

**United Nations** Framework Convention on Climate Change

## CGE hands-on training workshop for the Latin-America and Caribbean Region on institutionalization of data management for national GHG inventory

## 15 to 17 July 2019

San Ignacio, Belize

## Agenda version: 16 July 2019

DAY 1		
Time	Agenda items	Session Chair
08:00- 09:00	Registration	
09:00- 09:25	<ul> <li>Opening session of the workshop</li> <li>Welcome remarks (<i>Mr. Jigme, UNFCCC secretariat</i>)</li> <li>Workshop opening remarks (<i>Mr. Gervais MADZOUS, CGE Chair</i>)</li> <li>Welcome remarks (<i>Ms. Diane, WADE MOORE, UNDP Country Office - Belize</i>)</li> <li>Key note address (<i>Dr. Percival CHO, Chief Executive Officer, MAFFESDI, Government of Belize</i>)</li> </ul>	
09:25- 09:45	Coffee break	
09:45- 10:15	Introductory sessionA. Introduction – workshop participantsB. Overview of workshop – Objectives, agenda and expectations ( <i>Mr. Marlan PILLAY, UNFCCC secretariat</i> )	Mr. Jigme, UNFCCC secretariat
10:15- 11:00	<ul> <li>Technical Session I: Scene-setting – Recap of the pre-workshop webinar</li> <li>This session will cover a recap of the materials covered during the pre-workshop webinar, and provide space for the participants to ask questions that they may have as a result of further reflection on the topic covered.</li> <li>A. Recap of the existing MRV arrangements under the Convention and the enhanced transparency framework under Paris Agreement (<i>Mr</i>, <i>Kénel DÉLUSCA, CGE member - Haiti</i>)</li> <li>B. Recap of national GHG inventories: key data types to include in the inventory and their sources (<i>Ms. Olia GLADE/Ms. Molly WHITE, GHGMI</i>)</li> </ul>	Mr. Gervais MADZOUS, CGE Chair
11:00- 12:30	<b>Technical Session II: Institutional arrangements and data</b> <b>management – techniques, approaches and tools</b> This session provides overview of key components of national institutional arrangements for preparing and submitting national reports. It also includes examples of institutional arrangements put in place by some developing countries, which managed to support the increased frequency of the preparation of national reports. The session uses the following logic: good practices and key requirements for IAs $\rightarrow$ approaches and tools to implement good practices $\rightarrow$ how others are doing it	Mr, Kénel DÉLUSCA, CGE member - Haiti



	<ul> <li>A. Presentation (20mins): the framework for transparency institutional arrangements (<i>Ms. Derina MAN - ICF</i>)</li> <li>B. Presentation (10 min): Institutional arrangements: good practices and lessons learned (<i>Mr. Luis PAZ, CGE member - Cuba</i>)</li> <li>C. Presentation (10 min): Institutional arrangements: compilation and documentation (<i>Ms. Olia GLADE/Ms. Molly WHITE, GHGMI</i>)</li> </ul>	
12:30- 14:00	Lunch break (and DSA disbursement)	
14:00- 15:30	<ul> <li>Technical Session II: Institutional arrangements and data management – techniques, approaches and tools (continued)</li> <li>D. Presentation (20 min): Overview of IA techniques, approaches and tools (<i>Ms. Olia GLADE/Ms. Molly WHITE, GHGMI</i>)</li> <li>E. Large Group Discussion (30 min): Review and discuss example of a developing country IAs (<i>Ms. Olia GLADE/Ms. Molly WHITE, GHGMI</i>)</li> </ul>	Mr, Kénel DÉLUSCA, CGE member - Haiti
15:30- 16:00	Coffee break	
16:00- 17:30	<ul> <li>Technical Session III: Group baseline mapping exercise</li> <li>Summarize and update how data is managed under the current institutional arrangements (based on homework submissions), including software tools, processing procedures, stakeholder engagement, challenges, experiences, and lessons learned. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)</li> <li>A. Small Group Discussion (60 min): <ul> <li>a. Break into sector groups and briefly present your homework data maps.</li> <li>b. Discuss your map similarities, differences? After seeing other data maps, how would you revise your map?</li> <li>c. Discuss the major input-output data flows for the whole sector and identify data/process gaps for the next sessions: <ul> <li>Where are the data associated with different emission sources coming from?</li> <li>Who does the data processing?</li> <li>Which tools/software are used to process the data?</li> <li>What happens to the processed data?</li> </ul> </li> <li>B. Large Group Discussion (30 min): <ul> <li>What challenges were identified?</li> </ul> </li> </ul></li></ul>	Luis PAZ, CGE member – Cuba
	End of day 1	-
	DAY 2	
Time	Agenda items	Session Chair
09:00- 10:30	Technical Session IV: Group functional design exercise –         Brainstorm the system scope, functions and capabilities that would be desired for a national MRV data management system. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)         A       Breacentation (20 min): Data management system and their	Mr. Kiyoto TANABE, CGE member – IPCC
	A. Presentation (30 min): Data management system and their overview; what is meant by functional, non-functional elements;	



