

## **The 12th Workshop on Greenhouse Gas Inventories in Asia (WGIA12)**

- Capacity building for measurability, reportability and verifiability -

4-6 August 2014, Bangkok, Thailand

### **Executive Summary**

The Ministry of the Environment of Japan (MOEJ) and the National Institute for Environmental Studies (NIES) convened the 12<sup>th</sup> Workshop on Greenhouse Gas (GHG) Inventories in Asia (WGIA12) on 4-6 August 2014 in Bangkok, Thailand, as a capacity building workshop for Measurability, Reportability and Verifiability (MRV). Ever since 2003 the workshops have aimed at supporting Non-Annex I (NAI) Parties in Asia to develop and improve their GHG inventories. The 12<sup>th</sup> workshop was attended by over 120 experts from fourteen WGIA-member countries (Cambodia, China, India, Indonesia, Japan, the Republic of Korea, Lao P.D.R., Malaysia, Mongolia, Myanmar, Philippines, Thailand, Singapore, and Vietnam), as well as the representatives of the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), Technical Support Unit of the IPCC Task Force on National Greenhouse Gas Inventories (IPCC TFI-TSU), the Regional Capacity Building Project for Sustainable National Greenhouse Gas Inventory Management Systems in Southeast Asia (SEA GHG Project), United Nations Environment Programme (UNEP), Food and Agriculture Organization of the United Nations (FAO), The Global Forest Observations Initiative (GFOD), Asia-Pacific Network for Global Change Research (APN), the U.S. Agency for International Development (USAID), the U.S. Environmental Protection Agency (USEPA), and relevant Japanese institutes. The Greenhouse Gas Inventory Office of Japan (GIO) at the Center for Global Environmental Research (CGER) of NIES functioned as the WGIA12 Secretariat.

The objectives of the workshop were:

- To enhance sector-specific capacity for inventory compilation (mutual learning)
- To facilitate periodical national GHG inventory preparation for national communications (NCs) and biennial update reports (BURs)
- To discuss the possibility of inventories as a supporting tool for mitigation measures/NAMAs
- To explore issues on measurability, reportability and verifiability (MRV) at various levels.

In this WGIA12, Biennial update reports (BURs) which will be submitted by Non-Annex I countries in the end of this year and International Consultation and Analysis (ICA) of BUR were discussed. To conduct consultation and technical analysis of BUR in its ICA procedure, the necessity of making more accurate GHG Inventories and the importance of QA/QC activities were recognized.

Also the importance of MRV at various levels, such as region and city levels, for verification of implementation and planning for NAMA was confirmed. In the

AFOLU sector, the necessity of consolidating stable systems of GHG inventory for applying high cost benefit technology and continuous communication with inventory compilers and researchers who provide new technology was pointed out.

Through this WGIA12, the capacity development of participants' countries for MRV and the network to make BUR were enhanced aiming at making BUR, conducting ICA and implementing the intended nationally determined contributions (INDCs).

WGIA 13 will be held in Indonesia, and BURs which have been submitted by Non-Annex I Parties in this year will be presented by the participants. In addition, Mutual Learning and discussions about ICA will be conducted in the next WGIA.

The presentations and discussions on each subject are summarized below.

### **Opening session**

WGIA and Japan's climate change policies as well as the current situation of Japan were presented. Next, Thailand's climate change mitigation policies were presented by Thailand as the host country. Enhancement of MRV activities using accurate inventories for NCs and BURs will contribute to planning and verifying Nationally Appropriate Mitigation Actions (NAMAs). This will also help form the basis for Intended Nationally Determined Contributions (INDCs) which all Parties are required to make after 2020.

### **Mutual Learning of each sector's GHG Inventories**

The purpose of Mutual Learning is to improve GHG inventories by providing details of methods and data for GHG emission/removal estimation between two countries and exchanging comments on the methods and data. In this WGIA12, Mutual Learning sessions for the energy sector (Indonesia and Myanmar), agriculture sector (China and Mongolia) and LULUCF sector (Vietnam) were conducted.

The participating countries of Mutual Learning said that they identified good practices of each other, and that the experience of attendance would contribute to future inventory improvement which is a part of BUR. Also, sharing the background information of GHG Inventory in detail contributes the productive discussions.

### **Progress on National Communication, Biennial Update Report and International Consultation and Analysis**

Non-Annex I Parties will submit BURs every two years, and the first BUR will be submitted by December, 2014. Therefore, the UNFCCC Secretariat presented NCs, BURs, and the framework and roles of the Team of Technical Experts (TTE) for ICA of the first BUR which was decided in COP 19 last year via Skype. Furthermore, UNEP presented UNEP-GEF support programmes and projects to support the building of the countries' capacity to make GHG Inventories continuously. The components of submitted BURs and the procedure of ICA were discussed.

### **Quality Assurance/ Quality Control (QA/QC) Activities in Preparation of NCs and BURs**

The representative of IPCC TFI-TSU pointed out that QA/QC of inventories needed to consider the balance between time constraints and cost benefit. He also

noted that the ICA process of BUR had a similar nature to QA in that it is conducted by a third party, although it may not be regarded as QA. He mentioned that ICA would give non-Annex I Parties which lack sufficient human resources of QA new opportunities to improve the quality of their GHG inventories.

The QA/QC support program for NCs by UNEP, the database for the AFOLU sector by FAO, QA/QC activities in the capacity development project and experience of QA/QC activities for NCs by Lao P.D.R. were presented. The necessary QA/QC activities for preparation of NCs and BURs were discussed for ICA which is conducted after the BUR submission. The importance of archiving the process for QA/QC in terms of transparency which is the objective for ICA was confirmed.

### **Working group 1: GHG Inventories at Various Levels**

IGES, ICLEI and NIES mentioned the relationships between GHG inventories at regional/city level and ones at the national level, and noted GHG inventories at regional/city level played a role of the future GHG emission/removal projection.

The achievement and gaps of making the GHG Inventories at regional/city level were reported by Thailand, Indonesia, Korea and India. Participants noted that local inventories would be important to highlight the co-benefits, how it would contribute decision-making in policy development, and that there would be more chances to attract funding.

### **Working group 2: AFOLU Sector**

The agendas regarding making inventory in AFOLU sector were reported by Vietnam, Malaysia, and Cambodia; probable ways of support by Donor sides (FFPRI, FAO, GFOI) including Japan were suggested.

Hokkaido University and USAID mentioned technical discussions regarding calculation of GHG emissions from soil which contains soil peat accompanied by many problems. As a result, to ensure consistency of international data, it was suggested that reviewing definitions of forest which differs from country to country, making an accurate and cost-effective inventory which consistent with REDD+, and utilizing cost-effective new technologies including remote sensing method would be necessary.

### **Enhancement of Network for Supporting Measurement, Reporting and Verification (MRV) at Various Levels**

IGES reported cases of actions for sharing of knowledge by Low-Carbon Asia Research Network (LoCARNet) and of research partnership and MRV support by APN in Asia-Pacific region. Then, they noted many other cases of actions including implementation of MRV at regional/city level in Kitakyushu City, planned support activities by Thailand, a guidebook to promote understanding of MRV by IGES, and support activities by NEDO at Joint Crediting Mechanism (JCM) projects. Through discussions, it was recognized that enhancing the exchange of information at various levels would play a crucial role to plan on NAMA projects and monitor the state of implementation of them, and would also contribute to make INDCs which every nations are required to draw framework after 2020.