventories (TFI)**

<http://www.ipcc-nggip.iges.or.jp>