decision tools in prioritization of design elements (i.e. how-to ID needs, scoping levels, reporting outputs)       B. Small Group Discussion (60 min): What functions and capabilities would you design for a national MRV data management system, identifying minimum requirements (i.e. the "must-have" vs. "nice-to-have")?         Using your country context, design a "generic" system for the country of ABC. The system needs to produce outputs in 3 years (before the first BTR), operating for a year beforehand.         10:30- 11:00       Coffee break         11:00       Session V: Quality control/quality assurance of data in-line with the TACCC quality standards and IPCC good practices on QA/QC and verification       Mr. Kénel         This session will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommendel techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise a ining to identify and categorize the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE         12:30       Session VI: Data documentation and archiving       Mr. Luis PAZ, CGE         12:30       Session VI: Data documentation and archiving and documentation associated with archiving and documentation associated with archiving and documentation associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE         12:30       Session			
would you design for a national MRV data management system, identifying minimum requirements (i.e. the "must-have" vs. "nice-to- have")?         Using your country context, design a "generic" system for the country of ABC. The system needs to produce outputs in 3 years (before the first BTR), operating for a year beforehand.         10:30- 11:00       Coffee break         11:01       Session V: Quality control/quality assurance of data in-line with the TACCC quality standards and IPCC good practices on QA/QC and verification       Mr, Kánel DÉLUSCA, CGE member - Haiti         11:00- 12:30       Session V: Quality control/quality assurance of data in-line with the TACCC quality standards and IPCC good practices on QA/QC and verification       Mr, Kánel DÉLUSCA, CGE member - Haiti         12:30       This session will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommended techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise aiming to identify and categorize the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE member - Cuba         12:30- 13:00       Session VI: Data documentation and archiving This session will explain the IPCC good practices in archiving and documentation associated with GHG data collection and processing and include a practical exercise to identify issues associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI) <td< td=""><td></td><td></td><td></td></td<>			
of ABC. The system needs to produce outputs in 3 years (before the first BTR), operating for a year beforehand.         10:30- 11:00       Coffee break         11:00       Session V: Quality control/quality assurance of data in-line with the TACCC quality standards and IPCC good practices on QA/QC and verification       Mr, Kénel         12:30       TACCC quality standards and IPCC good practices on QA/QC and verification       Mr, Kénel         This session will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommended techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise aiming to identify and categorize the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       A. Presentation (30 min): Techniques, approaches and tools to address QA/QC       Mr. Luis PAZ, CGE member - Cuba         12:30-       Session VI: Data documentation and archiving       Mr. Luis PAZ, CGE member - Cuba         13:00       This session will explain the IPCC good practices in archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       A. Presentation (30 min): Data collection and proceeding decimated with GHG data collection and proceeding decimated with GHG data collection and proceeding decimated with GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE member - Cuba         12:30-       This session will explain the IPCC good practices		would you design for a national MRV data management system, identifying minimum requirements (i.e. the "must-have" vs. "nice-to-	
11:00       Session V: Quality control/quality assurance of data in-line with the TACCC quality standards and IPCC good practices on QA/QC and verification       Mr. Kénel         12:30       Session Will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommended techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise aiming to identify and textpoint between the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE member - Haiti         12:30-       Session VI: Data documentation and archiving marchiving and procedures described in part A and linking each issue with the TACCC principles.       Mr. Luis PAZ, CGE member - Cuba         12:30-       A. Presentation (30 min): Techniques, approaches and tools to address QA/QC       Mr. Luis PAZ, CGE member - Cuba         13:00       Ner session will explain the IPCC good practices in archiving and documentation associated with GHG data collection and processing and include a practical exercise to identify issues associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)         13:00       A. Presentation (30 min): Data collection and documentation to ensure transparency principle, introduction to example data collection exercise collection exercise         13:00       Lunch break       Lunch break		of ABC. The system needs to produce outputs in 3 years (before the	
12:30       TACCC quality standards and IPCC good practices on QA/QC and verification       DÉLÚSCA, CGE member - Haiti         This session will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommended techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise aiming to identify and categorize the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       A. Presentation (30 min): Techniques, approaches and tools to address QA/QC       Mr. Luis PAZ, CGE         12:30-       Session VI: Data documentation and archiving       Mr. Luis PAZ, CGE member - Cuba         13:00       Session VI: Data documentation and archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE member - Cuba         13:00       A. Presentation (30 min): Data collection and processing and include a practical exercise to identify issues associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       Mr. Luis PAZ, CGE member - Cuba         13:00       In Presentation (30 min): Data collection and documentation to ensure transparency principle, introduction to example data collection exercise to identify issues associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)         A. Presentation (30 min): Data collection and documentation to ensure transparency principle, introductio		Coffee break	
13:00       This session will explain the IPCC good practices in archiving and documentation associated with GHG data collection and processing and include a practical exercise to identify issues associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)       member - Cuba         A. Presentation (30 min): Data collection and documentation to ensure transparency principle, introduction to example data collection exercise       13:00-         Lunch break       Lunch break	12:30	<ul> <li>TACCC quality standards and IPCC good practices on QA/QC and verification</li> <li>This session will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommended techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise aiming to identify and categorize the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)</li> <li>A. Presentation (30 min): Techniques, approaches and tools to address QA/QC</li> <li>B. Hands-on exercise in small groups (60 min): Do a QC of an example report and flag issues, based on the principles and procedures described in part A and linking each issue with the TACCC principles.</li> </ul>	DÉLUSCA, CGE member - Haiti
ensure transparency principle, introduction to example data collection exercise Lunch break		This session will explain the IPCC good practices in archiving and documentation associated with GHG data collection and processing and include a practical exercise to identify issues associated with archiving and documentation in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)	,
		ensure transparency principle, introduction to example data collection exercise	
		Lunch break	



