United Nations
Framework Convention on
Climate Change

CGE STOCKTAKE REPORT 2021

2021 Stocktake of measurement, reporting and verification, and transparency gaps and needs to inform Consultative Group of Experts technical advice and support provided to developing country Parties

SEPTEMBER 3, 2021

UNFCCC

Contents

Abbreviations and acronyms

2006 IPCC Guidelines	*2006 IPCC Guidelines for National Greenhouse Gas Inventories*
2019 Refinement to the 2006 IPCC Guidelines	*2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*
AFOLU	agriculture, forestry and other land use
BTR	biennial transparency report
BUR	biennial update report
CGE	Consultative Group of Experts
COVID-19	coronavirus disease 2019
D&I	data and information
ETF	enhanced transparency framework under the Paris Agreement
GEF	Global Environment Facility
GHG	greenhouse gas
IA	institutional arrangements
IPCC	Intergovernmental Panel on Climate Change
MPGs	modalities, procedures and guidelines for the enhanced transparency framework under the Paris Agreement
MRV	measurement, reporting and verification
M&T	methodology and tools
NC	national communication
NDC	nationally determined contribution
NFP	national focal point
NSO	national statistical office
QA/QC	quality assurance/quality control
Revised 1996 IPCC Guidelines	*Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*
SDG	Sustainable Development Goal

I. Introduction

A. Background

1. The Conference of the Parties, at its twenty-fourth session, decided to extend the term of the CGE for eight years, from 1 January 2019 to 31 December 2026.[1]

2. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, at its first session, decided that the CGE shall also serve the Paris Agreement, starting from 1 January 2019, to support the implementation of the ETF by, inter alia:

(a) Facilitating the provision of technical advice and support to developing country Parties, as applicable, including for the preparation and submission of their BTRs and facilitating improved reporting over time;

(b) Providing technical advice to the secretariat on the implementation of the training of technical expert review teams.[2]

3. The CGE, in response to this mandate, agreed to conduct an assessment every two years of the existing and emerging gaps and needs of developing country Parties in their implementation of the existing MRV arrangements under the Convention and in preparation for the ETF.

4. The first survey was conducted in 2019. The second survey was conducted between April and June 2021 with a view to gathering up-to-date feedback from developing country Parties on the status of the implementation of the existing MRV arrangements under the Convention and preparation for the ETF, including IA in place at the national level, and associated problems and constraints, lessons learned, as well as capacity-building needs.

5. This report contains the key results of the 2021 CGE stocktake survey of MRV and transparency gaps and needs to inform CGE technical advice and support provided to developing country Parties.

B. Objective

6. The objective of the survey was to gather up-to-date information on problems, constraints, lessons learned, as well as capacity-building needs from developing country Parties in their implementation of the existing MRV arrangements under the Convention and preparation for the ETF. Further, the survey aimed to take stock of the implementation status of several elements of national MRV processes and enhance an understanding of the expectations of developing country Parties regarding assistance from the CGE in implementing the existing MRV arrangements and the ETF.

C. Methodology

7. The CGE, with support from the secretariat, launched an online survey which ran from 15 April to 30 June 2021.

8. The survey was circulated to all developing country Parties via their respective NFPs, who were encouraged to further circulate it to their NC and BUR project coordinators, or other experts and officials, as appropriate.

9. The survey comprised four parts:

(a) Demographic information;

(b) Existing MRV arrangements under the Convention;

(c) ETF;

[1] Decision 11/CP.24, para. 1.
[2] Decision 18/CMA.1, para. 15.

(d) Party expectations of the CGE.

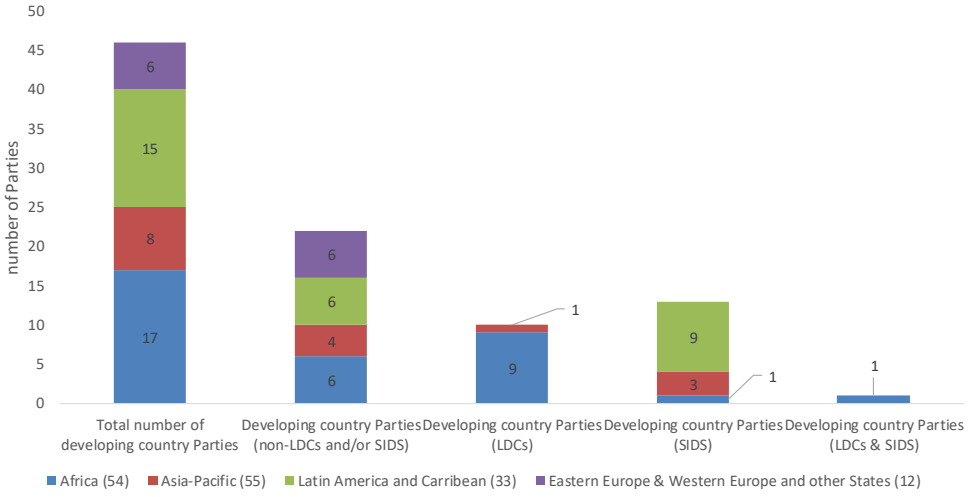
10. During the analysis of the survey results, responses addressing similar issues and substances were clustered into issue areas and then, within those areas, into categories to facilitate the presentation of information in a meaningful and manageable manner. Annex I provide further explanation of the various areas and categories that emerged, together with sample responses associated with each category.

II. Results

A. Profile of respondents

11. By the closing date, 46 developing country Parties[3] had participated in the survey. The regional breakdown of these 46 developing country Parties was as follows: 17 from African States, 8 from Asia-Pacific States, 15 from Latin America and Caribbean States and 6 from Eastern European, and Western European and other States. Figure 1 below summarizes these results. Where there was more than one respondent per Party, the response of the NFP took precedence.

