

# QA/QC activities and ICA

The 12th Workshop on GHG Inventories in Asia (WGIA12)

4-6 August, 2014

---

Kiyoto Tanabe

Technical Support Unit

IPCC Task Force on National Greenhouse Gas Inventories

# QA/QC in inventory preparation

---

# What do we want?

---

Overall: a high quality inventory of anthropogenic emissions and removals of greenhouse gases (GHG) that is credible & convincing

Indicators of quality:

**TCCCA**

- Transparency
- Completeness
- Consistency
- Comparability
- Accuracy

# What do we need?

---

A good QA/QC system

Tools to focus resources on where we get the maximum benefit

- Key Category Analysis
- Uncertainty Management

An inventory plan covering QA/QC, timing, deliverables and stakeholder involvement

Consistent management to achieve this

# What is “Quality Control”?

---

System of routine technical activities to assess and maintain the quality of the inventory as it is being compiled

Performed by personnel compiling the inventory

QC system is designed to:

- Provide routine and consistent checks to ensure data integrity, correctness, and completeness
- Identify and address errors and omissions
- Document and archive inventory material and record all QC activities

# What is “Quality Assurance”?

---

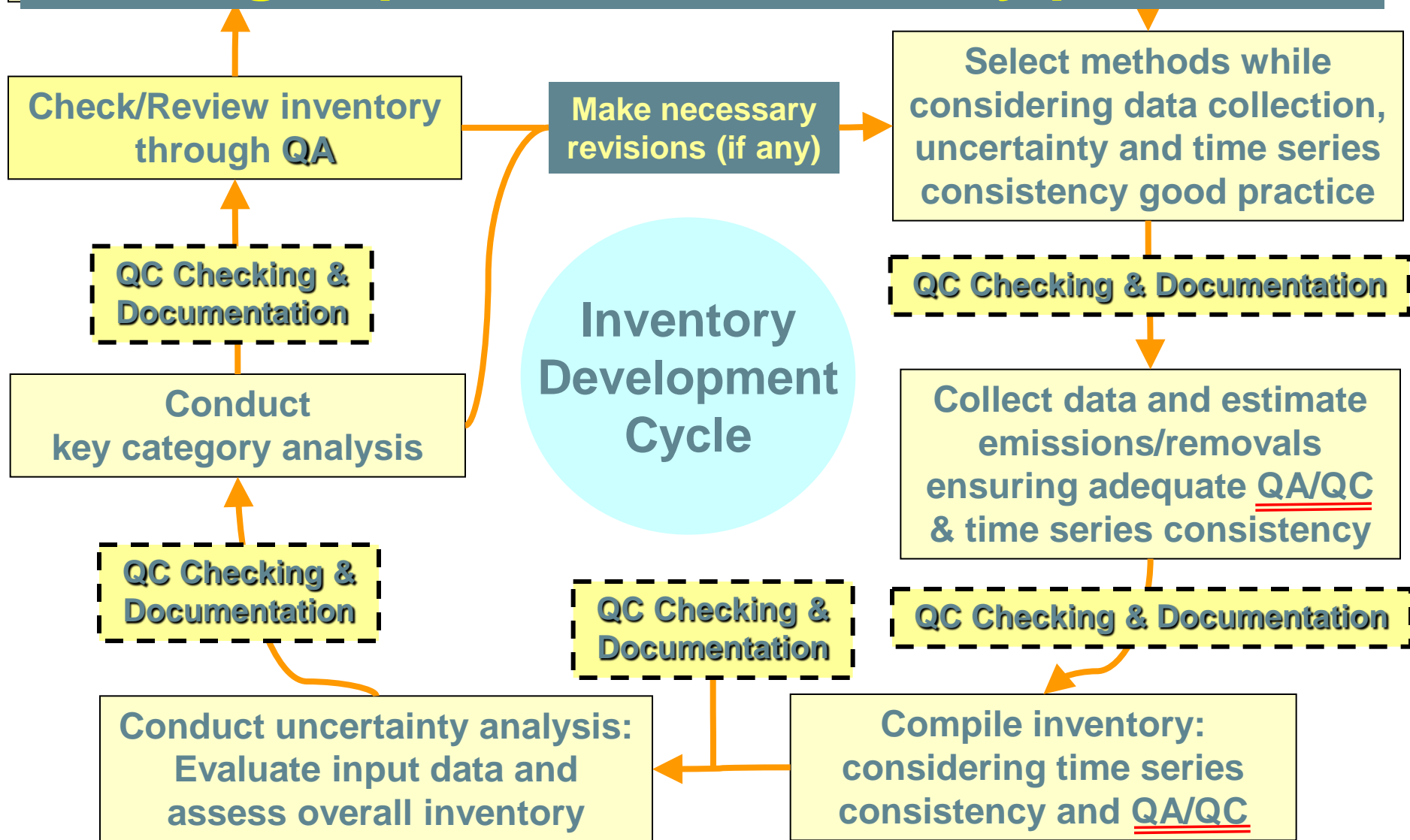
Planned system of review procedures conducted by personnel not directly involved in the inventory compilation/development process (preferably by independent third parties)

