Inventory Working Group (cross-cutting issues) on Quality Assurance/Quality Control

Group Discussion
INTRODUCTION

The 9th Workshop on GHG Inventories in Asia (WGIA9)
14 July 2011 (13:30 – 17:00)
InterContinental Phnom Penh, Phnom Penh, Cambodia

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Background Information

Enhancement of NAI national communications and inventories are needed

➢ Decision 1/CP.16 of the Cancun Agreements

60. Decides to enhance reporting in national communications, including inventories, from Parties not included in Annex I to the Convention on mitigation actions and their effects, and support received, with additional flexibility to be given to the least developed country Parties and small island developing States:

(a) The content and frequency of national communications from Parties not included in Annex I to the Convention will not be more onerous than that for Parties included in Annex I to the Convention;

(b) Parties not included in Annex I to the Convention should submit their national communications to the Conference of the Parties, in accordance with Article 12, paragraph 1, of the Convention, every four years or in accordance with any further decisions on frequency by the Conference of the Parties, taking into account a differentiated timetable and the prompt provision of financial resources to cover the agreed full costs incurred by Parties not included in Annex I to the Convention in preparing their national communications;

(c) Developing countries, consistent with their capabilities and the level of support provided for reporting, should also submit biennial update reports containing updates of national greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received

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Background Information

➤ Decision 1/CP.16 of the Cancun Agreements

63. Decides to conduct international consultations and analysis of biennial reports under the Subsidiary Body for Implementation, in a manner that is non-intrusive, non-punitive and respectful of national sovereignty; the international consultations and analysis will aim to increase transparency of mitigation actions and their effects, through analysis by technical experts in consultation with the Party concerned and through a facilitative sharing of views, and will result in a summary report;

Background Information

QA/QC systems will be increasingly important, when enhancing the NAI national communications and inventories

➢ QA/QC procedures serve to drive inventory improvement
➢ A QA/QC system contributes to the objectives of good practice in inventory development, namely to improve transparency, consistency, comparability, completeness, and accuracy of national greenhouse gas inventories

The results of the QA/QC process may point to particular variables within the estimation methodology for a certain category that should be the focus of improvement efforts.

Guidance is given in:

IPCC Good Practice Guidance and *2006 IPCC Guidelines*

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What is QC?

➤ <u>Quality Control (QC) is a system of routine technical activities to assess and maintain the quality of the inventory as it is being compiled</u>. It is performed by personnel compiling the inventory. The QC system is designed to:

(i) Provide routine and consistent checks to ensure data integrity, correctness, and completeness;

(ii) Identify and address errors and omissions;

(iii) Document and archive inventory material and record all QC activities.

QC activities include general methods such as accuracy checks on data acquisition and calculations, and the use of approved standardised procedures for emission and removal calculations, measurements, estimating uncertainties, archiving information and reporting. QC activities also include technical reviews of categories, activity data, emission factors, other estimation parameters, and methods.

...from 2006 IPCC Guidelines

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What is QA?

➢ <u>Quality Assurance (QA) is a planned system of review procedures conducted by personnel not directly involved in the inventory compilation/development process</u>. Reviews, preferably by independent third parties, are performed upon a completed inventory following the implementation of QC procedures. Reviews verify that measurable objectives (data quality objectives, see Section 6.5, QA/QC Plan.) were met, ensure that the inventory represents the best possible estimates of emissions and removals given the current state of scientific knowledge and data availability, and support the effectiveness of the QC programme.

...from 2006 IPCC Guidelines

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Elements of QA/QC systems

➢ Participation of an inventory compiler who is also responsible for coordinating QA/QC and verification activities and definition of roles/responsibilities within the inventory;

➢ A QA/QC plan;

➢ General QC procedures that apply to all inventory categories ;

➢ Category-specific QC procedures;

➢ QA and review procedures;

➢ QA/QC system interaction with uncertainty analyses;

➢ Verification activities;

➢ Reporting, documentation, and archiving procedures

...from 2006 IPCC Guidelines

Previously in WGIA...

QA/QC was taken up at WGIA4 (2007), and since then touched on in the context of each country's institutional arrangement for inventory preparation

Some examples:

➢ Discussions at WGIA4: pointing to the trade-off aspect between QC requirements and timeliness /cost effectiveness, and the necessity to identify key areas on which to focus the QA/QC activities

➢ Japan's presentation at WGIA5: pointing to the need for improvement of its QA/QC procedures

➢ USEPA presentation at WGIA5: sharing USEPA experience in Central America, focusing on the templates for building sustainable national inventory management systems, including a QA/QC Measures Template

QA/QC-WG in WGIA9

Theme: Sharing experiences gained through preparing NCs and identifying key elements for QA/QC systems

Taking into account that many of the WGIA member countries have started or are starting to plan for their next inventories, it is a good time for participants to exchange information on QA/QC systems, together with institutional arrangements for inventory preparation.

Discussion topics

1. What kind of QA/QC systems/programs/procedures did we have in place in the past? What do we currently have in place? What do we want in the future?

2. What are the key elements of QA/QC systems, based on experiences gained?

3. What barriers need to be overcome in order to enhance QA/QC systems in WGIA countries?

Chair: Ms. Mausami Desai

Rapporteur: Elsa Hatanaka

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Presentations

5 min. Elsa Hatanaka (GIO/CGER/NIES, Japan)
Introductory Presentation

10 min. Mausami Desai (Environmental Protection Agency, U.S.A.)
Highlights of QA/QC Procedures applied in U.S. GHG Inventory System

25 min. Elsa Hatanaka (GIO/CGER/NIES, Japan)
Japan's QA/QC System

20 min. Dorjpurev Jargal (EEC Co., Ltd, Mongolia)
QA/QC in Mongolia

20 min. Mihyeon Lee (KECO, Korea)
An Overview of GHG Inventory QA/QC system in Korea

15 min. Coffee Break (14:50 - 15:05)

25 min. Takako Ono
(Project for Capacity Building of National Greenhouse Gas Inventory in Vietnam, JICA)
QA/QC in Viet Nam

Discussions & Wrap-up