Figure 1
Number of developing country Parties participating in the survey by region

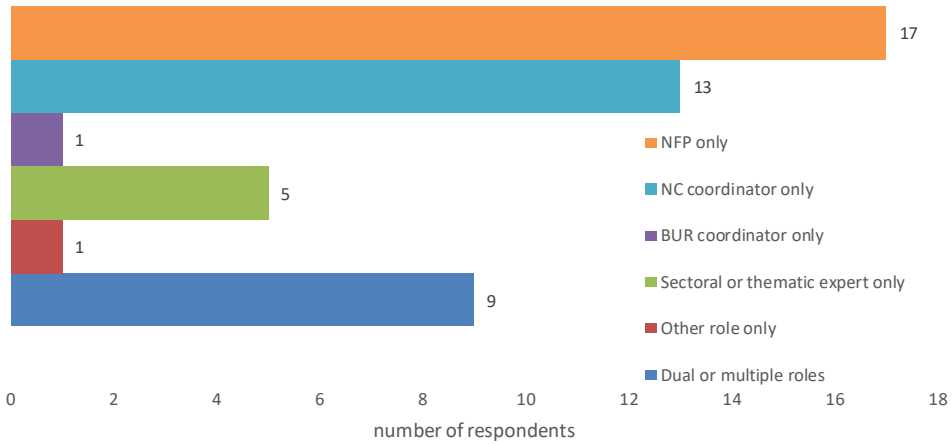


12. As shown in figure 2 below, out of 46 respondents, 31 identified themselves as performing an exclusive role of either NFP (17 respondents), NC project coordinator (13), BUR project coordinator (1), sectoral or thematic expert (5), or another role (1). A total of 9 respondents identified themselves as performing dual or multiple roles, including as national GHG inventory coordinator.

[3] The total number of represented Parties per question varied. An overview of the total number of represented Parties per question are provided in annex II and the list of represented Parties is given in annex III.

Figure 2

Profile of respondents by role in the national measurement, reporting and verification process



B. Existing measurement, reporting and verification arrangements under the Convention

1. Implementation status

13. This section of the survey aimed to take an updated snapshot of the status of implementation of the existing MRV arrangements under the Convention, including:

(a) Status of the submission of the NC and/or BUR;

(b) National MRV system or process, including IA, in place;

(c) Experience in accessing funds from the GEF;

(d) Status of the preparation of the next NC and/or BUR.

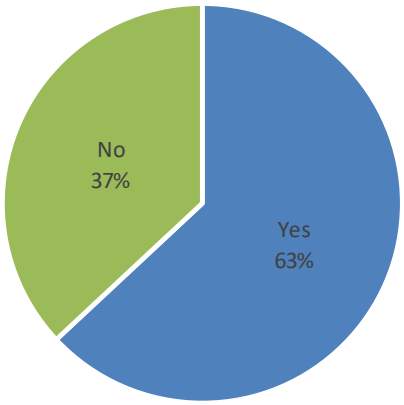
(a) Submission status of national communication and/or biennial update report

14. Respondents were asked to indicate whether their country has submitted any NCs in the last four years and, if not, to briefly explain the reasons. A total of 46 respondents answered this question. As depicted in figure 3 below, 63 per cent indicated that their country has submitted an NC in the last four years and the remaining 37 per cent indicated that the country is either planning to submit an NC soon, that the NC is being prepared (59 per cent of the 37 per cent) or that there are specific reasons why an NC is not being prepared. These reasons included a lack of access to funding for NC preparation, limitations in technical or institutional capacity, delays due to internal planning or coordination issues and various disruptions to the NC preparation process caused by the COVID-19 pandemic.

Figure 3

Status overview of national communication preparation and submission in the last four years

If no, why is this the case?
- NC under preparation (59% of the 37%)
- Limited technical/institutional capacity
- Lack of access to funds
- Internal planning or coordination delays
- disruption due to pandemic

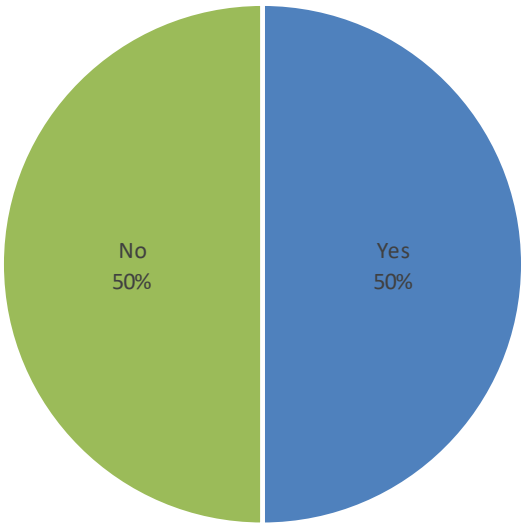


15. Respondents were also asked to indicate whether their country has ever submitted a BUR. A total of 46 respondents answered this question. As depicted in figure 4 below, 50 per cent indicated that their country has submitted a BUR. Those who indicated that their country has not submitted a BUR provided reasons for this: around 35 per cent of the 50 per cent that responded negatively indicated that the BUR is under preparation, while other reasons included a lack of access to funding for BUR preparation, limitations in technical or institutional capacity, that the BUR process was going to be initiated soon, the BUR was currently being validated and that there had been disruption to the BUR preparation process caused by the COVID-19 pandemic.

