Overview of WGIA14 Progress of Mutual Learning

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The 14th Workshop on Greenhouse Gas Inventories in Asia

Ulaanbaatar, Mongolia

27th July, 2016

WGIA - Capacity building for Measurability, Reportability and Verifiability -

Workshop title:	Workshop on Greenhouse Gas Inventories in Asia (WGIA)
Objective:	To support countries in Asia to improve the quality of inventories via regional information exchange
Organizers:	Ministry of the Environment of Japan National Institute for Environmental Studies
Participating countries:	Brunei, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Lao P.D.R., Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, Vietnam (15 countries)
Participants:	Government officials, researchers and compilers
Style:	Annual workshop since 2003
Funds:	Ministry of the Environment of Japan

Achievements of WGIA

Strengthened a network of regional experts

WGIA1 (2003)

WGIA13 (2015)

Dissemination

- Website
- Proceedings

Welcome to WGIA14!

Over **100** participants from …

13 Participating Countries in Asia:	<u>Government officials, researchers, compilers from</u>: Brunei, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Lao P.D.R., Malaysia, Mongolia, Myanmar, Thailand, and Vietnam.
Japan's Organizations:	• Ministry of the Environment (MOE), • National Institute for Environmental Studies (NIES), • Institute for Global Environmental Strategies (IGES), • Japan International Cooperation Agency (JICA), and so on…
International Organizations & observers:	• UNFCCC Secretariat, • IPCC Task Force on National GHG Inventories TSU, • Food and Agriculture Organization of the United Nations (FAO), • Australia • Iran and so on…

Objectives of WGIA14

- To enhance sector-specific capacity for inventory compilation (Mutual learning)

- To share the information of national GHG inventory for national communications (NCs) and biennial update reports (BURs) (Session I)

- To enhance the understandings of institutional arrangement of NC and BUR for continuous GHG inventory compilation (Session II)

- To explore good practice for International Consultation and Analysis (ICA) of BUR (Session III)

- To promote the activities with co-benefit for GHG inventory and related support (Session IV)

Workshop flow

Day 1: 26th July, Tuesday

- Mutual Learning (Closed Session)

Day 2: 27th July, Wednesday

- Opening Session
- Session I: Updates on the National Communications (NCs) and Biennial Update Reports (BURs) from non-Annex I Parties
- Session II: Institutional Arrangement for National GHG Inventory and BUR
- Session III: Good Practice for ICA Process

Day 3: 28th July, Thursday

- Session IV: Activities with Co-benefits for GHG Inventories or Mitigation, and Related Support
- Wrap-up Session
- Joint Meeting of the WGIA Organizing Committee (OC) and Advisory Board (AB) (Closed Session)

Study Tour: 29th July, Friday

- Study Tour (Visiting Salkhit Wind Park (The first Mongolian wind farm)

Expected outcomes

- WGIA is targeting capacity building of GHG inventory preparation of Asian counties.

- Enhancement of quality of GHG inventories for NCs and BURs submission

- WGIA14 focuses on the institutional arrangement of NCs and BURs.

- Enhancement of understanding the importance of GHG inventories, through the discussion of co-benefit

- Accurate inventory of NCs and BURs will contribute to planning and assessment of progress on emission reduction target in INDC/NDC.

PROGRESS OF MUTUAL LEARNING

- FOLLOW-UP SURVEY OF MUTUAL LEARNING -

Mutual Learning programme since 2010

■ Objective

- To develop capacity of inventory compilation by learning from the partner county's inventory

  – To study methodology
  – To progress inventory compilation (data collection, quality control, and etc.)
  – To improve documentation

■ Approach

- Bilateral learning
- Exchange of the inventories
  – Document on methodology
  – Spreadsheet for calculation
- Reading carefully, clarifying with questions
- Learning mutually good practices from the partner country's inventory
  – Not one sided lecture
  – Not peer review with criticism

General Procedure of ML

- ## Preliminary process

Announcement	: December
Application	: January
Determining partners	: March

- ## Main process

Submission of materials	: April –May
Material Exchange	: June
[Learning the materials]	
Comment exchange	: June
Answer to comments	: July
Sessions	: July

Expected outcomes

■ Issues discussed

Estimation methodology

- Acquisition of activity data
- Adoption of emission factor
- Uncertainty analysis
- Transparency of documentation

National system

- Institutional arrangement
- Quality assurance & quality control

etc.

■ Benefit to the parties

➢ Good opportunity to know other country's inventory

➢ Motivation for continuous inventory compilation

➢ Improvement of methodology, etc.

History

	2008-2010	2010 WGIA8	2011 WGIA9	2012 WGIA10	2013 WGIA11	2014 WGIA12	2015 WGIA13
General	Trial implementation Japan-Korea	Introduction to ML (with hands on training)	-	-	-	-	Japan-Vietnam
Energy			Indonesia-Mongolia	Cambodia-Thailand	Lao PDR-Thailand	Indonesia-Myanmar	-
IP			-	Indonesia-Japan	-	-	-
Agriculture			-	Indonesia-Vietnam	China-Myanmar	China-Mongolia	Indonesia-Lao PDR
LULUCF			Japan-Lao PDR	-	-	Vietnam	Cambodia-Mongolia
Waste			Indonesia-Cambodia-Korea	China-Korea	Malaysia-Vietnam	-	Korea-Myanmar

- Trial implementation between Japan and Korea since 2008
- Introduction to ML activity on WGIA 8
- Added as official programme into WGIA since 2011
- Added a session for General (cross cutting issues) on WGIA13.