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14:00- 15:30	Session VI: Data documentation and archiving (continued)	Mr. Luis PAZ, CGE member - Cuba	
	B: Hands-on Exercise (90 min):		
	<ul> <li>a. Large Group Brainstorm (30 min): Identify the issues associated with data collection and processing in a given case study and discuss how these can be resolved</li> <li>b. Small Groups (One issue per group): Document a particular data type to resolve a selected data documentation issue: <ul> <li>Identify the data attributes so that data documentation is transparent (20 min)</li> <li>Design a simple template reflecting identified data attributes and record relevant data values in the template (20 min)</li> <li>Draft a simple questionnaire/form that would allow to populate the designed template based on the list of the data attributes (20 min)</li> </ul> </li> </ul>		
15:30-	Coffee break		
16:00			
16:00- 17:30	Session VII: Data gaps This session will explain practical ways to resolve issues associated with missing data for some/most years of the time series in-line with the inventory guidelines and international good practices followed by the hands-on exercise to apply different data splicing techniques to fill- in data gaps using in a given case study. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)	Mr. Kiyoto TANABE, CGE member - IPCC	
	<ul> <li>A. Presentation (30 min): Techniques, approaches and tools to address data gap in terms of coverage and time-series</li> <li>B. Hands-on exercise in small groups (60 min): Work with provided case study to remedy gaps in the time-series: <ul> <li>Following the guidance provided in part A and the supplementary materials, identify most appropriate way(s) to remedy the lack of data. Justify your choice of method.</li> <li>Apply the selected splicing technique (use the supplementary materials for external data sets as required) and resolve the issues with time-series consistency</li> </ul> </li> </ul>		
17:30- 18:00	<ul> <li>Continued Session VII: Data gaps</li> <li>This session will allow small groups to complete the data gap exercise and present their results for a group discussion. (Ms. Olia GLADE/Ms. Molly WHITE, GHGMI)</li> <li>Report back at the plenary</li> </ul>	Mr. Gervais MADZOUS, CGE Chair	
	End of day 2		