Figure 4

Status overview of biennial update report submission

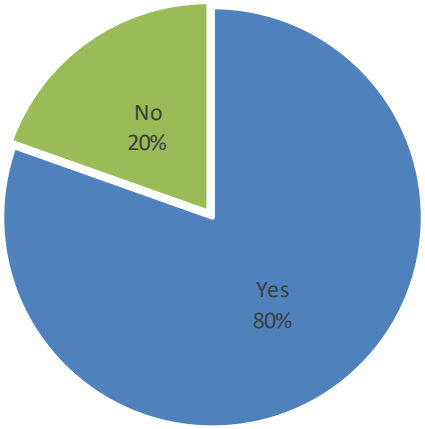
If no, why is this the case?
- BUR under preparation (35% of the 50%)
- Limited technical or institutional capacity
- Lack of access to funds
- BUR process to be initiated soon
- Other



16. Respondents were asked whether the COVID-19 pandemic has had an impact on their country's work in preparing NCs and/or BURs. As depicted in figure 5 below, 80 per cent indicated that the pandemic has had an impact on the preparation of their country's NC and/or

BUR. The impacts ranged from delays or difficulties in scheduling various meetings due to lockdown restrictions; delays or difficulties in engaging in activities that feed into the NC or BUR preparation process, such as collecting data from stakeholders and hiring consultants to undertake data collection or analysis activities; internal delays in reviewing, finalizing or clearing documents due to resource constraints or diversion to pandemic-related work; prohibitive Internet data costs when trying to complete work from home while abiding by lockdown restrictions; and the fact that stakeholder consultations held virtually are not as effective as in-person meetings.

Figure 5
Impact of the coronavirus disease 2019 pandemic on national communication and biennial update report preparation



If yes, what were the main impacts?
- Delays or difficulties in scheduling meetings (e.g. staff meetings, training, validation workshops and stakeholder consultations)
- delays or difficulties in engaging in data collection and management activities (e.g. e.g. travel restrictions affecting necessary consultancy work)
- Internal delays in reviewing, finalizing or clearing documents due to resource constraints or resource diversion to pandemic-related work
- Virtual format of stakeholder meetings not as effective
- Prohibitive internet data costs limiting the possibility to work effectively from home

(b) National measurement, reporting and verification systems and processes, including institutional arrangements in place

17. This subsection of the survey aimed to obtain a snapshot of different elements of national MRV and transparency systems and processes, including IA in place. The respondents were asked to indicate whether their country has a specific entity designated to coordinate the preparation of national reports, including national GHG inventories, NCs, BURs and BTRs; and, if so, whether the entity has a permanent or ad hoc mandate. The number of respondents varied depending on the type of national report. Figure 6 below summarizes the results:

(a) For national GHG inventories, there were 45 responses: 67 per cent indicated that their country has a lead entity that coordinates national GHG inventories with a permanent mandate, 20 per cent indicated that there is a lead entity but its mandate is on an ad hoc basis, 4 per cent indicated that there is a lead entity but did not specify the type of mandate and 9 per cent indicated that their country does not have such a lead entity;

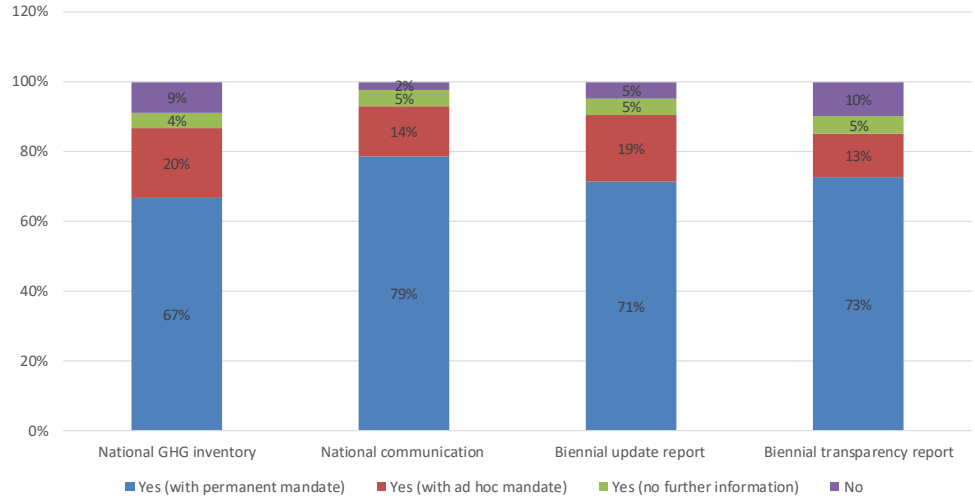
(b) For NCs, there were 42 responses: 79 per cent indicated that their country has a lead entity that coordinates NCs with a permanent mandate, 14 per cent indicated that there is a lead entity but its mandate is on an ad hoc basis, 5 per cent indicated that there is a lead entity for NCs but did not specify the type of mandate and 2 per cent indicated that their country does not have a lead entity for NCs;

(c) For BURs, there were 42 responses: 71 per cent indicated that their country has a lead entity that coordinates BURs with a permanent mandate, 19 per cent indicated that there is a lead entity but its mandate is on an ad hoc basis, 5 per cent indicated that there is a lead entity but did not specify the type of mandate and 5 per cent indicated that their country does not have a lead entity for BURs.

(d) For BTRs, there were 40 responses: 73 per cent indicated that their country has a lead entity that will coordinate preparation of BTRs with a permanent mandate, 13 per cent

indicated that there is a lead entity but its mandate is on an ad hoc basis, 5 per cent indicated that there is a lead entity but did not specify the type of mandate and 10 per cent indicated that their country does not have a lead entity for BTRs.

Figure 6
Status of entity designated to coordinate preparation of reports



18. The respondents were also asked to indicate (a) the involvement of external consultants and institutions in preparing national GHG inventories, NCs or BURs and the extent to which they engage with the national agency. If the engagement with the national agency was 'not at all' or 'to a limited extent', respondents were asked to explain why; (b) the extent to which MRV work is mainstreamed into the work of line ministries and sectors that are key information providers; (c) the extent to which the NSO is involved in MRV work; and (d) the extent to which the country takes a synergistic approach in monitoring the SDGs (on a scale of 'not at all', 'to a limited extent' and 'to a full extent'). Figures 7 and 8 below summarize the results:

(a) **Involvement of external consultants and institutions and the extent to which they are engaged with the national agency**. A total of 39 respondents answered this question with respect to national GHG inventories, 40 answered regarding NCs and 38 answered regarding BURs:

