



# **AFOLU**

## **Group Discussion**

### **INTRODUCTION**

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***WGIA10 AFOLU WG in Hanoi, Vietnam***  
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# Key categories of WGIA member countries

- NC1<sup>1</sup> (1990 or 1994): LUCF, Energy, Agriculture (Hardly any IP and Waste)
- NC2<sup>2</sup> (2000) : Almost same as NC1 but more IP and Waste

	India		Indonesia		Korea		Malaysia		Mongolia		Singapore		Thailand		Viet Nam	
	1994	2000	1994	2000	1990	2000	1994	2000	1990	2000	1994	2000	1994	2000	1994	2000
#1	1A1	1A1	5D	5B	1A2	1A2	5A	5A	1A1	1A1	1A1	1A1	5B	1A1	5B	5A
#2	4A	1A2	5B	5D	1A4	1A4	1A3	1A1	5C	4A	1A2	1A2	1A1	1A3	5A	5B
#3	1A2	4A	5A	5A	1A3	1A3	1A1	1A3	4A	5C	1A3	1A3	4C	5B	4C	4C
#4	4C	5A	5C	5E	1A1	1A1	6A	1A2	5B	1A3			1A3	5C	5C	5D
#5	1A3	1A4	1A1	6B	5A	5A	1B2	6A	5A	1A4			1A2	1A2	5D	1A2
#6	1A5	1A3	1A2	1A1	2A	2A	1A4	5B		5A			2A	4C	4D	4D
#7	1A4	4C	4C	5C	4C	2F	5B	1B2		4D			4A	2A	1A2	1A3
#8	2C	4D	1A3	1A2	6B	6A	4C	2A		1A2			4D	5A	1A4	1A1
#9	4D	2A	1B2	1A3		2B	2A	1A4		5B			1A4	1A4	4A	1A4
#10	2A	6B	1A4	1A4		4C		2C					4B	4A	5E	4A
#11	4B	2B	4A	4C										4D	1A1	2A
#12	5D		4D	2A										4B	1A3	5C
#13	5B			1B2										6A	2A	6A
#14	2B			4D											4B	4B
#15	5A			6A											1A5	1A2
#16				4A											4F	2C
#17				1A5												6B

*Energy, Agriculture and LULUCF are still prioritized categories for improvement*

Note: Analysis was conducted by the WGIA Secretariat. GWP of AR2 was used to obtain CO<sub>2</sub> equivalent data for each category.

■ : Agriculture, ■ : LUCF

Reference:

<sup>1</sup> Chisa Umemiya & Tomoyuki Aizawa, Identification of regionally-significant source/sink categories in Asia, 2<sup>nd</sup> Workshop on GHG Inventories in Asia, 7-8 Feb 2005, Shanghai, China. ([http://www-gio.nies.go.jp/wgia/wg2/pdf/2\\_13\\_1610.pdf](http://www-gio.nies.go.jp/wgia/wg2/pdf/2_13_1610.pdf))

<sup>2</sup> Initial and Second National Communications of each country

- Considering the fact that AFOLU (agriculture and LULUCF) sector includes significant emission/removal sources in many of the member countries, continuous discussions on this sector are needed. In this session, the member countries will give presentations and exchange information on the details of estimation methodologies and/or mitigation measures used by each country.
- ***Chair: Dr. Damasa Magcale Macandog***
- ***Rapporteur: Dr. Khin Lay Swe***



# Time Schedule

## WGIA10 Day 1, 13:30~17:00

- 10min. **Introductory Presentation**
- 20min. Dr. Khin Lay Swe (Myanmar)
  - “Initial National Communication (INC) Project in Myanmar”
- 20min. Dr. Idat Galih Permana (Indonesia)
  - “Inventory and Mitigation for Methane Emissions  
from Livestock in Indonesia”
- 20min. Mr. Worapong Waramit (Thailand)
  - “Greenhouse Gases Inventory in Agricultural Sector of Thailand”
- 20min. Dr. Shenghui Han (China)
  - “Greenhouse gas emission from China cropland”
- 20min. Dr. Damasa Magcale Macandog (Philippines)
  - “Philippine SNC: Gaps, Challenges and Improvements for the  
GHG Inventory of the AFOLU sector”