	DAY 3	
Time	Agenda items	
09:00- 10:30	<ul> <li>Session VIII - Clinic: Brainstorming session in smaller groups (Mr. Jigme/Mr. Marlan PILLAY, UNFCCC secretariat)</li> <li>This is an interactive session whereby problems and challenges shared during the course of the workshop will be discussed by the participants and critical or most common problems and challenges will be taken-up within groups in order to share experiences, lessons learned and identify possible solutions or alternatives to the problems or challenges to further share with the rest of the participants at plenary.</li> <li>Format of Clinic: Participants will form smaller groups and assign a theme to each group and work through their own country cases following one of the following themes: <ul> <li>a. Institutional arrangements</li> <li>b. Data collection</li> <li>c. QA/QC</li> </ul> </li> <li>1. In each group, the participant will take a case study of one or two countries, which are represented by the group members.</li> <li>2. Using the chosen case study and the given theme, each group will: <ul> <li>1. Identify a case owner to present the details of its current data management arrangements and the gap with its design needs;</li> <li>2. Other group members provide their reflection on how the gap may be addressed;</li> <li>3. Discuss how regional cooperative expert communities could help resolving these issue.</li> </ul> </li> </ul>	Mr. Kiyoto TANABE, CGE member - IPCC
10:30- 11:00	Coffee break	
11:00- 12:30	<ul> <li>Session VIII continued: Revisit group functional design exercise – Return to output of exercise on Day 1 and discussion how to update functional design priorities based on technical sessions on Day 2 (<i>Ms. Olia GLADE/Ms. Molly WHITE, GHGMI</i>)</li> <li>Presentations of group discussions</li> <li>10-minute presentation and 15-minute discussion</li> </ul>	Mr. Kiyoto TANABE, CGE member - IPCC
12:30- 13:30	Lunch break	
13:30- 15:00	<ul> <li>Session IX: Opportunities for synergy with: (Mr. Marlan PILLAY, UNFCCC secretariat)         This session will identify and highlight areas where possible synergies exists, at the national level, between MRV/transparency, including national GHG inventories and tracking progress of NDCs, and indicators to monitoring the UN sustainable development goals.     </li> <li>Tracking progress of NDCs and;</li> <li>Monitoring progress towards SDGs</li> </ul>	Mr. Luis PAZ, CGE member - Cuba



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15:00- 15:30	Coffee break		
15:30- 16:45	<ul> <li>Closing session:         <ul> <li>Information on other training and capacity-building opportunities (Mr. Marlan PILLAY, UNFCCC secretariat)</li> <li>Workshop evaluation and feedback, including identifying topics, if necessary, for the post-workshop webinar (Mr. Jigme, UNFCCC secretariat)</li> </ul> </li> <li>Closing remarks         <ul> <li>Host country</li> <li>Mr. Gervais MADZOUS, CGE Chair</li> </ul> </li> </ul>	Mr. Jigme, UNFCCC secretariat	
	End of day 3		