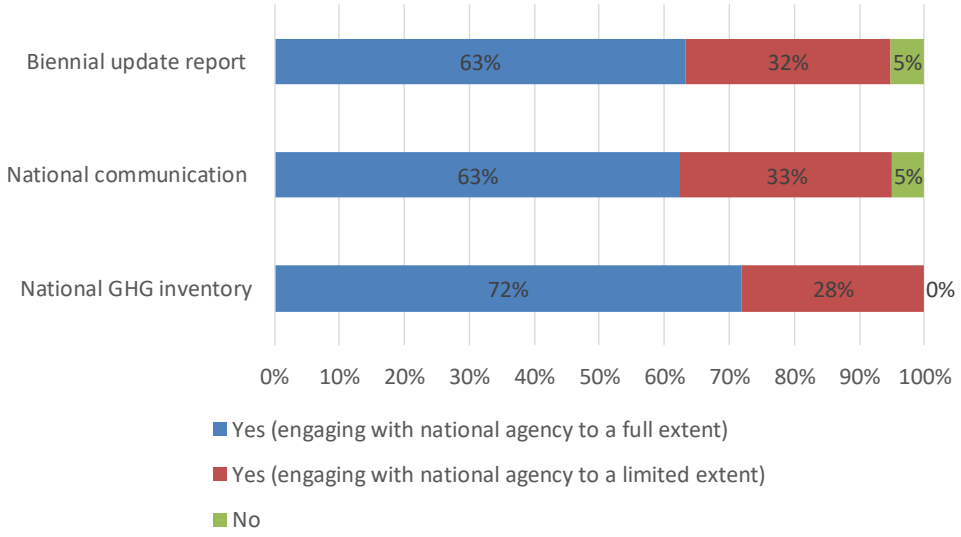
i. A total of 72 per cent indicated that their country involved external consultants or institutions in preparing national GHG inventories to a full extent, while 28 per cent involved external consultants or institutions to a limited extent;

ii. A total of 63 per cent indicated that their country involved external consultants or institutions in preparing NCs to a full extent, 33 per cent only to a limited extent and 5 per cent not at all;

iii. A total of 63 per cent indicated that their country involved external consultants or institutions in preparing BURs to a full extent, 32 per cent to a limited extent and 5 per cent not at all.

iv. In cases where the engagement with the national agency is limited or non-existent, several respondents explained why this was the case: national experts have been trained, leading to less need to hire consultants; consultants are used to supplement in-country expertise only; capacities have been built up with stakeholders leading to a limited need for consultants; or consultants are being used for specific activities only, such as preparing information on adaptation and mitigation scenarios, in the validation process of national reports, coordination of preparation of national reports and capacity-building of national experts.

Figure 7
Involvement of external consultants or institutions

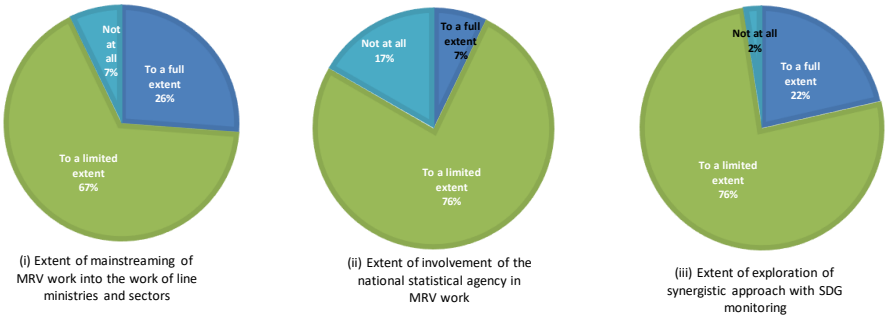


(b) **Mainstreaming of MRV work into the work of line ministries and sectors.** The respondents were asked to indicate the extent to which MRV work, namely, data collection, processing and management for national GHG inventories, reporting of mitigation and adaptation actions and support needed and received, is mainstreamed into the work of line ministries and sectors which are key sources of information for preparing national reports. A total of 42 respondents answered the question, with 26 per cent indicating that MRV work is mainstreamed to a full extent, 67 per cent to a limited extent and 7 per cent not at all (see figure 8(i) below).

(c) **Involvement of the national statistical office in MRV work.** The respondents were asked to indicate the extent to which the NSO is involved in MRV work (defined as in (b) above). A total of 42 respondents answered the question, with 7 per cent indicating that the NSO is involved in MRV work to a full extent, 76 per cent to a limited extent and 17 per cent not at all (see figure 8(ii) below).

(d) **Exploration of a synergistic approach to SDG monitoring.** The respondents were asked to indicate the extent to which the country takes a synergistic approach between the MRV process and tracking and monitoring of SDGs. A total of 42 respondents answered this question, with 22 per cent indicating that the country is taking a synergistic approach to SDG monitoring to a full extent, 76 per cent to a limited extent and 2 per cent not at all (see figure 8(iii) below).

Figure 8
An overview of approaches to measurement, reporting and verification work at a national level



19. Further, the respondents were asked to indicate the implementation status of key elements that facilitate national reporting processes, on a scale of 1–4, with 1 being ‘not yet put in place’, 2 being ‘under development’, 3 being ‘established but not fully operational’

and 4 being 'fully operational'. The total number of respondents varied depending on the element. Figure 9 below presents a summary of the responses.

(a) National laws or regulations to **mandate** national reporting to the UNFCCC. Out of 25 respondents, 12 per cent indicated that their country has a legislative framework that mandates national reporting to the Convention and that it is fully operational, 32 per cent indicated that a legal mandate has been established but is not fully operational, 8 per cent indicated that their county is currently developing a legal mandate and 48 per cent indicated that no legal mandate has yet been put in place (see figure 9, column A, below).

