Greenhouse gas Inventory Office of Japan



## Land Use, Land-use Change, and Forestry (LULUCF) Sector Group Discussion

### INTRODUCTION

The 8th Workshop on GHG Inventories in Asia (WGIA8) 14 July 2010 (14:00 – 17:00) Room Plaza Hall, Lao Plaza Hotel, Vientiane, Lao PDR

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# **Background Information**



Development of a LULUCF inventory with reasonable accuracy is needed

- > to fulfill the requirement of the Convention (Article 4 and 12), and
- $\succ$  as a basis for the nationally appropriate mitigation actions including the REDD.

Methodologies

Convention (Non-Annex I parties):

Revised 1996 IPCC Guideline (GPGs & 2006 Guideline on a voluntary basis)

#### REDD (Developing country parties):

- <u>The most recent IPCC guidance and guidelines</u>, as adopted or encouraged by the COP (Decision 4/CP.15, 1 (c))
- The use of <u>a combination of RS and ground-based forest carbon inventory</u> <u>approaches</u> for estimating, as appropriate, anthropogenic forest-related GHG emissions by sources and removals by sinks, forest carbon stocks and forest area changes are requested to be established (Decision 4/CP.15, 1 (d) (i)).

# Background Info. (WGIA7)



#### Theme: How to Utilize RS and GIS Data for LULUCF Inventory

Chair: Dr. Abdul Rahim Nik (FRIM, Malaysia), Rapporteur: Dr. Rizaldi Boer (CCROM, Indonesia) Attendees: 11 participants from Indonesia, Japan, Korea, Malaysia, Myanmar and Thailand

#### **Presentations:**

Noriko Kishimoto (GSI): Utilizing Global Map for addressing Climate Change The Global Map was introduced and its applicability to the LULUCF inventory was illustrated. Global Map: <u>http://www.iscgm.org/cgi-bin/fswiki/wiki.cgi</u> Note: The Global Map is also listed in Table 3A.1.1 in the 2006 IPCC GL (Vol.4, p.3.23-24)

Yasumasa Hirata (FFPRI): Application of Remote Sensing to Forest Inventory for Identifying Deforestation and Degradation

Japan's accounting system for the KP-LULUCF was introduced. Furthermore, techniques for interpreting and classifying RS data, for identifying areas being deforested and degraded, and for applying new RS technologies to inventory were introduced.

Savitri Garivait (JGSEE): Thailand's experience with Remote Sensing and GIS Experiences and lessons learn from the application of RS and GIS data to the emissions from the agricultural biomass open burning were shared.

See detail: http://www-gio.nies.go.jp/wgia/wg7/wg7index-e.html

# Background Info. (WGIA7)



#### **Conclusions:**

- > Available global RS and GIS datasets and how they could be acquired should be examined;
- A margin error may occur when global data is applied to national context, thus a country should take care of this;
- Collection of ground-based data should be enhanced in order to verify RS/GIS datasets and to obtain emission and removal factors;
- Exploring the use of RS technology for estimating peatland carbon stocks should be considered with reasonable accuracy;
- Sharing experiences of Annex-I countries in regard for data collection and verification would be beneficial for considering how non-Annex I countries could improve their LULUCF inventories.

# Background Info. (WGIA7)



#### **WGIA7** Recommendations:

- In order to produce a high-quality inventory in the subsequent NCs, the followings are necessary:
  - 1) review of the development process of the latest inventory,
  - 2) identification of remaining gaps and barriers, and
  - 3) consideration to the development of a <u>better national inventory system;</u>
- How to acquire relevant data nationally and globally for LULUCF inventories, including training GIS experts in deriving AD and EFs from global data, should be discussed;
- Enhancement of cooperation among experts in Agriculture and LULUCF sectors and among those in RS and GIS, in the application of RS and GIS data to the GHG inventory is needed to be considered for adopting the 2006 IPCC Guidelines.

# **LULUCF-WG in WGIA8**



#### Theme: Follow up of the WGIA7 (Remote-sensing and GIS data)

#### **Discussion topics**

- What kind of progress was made in RS technology and GIS data? (What kind of data are available now and could be available in the near future?)
- 2. What kind of progress was made in the application to the LULUCF inventory in the WGIA courtiers? (Can we learn their good practices and apply to our own LULUCF inventories?)
- 3. What kind of gaps and barriers are still to be overcome in the WGIA countries?
- 4. How can we enhance the interaction between GHG inventory and GIS experts?

Chair: Dr. Abdul Rahim Bin Nik Rapporteur: Dr. Savitri Garivait

Approx. 40 attendees

## Schedule wGIA8, Day 2, 14:00-17:00



- 5 min. Junko Akagi (GIO/NIES, Japan) Introductory Presentation
- 20 min. Leandro Buendia (SEA GHG Project Coordinator) Progress in the use of ALU Software by Participating Countries to the SEA GHG Project
- 20 min. Yasumasa Hirata (FFPRI, Japan) Potential of RS/GIS data for GHG inventory in forest sector
- 20 min. Noriko Kishimoto Hosonuma (GSI, Japan) Utilization of Global Map for GHG Inventory
- 15 min. Tea Break (15:30 15:40)
- 15 min. Rizaldi Boer (Indonesia) Indonesia's experience with the RS and GIS data
- 15 min. Savitri Garivait (Thailand) Thailand's Experience with Remote Sensing and GIS Data
- 15 min. Min Zaw Oo (Myanmar) Myanmar's LULUCF inventory

Discussions & Wrap-up



- Progress made in RS technology and GIS data
  - X
  - X
- Currently or potentially available data
  - X
  - X





Progress made by the WGIA countries in the application of RS/GIS data to their LULUCF inventories – Any good practices?

- X
- X





- Gaps and barriers to be overcome in the WGIA countries (RS/GIS data application and LULUCF inventory development in general)
  - X
  - X
- How can we enhance interaction between inventory and GIS experts?
  - X
  - X
- > Others [if any]
  - X

• X



- What do you want to discuss in WGIA9 and in future WGIA? (Recommendations)
  - X
  - X





# Let's start the session!

