Findings/Lessons Learnt- Quality Assurance and Quality Control- Greenhouse Gas Inventorying Workshop

Kishan Kumarsingh

Head, Multilateral Environmental Agreements Unit

Ministry of Planning and Development

QA/QC Workshop Trinidad
The Backdrop

- National Communications – GHG inventories; data requirements; hiring of consultant; dependent on grant funding.
- Recognition of the need to track GHG emissions outside of reporting requirements.
- Development of long term carbon reduction strategy in 2015 (to 2040) and need to monitor implementation.
- As result, the need for systematic data collection and reporting was identified.
- The Paris Agreement and NDCs- T&T was first among countries to submit iNDC and also to develop an NDC Implementation Plan, including tracking progress.
- MRV system developed and being implemented. Legal underpinning within existing legislative framework undertaken. Capacity issues identified.

The Basics- Quality Assurance

- Quality Assurance (QA) is a planned system of review procedures conducted by personnel not directly involved in the inventory compilation/development process.
- Reviews, preferably by independent third parties, are performed upon a completed inventory following the implementation of QC procedures. Reviews verify that measurable objectives 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 (IPCC 2006 Guidelines)

The Basics- Quality Control

- Quality Control (QC) is a system of routine technical activities to assess and maintain the quality of the inventory as it is being compiled. 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. (IPCC 2006 Guidelines)

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- Engagement with relevant stakeholders in respect of building capacity - the supply side (data provision from emitting sectors, including QA/QC issues) and the demand side (regulators and managers of MRV system, including QA/QC issues)
- Initial training conducted on IPCC 2006 guidelines.
- Opportunity for further training presented by UNFCCC.
- A week long training session was held in February 2019, in Port of Spain, Trinidad.

Situation analysis – QA/QC Workshop Trinidad

- Many participants were still unfamiliar or not quite comfortable with the IPCC 2006 Guidelines.
- There is currently no institutionalised relationship with the inventory compiler- Ministry of Planning and Development and the suppliers of activity data.
- No regular meetings of the inventory compiler, data suppliers and QA/QC personnel. On an as needed basis.
- No existing archiving system to assure the availability of the inventory data. Consultants reports; and other documents are available. However, documents provided have not been enough to an in-depth review process.
- MRV'KMS system designed and being implemented on pilot phase
- Resource constraints- Inventory compiler and data suppliers.

Recommendations/Lesson Learned - QA/QC Workshop Trinidad

- Routine inventory cycles are recommended with the aim of moving towards higher tiers with each progressive cycle (as data is available);
- Ensure that activity data, emission factors and global warming potentials are all consistent for the categories covered by greenhouse gas inventory currently being prepared;
- Establish an MoU or similar formal type of agreement when necessary with all data providers to ensure quality and timeliness of data provision.
- Parties/stakeholders meet regularly to assess data quality and data needs (expected to increase as the inventory completeness and complexity increase).
- Clarifying roles and responsibilities, and coordination and data sharing between government agencies and between public and private experts can and should be enhanced and strengthened.

Recommendations – QA/QC Workshop Trinidad

- Continue to develop and implement the MRV system to strengthen GHG reporting, domestic policy making, enhanced compliance with existing and new laws and share learning with regional organizations.
- Enhance documentation of the inventory process. It is recommended that Trinidad and Tobago consider preparation of GHG Inventory management plan. The MPD should decide who (sectoral experts from the academia, TT Bureau of Standards) should conduct the QA checks.
- Consider the value of recalculating time series covered in previous National Communications and combining with time series covered in TNC. This will support time series consistency and implementation and tracking of NDCs.

Next steps – QA/QC Workshop Trinidad

- MRV/KMS system in place; pilot project being rolled out to debug the system and used for national roll-out.
- Legal underpinning of GHG MRV completed. Lessons from pilot project will inform regulatory legislation.
- Development of a certification programme to sustain training (local universities, UNFCCC, GHGMI, DTU, local regulatory institutions) – work in progress; discussions ongoing.

THANK YOU