(b) A plan to allocate domestic budget to the compilation and submission of NCs, BURs and national GHG inventories on a regular basis, including for maintaining a team of national experts. Out of 25 respondents, 8 per cent indicated that a plan to allocate budget is fully operational in their country, none indicated a budget plan that was established but not fully operational, 16 per cent indicated that a plan is under development and 76 per cent indicated that no plan has yet been put in place (see figure 9, column B, below).

(c) **A formal process for stakeholder engagement** elaborated for:

- *Developing a GHG inventory*: out of 25 respondents, 20 per cent indicated that their country has a formal process for stakeholder engagement elaborated for developing a GHG inventory which is fully operational, 28 per cent indicated that the process is established but not fully operational, 44 per cent indicated that it is under development and 8 per cent indicated that it has not yet been put in place (see figure 9, column C, below);

- *MRV of mitigation actions, including tracking progress made in implementing and achieving NDCs*: out of 25 respondents, 16 per cent indicated that their country has a formal process for stakeholder engagement elaborated for MRV of mitigation measures over time which is fully operational, 20 per cent indicated that the process is established but not fully operational, 60 per cent indicated that it is under development and 4 per cent indicated that it has not yet been put in place (see figure 9, column D, below);

- *For monitoring of adaptation measures and climate impacts*: out of 25 respondents, 8 per cent indicated that a formal process for stakeholder engagement for monitoring of adaptation efficacy or climate impacts over time is fully operational in their country, 24 per cent indicated that the process is established but not fully operational, 64 per cent indicated that it is under development and 4 per cent indicated that it has not yet been put in place (see figure 9, column E, below);

- *MRV of support needed and received*: out of 24 respondents, 8 per cent indicated that a formal process for stakeholder engagement for MRV of support needed and received is fully operational in their country, 25 per cent indicated that the process is established but not fully operational, 38 per cent indicated that the process is under development and 29 per cent indicated that it has not yet been put in place (see figure 9, column F, below).

(d) **A formal process for data provision, such as a data sharing agreement,** memorandum of understanding between the data provider and data compiler, for:

- *Reporting information on national GHG inventories*: out of 24 respondents, 8 per cent indicated that their country has a formal process for data provision for national GHG inventories which is fully operational, 33 per cent indicated that the process is established but not fully operational, 42 per cent indicated that it is under development and 17 per cent indicated that it has not yet been put in place (see figure 9, column G, below);

- *Reporting information on mitigation*: out of 24 respondents, 17 per cent indicated that their country has a formal process for data provision for reporting information on mitigation actions that is fully operational, 21 per cent indicated that the process is established but not fully operational 42 per cent indicated that it is under development and 21 per cent indicated that it has not yet been put in place (see figure 9, column H, below);

- *Reporting information on adaptation*: out of 24 respondents, 4 per cent indicated that their country has a formal process for data provision for reporting information on adaptation actions that is fully operational, 25 per cent indicated that the process is established but not fully operational, 46 per cent indicated that it is under development and 25 per cent indicated that it has not yet been put in place (see figure 9, column I, below);

- *Reporting information on support needed and received*: out of 25 respondents, 4 per cent indicated that their country has a formal process for data provision for reporting information on support needed and received that is fully operational, 24 per cent indicated that the process is established but not fully operational, 40 per cent indicated that it is under development and 32 per cent indicated that it has not yet been put in place (see figure 9, column J, below).

(e) **A tool** such as a data providing template, online data sharing platform, which data providers can use for providing data in a consistent manner and making it accessible to compilers for reporting information on national GHG inventories:

- *Reporting information on national GHG inventories:* out of 25 respondents, 4 per cent indicated that their country has a tool for providing data in a consistent manner and making it accessible to compilers for national GHG inventories that is fully operational, 20 per cent indicated that the tool is established but not fully operational, 44 per cent indicated that it is under development and 32 per cent indicated that it has not yet been put in place (see figure 9, column K, below);

- *Reporting information on mitigation:* out of 25 respondents, 4 per cent indicated that their country has a tool for providing data in a consistent manner and making it accessible to compilers for mitigation that is fully operational, 16 per cent indicated that the tool is established but not fully operational, 44 per cent indicated that it is under development and 36 per cent indicated that it has not yet been put in place (see figure 9, column L, below);

- *Reporting information on adaptation:* out of 25 respondents, none indicated that their country has a tool for providing data in a consistent manner and making it accessible to compilers for adaptation that is fully operational, 16 per cent indicated that the tool is established but not fully operational, 40 per cent indicated that it is under development and 44 per cent indicated that it has not yet been put in place (see figure 9, column M, below);

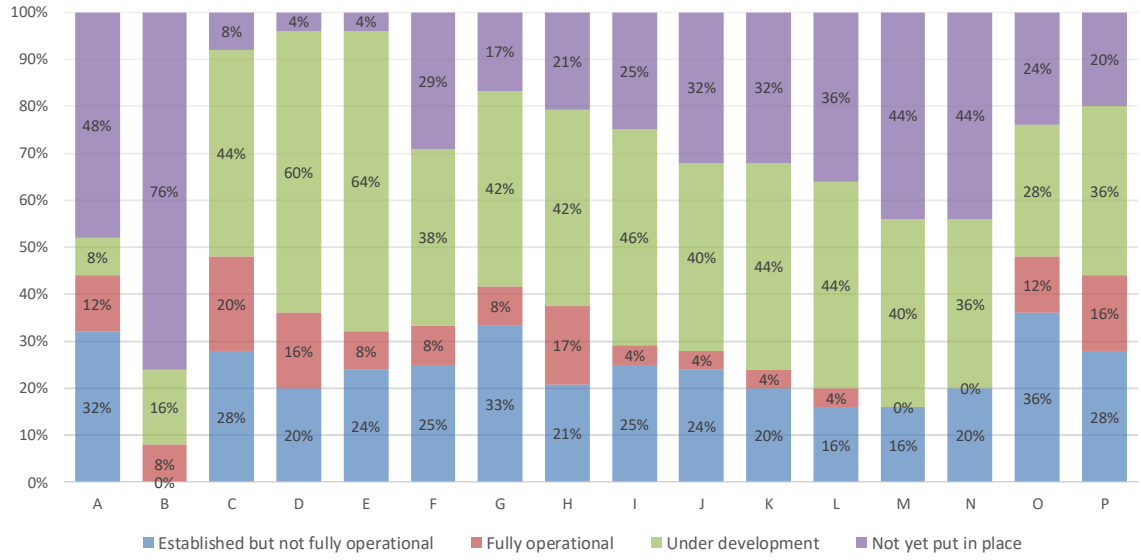
- *Reporting information on support needed and received:* out of 25 respondents, none indicated that their country has a tool for providing data in a consistent manner and making it accessible to compilers for support needed and received that is fully operational, 20 per cent indicated that the tool is established but not fully operational, 36 per cent indicated that it is under development and 44 per cent indicated that it has not yet been put in place (see figure 9, column N, below).