Performed upon a completed inventory following the implementation of QC procedures

- Verify that measurable objectives were met
- Ensure that the inventory represents the best possible estimates given the current state of scientific knowledge and data availability
- Support the effectiveness of the QC programme

Start new estimate, building on experience

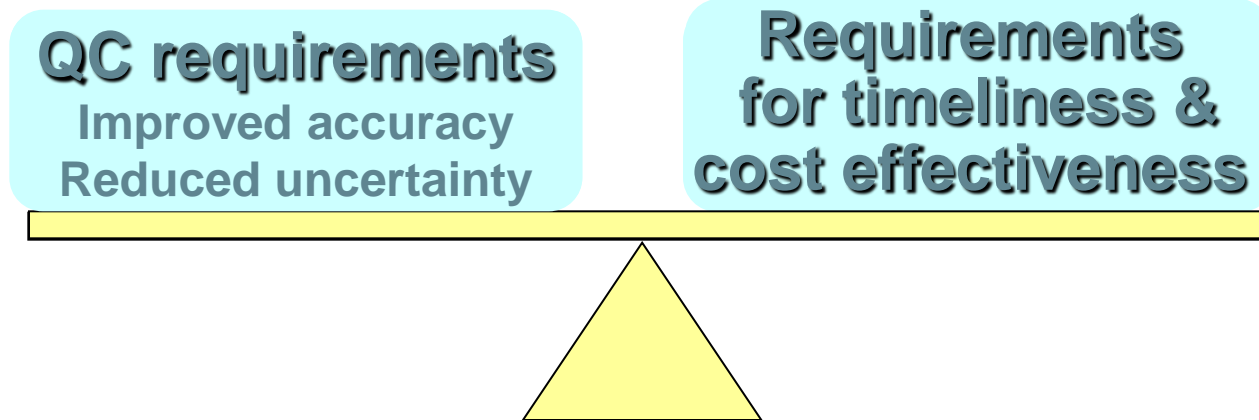
# QA/QC and verification activities should be integral parts of the inventory process



# Practical Considerations

---

Seek to achieve the balance of both requirements



Also seek to enable continuous improvement of inventory estimates



# Practical Considerations

---

- Try to identify where to focus more intensive analysis and review. To that end, some questions should be asked, e.g.:
  - ✓ Is this source/sink a key category?
  - ✓ Has the category been designated as key for qualitative reasons?
    - Is there considerable uncertainty associated with the estimates for this category?
    - Have there been significant changes in the characteristics of this category, such as technology changes or management practices?
- No difference between confidential and publicly available data; both should carry descriptions of the measurement and calculation procedures and the steps taken to check and verify the values reported.

# QA Procedures

---

- ◆ Activities outside the actual inventory compilation, performed preferably by third party reviewers who are independent from the inventory compiler.
- ◆ May be difficult to find and involve “personnel not directly involved in the inventory compilation/development process”.
  - Expert peer review (within the country)
  - Audits
  - Public comments
  - “Mutual Learning” with inventory compilers from other countries
  - ... What else...?
  - [International Consultation and Analysis \(ICA\)?](#)

# International Consultation and Analysis (ICA) and Quality Improvement

---

# What is ICA?

---

At COP 16 in 2010, Parties decided to conduct **international consultations and analysis (ICA)** of **biennial update reports (BURs)** from developing country Parties under the SBI.

- ◆ Aim: To increase the transparency of mitigation actions and their effects.
- ◆ Two-steps:
  - ✓ A technical analysis of BUR by a team of technical experts (TTE)
  - ✓ A facilitative sharing of views in the form of workshop under the SBI

# Key principle of ICA

---

- ◆ ICA is to be conducted in a manner that is **non-intrusive, non-punitive** and **respectful of national sovereignty**.
- ◆ Discussion about the appropriateness of domestic policies and measures is **not** part of the ICA process.