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Experienced countries

	2011 （WGIA9）	2012 (WGIA10)	2013 (WGIA11)	2014 (WGIA12)	2015 (WGIA13)
Cambodia	✓	✓			✓
China		✓	✓	✓	
India					
Indonesia	✓	✓		✓	✓
R.O.K	✓	✓			✓
Japan	✓	✓			✓
Lao PDR	✓		✓		✓
Malaysia			✓		
Mongolia	✓			✓	✓
Myanmar			✓	✓	✓
Philippines					
Singapore					
Thailand		✓	✓		
Vietnam		✓	✓	✓	✓

- In spite of many applicants every year, not all of the countries have experienced ML yet..

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Follow-up survey of Mutual Learning

- **Objective**
  - To follow up outcomes from mutual learning programme
  - To understand requests for future mutual learning programme

- **Outline of survey**
  - Intended person

    Participants of previous mutual learning
  - Date

    18 May 2016 - 10 June 2016
  - Answer

    9 participants

Thank you for answering the Questionnaire!!

Follow up survey of Mutual Learning

Q. Please answer whether there has been any improvements?

Item	Yes	No
Method	5	2
Activity data	7	0
Emission factor	5	2
Other	5	1
Cross cutting	-	-
Improvement of capacity (as a individual)	9	0

- One country which joined the mutual learning for the General sector did not answer for "Method", "Activity data", and "Emission factor".
- Another country which has not started the next compiling process did not answer.

Follow up survey of Mutual Learning

- Results (Improvements related to issues taken up in ML)

Method [Yes : 5]

Planning to move from Tier 1 to Tier 2; Applying the 2006 IPCC GLs;
Planning to estimate for a missing source;
Improving the motivation for continuous improvement of inventories

[Subcategory] Nitrogen leaching, Reference Approach vs Sectoral Approach

Activity data [Yes : 7]

Archived information on data collection;
Consideration undertaken to improve accuracy and collection of data;
Established a good relationship with private company and to got permission for surveying;
Secondary data from Department of Agriculture and experts' judgement were utilized;
Capacity building also provided to national experts who review and collect data; Updated a correction factor;
Using Forest inventory and land use matrix,

[Subcategory] Live stock composition,

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Follow up survey of Mutual Learning

- Results (Improvements related to issues taken up in ML)

Emission Factors [Yes : 5]
Working to establish and apply local EF; Working to improve parameter data for EF; Application of 2006 IPCC GL EFs; Application of country specific emission factor; Consideration of country-specific NCV; Using Protein consumption data from FAO,
[Subcategory] N_2O emission from sewage treatment, enteric fermentation and manure management of livestock,

Other [Yes : 5]
Allocation of emissions from non-energy use of some petroleum products; Clearer specification of data sources and methodology is achieved; Specific errors that were overlooked in inventory compilation were identified

Follow up survey of Mutual Learning

- Results (Improvements related to issues taken up in ML)

Cross cutting

Prepared a QA/QC plan, Uncertainty analysis;
Prepared GHG inventory improvement plan;
Established the National GHGs inventory system by Prime Minister Decision
about data collection system and roadmap,

Improvement capacity (as an individual) [Yes : 9 (all)]

Gained knowledge of key areas in the inventory, through the comparison with
other countries, and identified gaps;
Gained knowledge in background information like related regulations, legal
framework and statistical system;
Gained knowledge of the diversity of methodologies and the process of AD
collection in other countries;
Gained deeper understanding of National Inventory Systems

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Follow up survey of Mutual Learning

- Results (Improvements related to issues taken up in ML)

Comments for future Mutual Learning

Very useful, expertise of experts from neighboring countries which have a similar context and same situations may help a lot

Beneficial, we can get knowledge and experience of other countries and it will improve our capacity for our future inventory work.

Very necessary for us to get experiences from countries on issues such as: data collecting, compiling, developing EF, 2006 IPCC GL and 2006 software

Requests for future Mutual Learning

Participation of more than 2 countries, or a same team of a nation works with another nation in the next WGIA;

Need more discussion on UA as well as QC of AD;

To solve data gaps, method for extrapolation/interpolation and EF selection;

To engage in ML on key concerns such as carbon pool selection, base year selection, and REL/RL development;

To discuss inventory compilation in a consistent manner for the Asian region

Summary of Mutual Learning

- Through the mutual learning sessions,
    - Methodology, activity data and emission factors have been improved.
    - Institutional arrangement also has been improved.
    - Knowledge was gained on QA/QC, Uncertainty analysis
    - Back ground information, such as related regulations, legal framework and statistical system in other country, were learned.
    - Not only the GHG inventory report, but also capacities of inventory compilers have been improved.
    - Diversity of methodologies and the process of AD collection in other countries were understood.
- Capacity building also provided to national experts who review and collect data,
- Participants would like to participate in mutual learning programme in the future.

Thank you
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GIO website: http://www-gio.nies.go.jp/index.html

WGIA website: http://www-gio.nies.go.jp/wgia/wgiaindex-e.html