(f) A **procedure for data QA/QC**: out of 25 respondents, 12 per cent indicated that their country has a procedure for data QA/QC that is fully operational, 36 per cent indicated that the procedure is established but not fully operational, 28 per cent indicated that it is under development and 24 per cent indicated that it has not yet been put in place (see figure 9, column O, below).

(g) A **process to identify and implement areas of improvement:** out of 25 respondents, 16 per cent indicated that their country has a process to identify and implement areas of improvement that is fully operational, 28 per cent indicated that the process is established but not fully operational, 36 per cent indicated that it is under development and 20 per cent indicated that it has not yet been put in place (see figure 9, column P, below).

Figure 9

An overview of implementation status



Key to y axis:

A: National laws and/or regulations that mandate the preparation of national reports to the Convention and the Paris Agreement

B: A plan to allocate domestic budget to the compilation and submission of NCs, BURs and national GHG inventories on a regular basis, including for maintaining a team of national experts

C: A formal process for **stakeholder engagement** (e.g. coordination body, working groups, discussion forum, regular meetings and consultation) for preparing **national GHG inventories**

D: A formal process for **stakeholder engagement** (e.g. coordination body, working groups, discussion forum, regular meetings and consultation) for **MRV of mitigation actions**, including tracking progress made in implementing and achieving NDCs

E: A formal process for **stakeholder engagement** (e.g. coordination body, working groups, discussion forum, regular meetings and consultation) for monitoring of **adaptation measures and climate impacts**

F: A formal process for **stakeholder engagement** (e.g. coordination body, working groups, discussion forum, regular meetings and consultation) for MRV of **support needed and received**

G: A formal process for **data provision**, such as a data sharing agreement or memorandum of understanding between the data provider and data compiler, for reporting information on **national GHG inventories**

H: A formal process for **data provision**, such as a data sharing agreement or memorandum of understanding between the data provider and data compiler, for reporting information on **mitigation**

I: A formal process for **data provision**, such as a data sharing agreement or memorandum of understanding between the data provider and data compiler, for reporting information on **adaptation**

J: A formal process for **data provision**, such as a data sharing agreement or memorandum of understanding between the data provider and data compiler, for reporting information on **support needed and received**

K: **A tool**, such as a data providing template or online data sharing platform, which data providers can use to provide data in a consistent manner and make it accessible to compilers for reporting information on **national GHG inventories**

L: **A tool**, such as a data providing template or online data sharing platform, which data providers can use to provide data in a consistent manner and make it accessible to compilers for reporting information on **mitigation**

M: **A tool**, such as a data providing template or online data sharing platform, which data providers can use to provide data in a consistent manner and make it accessible to compilers for reporting information on **adaptation**

N: **A tool**, such as a data providing template or online data sharing platform, which data providers can use to provide data in a consistent manner and make it accessible to compilers, for reporting information on **support needed and received**

O: A procedure for data QA/QC

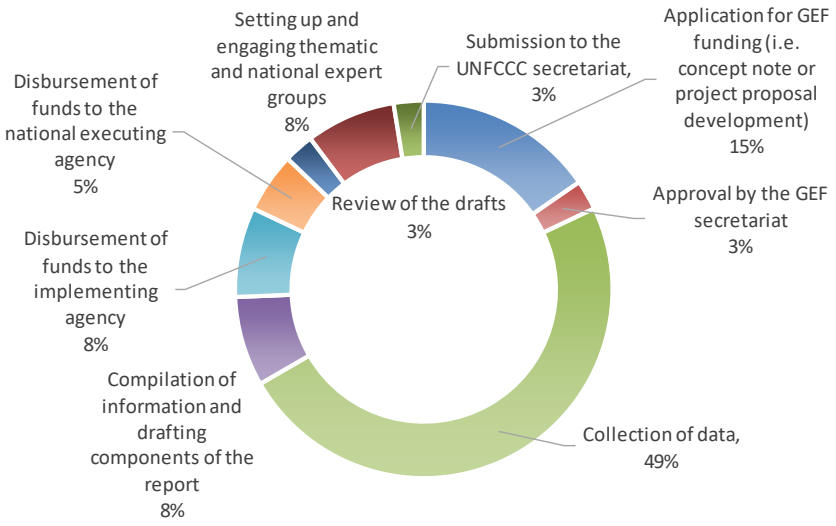
P: A process to identify and implement areas of improvement

(c) Experience in accessing funds from the Global Environment Facility

20. This subsection of the survey aimed to capture country experiences in accessing funds from the GEF for the preparation of national reports. Respondents were asked to choose from a list of what the most challenging phase had been in the process of preparation of the latest national report, in terms of duration and responsiveness of stakeholders, and to elaborate on the challenges and issues experienced in that phase. Of the 39 respondents, as depicted in figure 10 below, 49 per cent indicated that the most challenging phase had been data collection, 15 per cent identified application for GEF funding and the following were each identified by 8 per cent of respondents: compilation of information and drafting components of the report, disbursement of funds to the implementing agency, and setting up and engaging

thematic and national expert groups. Other aspects were identified by a smaller percentage of respondents.