# Operational guidance

---

- ◆ Decision 2/CP.17, paragraphs 56 - 62 and annex IV
  - Modalities and guidelines for international consultation and analysis
  
- ◆ Decision 20/CP.19 and its annex
  - Composition, modalities and procedures of the team of technical experts (TTE) under international consultation and analysis

# Decision 2/CP.17, paragraphs 56 - 62

---

- ◆ Adopted the composition, modalities and procedures of the team of technical experts for undertaking the technical analysis of biennial update reports from non-Annex I Parties
- ◆ Invited Parties to **nominate technical experts** with the relevant qualifications to the UNFCCC roster of experts
- ◆ Requested the secretariat to **maintain and update the UNFCCC roster of experts**
- ◆ Requested the Consultative Group of Experts (CGE) to **develop and organize appropriate training programmes** for nominated technical experts taking into account annexes III and IV to decision 2/CP.17, based on the most up-to-date training materials of the CGE, with a view to improving the technical analysis, taking into account the difficulties encountered by Parties not included in Annex I to the Convention in the preparation of their biennial update reports

# Decision 20/CP.19

---

- ◆ Adopted the modalities and guidelines for ICA
- ◆ Decided:
  - That the **first rounds of ICA** will be conducted for developing country Parties, commencing **within six months** of the submission of the first round of BURs;
  - That the frequency of participation in **subsequent rounds of ICA** by developing country Parties, based on their respective capabilities and national circumstances, and special flexibility for SIDs and the LDC Parties, will be determined by the **frequency of the submission of BURs**;
  - To **revise the modalities and guidelines** prescribed herein based on experiences gained in the first round of ICA, **no later than 2017**;
  - That SIDs and the LDCs may undergo ICA as a group of Parties at their discretion;



# Technical analysis by TTE

---

## ◆ TTE will:

- ✓ Identify the extent to which the elements of information listed in paragraph 3(a) of the modalities and guidelines for ICA are included in the BUR of the Party concerned
- ✓ Undertake a **technical analysis of information contained in the BUR** as outlined in the BUR guidelines, and **any additional technical information that may be provided by the Party concerned**
- ✓ Identify, in consultation with the Party concerned, capacity-building needs in order to facilitate reporting in accordance with BUR guidelines, and participating in ICA

## ◆ TTE will prepare a summary report in consultation with the Party concerned. (= interactive process)

# Facilitative exchange of views

---

- ◆ The SBI shall, at regular intervals, convene a workshop for the facilitative exchange of views, open to all Parties, for all Parties for which there is a biennial update report and a final summary report by TTE.
  - ✓ Parties will be allowed to submit written questions in advance.
  - ✓ The facilitative exchange of views among Parties will consist of a one- to three-hour session for each Party or group of Parties.
  - ✓ Parties may request to go individually or in a group of up to five Parties.
  - ✓ The session will consist of a brief presentation by the Party or Parties concerned on their biennial update report, followed by oral questions and answers among Parties.
  
- ◆ The outcome of the ICA will be a summary report and a record of the facilitative sharing of views.

# ICA and Quality Assurance

---

- ◆ Preferably QA should be done before the submission of inventory
  - ✓ ICA is done for submitted BURs – therefore strictly speaking the ICA process may not be regarded as “QA”
- ◆ However, the ICA process has a similar nature to QA.
  - ✓ Performed by independent third parties (TTEs and other Parties)
  - ✓ Performed on completed inventories (BURs)

# ICA - New opportunities for quality improvement

---

- ◆ NAI Parties need to explain, and answer questions about, their inventories to TTE and other Parties.
- ◆ It will give NAI Parties new opportunities to improve the quality of their GHG inventories and BURs.
- ◆ Interaction with the third parties (receiving questions and comments) help you to:
  - ✓ Detect and correct errors in your inventory.
  - ✓ Improve transparency of your inventory.
    - What is obvious to yourself may not be obvious to the others!!
  - ✓ Get an idea on how you can obtain better data which yourself have not been aware of.

# Summary

---

# Summary

---

- ◆ Inventories need to be credible and believable - they need to be of high quality.
- ◆ QA/QC procedures are integral parts of the inventory process to ensure "TCCCA".
- ◆ International Consultation and Analysis (ICA) of BURs including national GHG inventories will give non-Annex I Parties new opportunities to improve the quality of their GHG inventories.
  - ✓ ICA process has a similar nature to QA
  - ✓ Interaction with the third parties help NAI Parties to detect and correct errors in their inventory, to improve its transparency, etc.