# Time Schedule

## WGIA10 Day 1, 13:30~17:00

- 20min. 15:20-15:40 ----Coffee Break----
- 20min. Dr. Elizabeth M.P. Philip (Malaysia)  
“Developing a Sustainable AFOLU GHG System”
- 20min. Dr. Kyeong-hak Lee (Korea)  
“Monte Carlo Simulation of Uncertainty Analysis for National GHG Inventories”
- 40min. *Group discussion, Make WG Report for Wrap-up Session*

# Summary of AFOLU WG

## ➤ Memorable information in this WG

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# For the future WGIA

➤ What do you want to discuss in WGIA11 or in future WGIA ?  
(for Agriculture/LULUCF sector)

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**Introduction for**  
**Monsoon Asia Agro-Environmental**  
**Research Consortium (MARCO)**

**&**

**Global Research Alliance(GRA)**  
**On Agricultural Greenhouse Gases**

**provided by Kazuyuki Yagi**  
**(National Institute for Agro-Environmental Sciences**  
**(NIAES))**

# Monsoon Asia Agro-Environmental Research Consortium (MARCO)

## NIAES International Symposium 2006

Evaluation and Effective Use of Environmental Resources for Sustainable Agriculture in Monsoon Asia  
-Toward International Research Collaboration-

Dec. 12-14, 2006 Epochal Tsukuba National Institute for Agro-Environmental Sciences Agriculture, Forestry and Fisheries Research Council NIAES



### MARCO members:

Korea: • National Academy of Agricultural Science

China: • Institute of Soil Science

• Institute of Applied Ecology

• Cold and Arid Regions Environmental and Engineering Research Institute

• Inner Mongolia University

Laos: • National Agriculture and Forestry Research Institute

Thailand: • Department of Agriculture

• King Mongkut's Univ. of Technology

Malaysia: • Department of Meteorology

Indonesia: • Environmental Research Institute of South East Asia

• Bogor Agricultural University

Bangladesh : • Bangladesh Agricultural University

India: • National Physical Laboratory

Japan: • National Institute for Agro-Environmental Sciences

• Environmental Diplomatic Leader Education, University of Tsukuba

# Recent MARCO Events on Agricultural Greenhouse Gas Emissions

2010 September, Tsukuba: MARCO/GRA Joint Workshop on Paddy Field Management and Greenhouse Gases

2010 September/October, Bogor: MARCO-FFTC International Workshop on Evaluation and Sustainable Management of Soil Carbon Sequestration in Asian Countries

2011 November, Tsukuba: MARCO Workshop on Technology Development for Mitigating Greenhouse Gas Emissions from Agriculture

2012 September 24-27, Tsukuba: MARCO Symposium 2012 “Strengthening Collaboration for Agro-Environmental Challenges in Monsoon Asia”  
Workshop 1: Agriculture and climate change in monsoon Asia – adaptation, mitigation, and forecast

■ See details at: <http://www.niaes.affrc.go.jp/marco/index.html>



# Global Research Alliance (GRA)

## On Agricultural Greenhouse Gases

GLOBAL  
RESEARCH  
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

- Is a bottom-up international network, founded on the voluntary, collaborative efforts of countries.
- Was launched on December 2009 in the UNFCCC COP15.
- Brings countries together to find ways to grow more food without growing greenhouse gas emissions.
- Now has more than 30 member countries from all regions of the world.
- Organizes 3 research groups and cross-cutting issues
- See details at <http://www.globalresearchalliance.org/>



# Research Group Structure

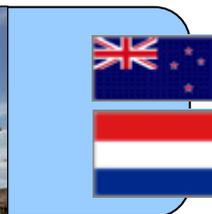
## Cross-cutting Groups

## Research Groups

Livestock



Croplands

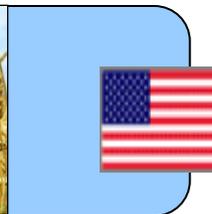


Croplands

Inventory and  
Measurement

Croplands

Soil Carbon and  
Nitrogen Cycling



Paddy Rice

Paddy Rice

Paddy Rice



**Let's move to presentation  
and discussion time!**