Figure 10
Identifcation of the most challenging phase in the national report preparation process



21. There were only a few elaborations received from respondents. With respect to collection of data, respondents indicated that national expertise was limited and so it was difficult to access this expertise when needed; data from stakeholders were not always in the format required for input into IPCC software, resulting in processing delays; and data quality control continues to be a challenge. With respect to the disbursement of funds to the implementing agency, about 18 months elapsed between the presentation of the GEF request template and the disbursement being received by the implementing agency, with the funds sometimes being far below the amount that had been requested, and the processes of management, approval and disbursements had been the most challenging phase for some, as it takes a long time.

(d) Preparation status of next national communication and/or biennial update report

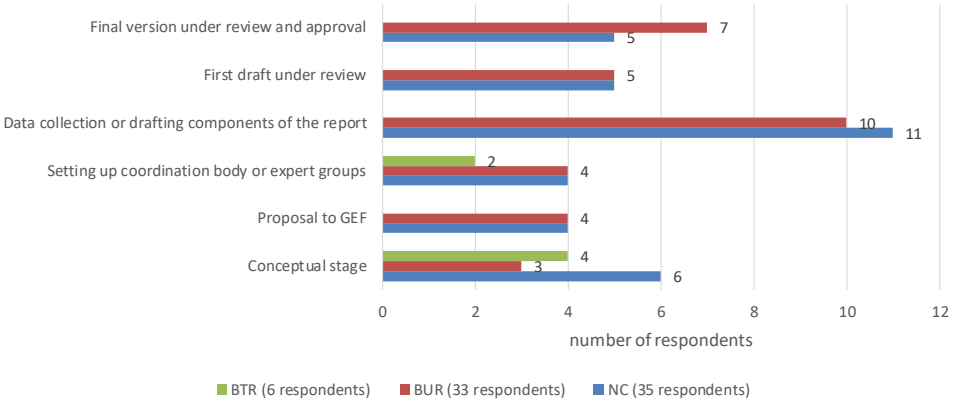
22. This subsection of the survey aimed to obtain a snapshot of any national reports currently under development and where they stood in the preparation process. Figure 11 below summarizes the results.

(a) A total of 35 respondents indicated that their country is preparing its NC. The implementation status varied: 11 respondents (31 per cent) indicated that their country is collecting data and drafting components of the report, 10 countries (29 per cent) are at either first draft under review or finalization stage (i.e. final version under review and approval) and 6 countries (17 per cent) are at concept stage.

(b) A total of 33 respondents indicated that their country is preparing its BUR. The most common status of implementation indicated in their country's BUR preparation process was data collection and drafting components of the report (10 respondents, so 30 per cent), followed by finalization stage (i.e. final version under review and approval) (7 respondents, so 21 per cent) and first draft under review (5 respondents, so 15 per cent).

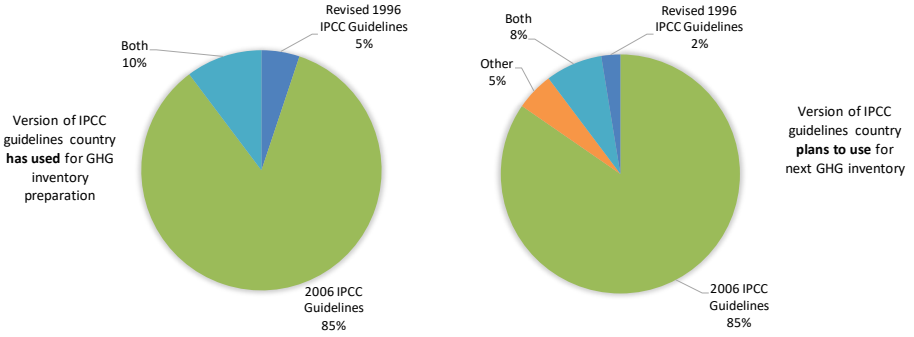
(c) A total of six respondents indicated that their country is preparing BTRs, with four being at the conceptual stage and two engaged in setting up the coordination body or expert groups needed to prepare the BTR.

Figure 11
Status of preparation of national reports



23. Further, the respondents were asked to specify the version of IPCC guidelines that the country has used for developing national GHG inventories and the version that the country plans to use for the next GHG inventory, with 39 respondents answering this question. A total of 85 per cent of respondents indicated that their country has used 2006 IPCC Guidelines, while 10 per cent indicated that their country has used both the 2006 IPCC Guidelines and the Revised 1996 IPCC Guidelines, and 5 per cent indicated that their country has only used the Revised 1996 IPCC Guidelines. For the next national GHG inventory, 85 per cent of the respondents indicated that their country plans to use 2006 IPCC Guidelines, with 8 per cent planning to use both the 2006 IPCC Guidelines and the Revised 1996 IPCC Guidelines, and 2 per cent planning to continue using only the Revised 1996 IPCC Guidelines. A total of 5 per cent indicated that their country planned to use other guidelines (the 2019 Refinement to the 2006 IPCC Guidelines). Figure 12 below summarizes the results.

Figure 12
Versions of Intergovernmental Panel on Climate Change guidelines in use



24. The respondents were further asked to specify the software that their country has used for national GHG inventories. A total number of 33 respondents answered this question and the most common software being used is IPCC inventory software (70 per cent), followed by Microsoft Excel (21 per cent). Some respondents indicated that their country has used other software, including LEAP, R software, software written in Python, software written in C++ for AFOLU, FAOSTAT and AGRISTAT.

2. Problems and constraints

25. This section of the survey aimed to understand the problems and constraints that impeded the preparation of NCs and BURs and reporting therein of the information across different themes, namely, national GHG inventories, reporting on mitigation, adaptation, and support needed and received. For each theme, the respondents were given a list of categories of issues that have been recurrently reported by developing country Parties and were invited to select all issues that were relevant to their country and rate the significance of the relevant

issue on a scale of 1 to 3 (1 being low, 2 medium and 3 high). The respondents were also encouraged to provide additional comments on the selected issues.

(a) National greenhouse gas inventory

26. Among the listed categories of issues, the number of respondents that indicated the relevance of each issue and its significance level varied. Table 1 below shows relevance versus significance[4] of the issues. The issue of 'institutional capacity to retain skills or knowledge gained from training' was identified as most significant among 17 categories of issues (score: 2.50), followed by the issues of 'coordination across sectors or institutions to collect and share data' (score: 2.47) and 'lack of availability of quality data' (score: 2.40), which were also identified as two of the most significant issues.

Table 1
Recurrent categories of issues in preparing national greenhouse gas inventories by order of significance

Issue number	Categories of issues *(Lack of / insufficient)*	Significance *(Rating)*	Relevance *(Number of respondents)*
1	(IA) Institutional capacity to retain skills and knowledge gained from training (e.g. dedicated staffing plan)	2.50	36
2	(IA) Coordination across sectors or institutions to collect and share data	2.47	36
3	(D&I) Availability of quality data	2.40	35
4	(IA) Policy or legal arrangements that mandate the preparation of national reports	2.34	35
5	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.25	36
6	(M&T) Technical capacity to perform uncertainty assessment	2.23	35
7	(IA) Definition of roles and responsibilities across the involved institutions	2.19	36
8	(D&I) Data collection process (including establishment of database, data sharing system and web-based knowledge management platform)	2.19	36
9	(IA) Awareness of stakeholders, especially private sector	2.17	36
10	(M&T) Technical backstopping (e.g. developing country-specific emission factors)	2.14	35
11	(M&T) Technical capacity to understand and apply IPCC guidelines	2.11	36
12	(M&T) Technical capacity to use IPCC software	2.09	35
13	(M&T) Technical capacity to perform key category analysis	2.03	35
14	(M&T) Practical guidance to facilitate use of available tools and methods	2.00	34
15	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data collection and sharing)	1.94	36
16	(Other) Improvement planning	1.94	33
17	(D&I) Accessibility of data for confidentiality reasons	1.78	36

(b) Reporting on mitigation actions

27. Among the 18 listed categories of issues, the number of respondents that indicated the relevance of each issue and its significance level varied. Table 2 below shows relevance versus significance[5] of the issues. The issue of 'methods for quantification of direct and indirect effects of mitigation actions' (score: 2.35) was most often identified as the most significant, followed by 'coordination across sectors or institutions to collect and share data' (score: 2.32) and 'practical guidelines for setting mitigation scenarios' (score: 2.32).

[4] The formula used to measure the significance was {∑ (number of respondents per level of significance multiplied by scale (one to three)} / (number of respondents who selected the issue category as relevant).

[5] As footnote 4 above.

Table 2
Recurrent categories of issues in reporting on mitigation actions by order of significance

No.	Categories of issues *(Lack of / insufficient)*	Significance *(Rating)*	Relevance *(Number of respondents)*
1	(M&T) Methods for quantification of direct and indirect effects of mitigation actions	2.35	34
2	(IA) Coordination across sectors or institutions to collect and share data	2.32	34
3	(M&T) Practical guidelines for setting mitigation scenarios	2.32	34
4	(M&T) Practical guidelines or methods for setting baselines, target values and indicators	2.30	33
5	(M&T) Technical capacity to interpret, analyse and translate D&I gathered from modelling	2.29	34
6	(IA) Awareness of stakeholders, especially private sector	2.26	34
7	(M&T) Practical tool for conducting mitigation assessment (e.g. sector-specific modelling)	2.26	34
8	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.26	34
9	(IA) Definition of roles and responsibilities across the institutions involved	2.24	34
10	(IA) Policy or legal arrangements that mandate the preparation of national reports	2.21	34
11	(IA) Institutional capacity to retain skills and knowledge gained from training (e.g. dedicated staffing plan)	2.21	34
12	(D&I) Data collection process (including establishment of database, data sharing system and web-based knowledge management platform)	2.21	34
13	(M&T) Technical capacity to use tools that are available	2.18	33
14	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data collection and sharing)	2.15	34
15	(D&I) Availability of quality data	2.13	32
16	(M&T) Technical backstopping (e.g. sector-specific studies or research on mitigation potential)	2.12	34
17	(D&I) Accessibility of data for confidentiality reasons	1.97	34
18	(Other) Improvement planning	1.93	30

(c) Reporting on adaptation actions

28. Among the 17 listed categories of issues, the number of respondents that indicated the relevance of each issue and its significance level varied. Table 3 below shows relevance versus significance[6] of the issues. The issue of 'coordination across sectors or institutions to collect and share data' was identified as most significant (score: 2.48), followed by 'availability of quality data' (score: 2.36) and 'data collection process' (score: 2.35).

Table 3
Recurrent categories of issues in reporting on adaptation actions by order of significance

No.	Categories of issues *(Lack of / insufficient)*	Significance *(Rating)*	Relevance *(Number of respondents)*
1	(IA) Coordination across sectors or institutions to collect and share data	2.48	33
2	(D&I) Availability of quality data	2.36	33
3	(D&I) Data collection process (including establishment of database, data sharing system and web-based knowledge management platform)	2.35	34
4	(M&T) Practical guidelines on development of baseline and socioeconomic scenarios for vulnerability and adaptation assessment	2.30	33
5	(IA) Definition of roles and responsibilities across the institutions involved	2.24	33

[6] As footnote 4 above.

No.	Categories of issues *(Lack of / insufficient)*	Significance *(Rating)*	Relevance *(Number of respondents)*
6	(M&T) Practical tool for conducting vulnerability and adaptation assessment (e.g. sector-specific modelling and regional or downscaling climate models)	2.24	33
7	(IA) Awareness of stakeholders, including private sector and rural communities	2.21	33
8	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.21	33
9	(M&T) Technical infrastructure (e.g. weather stations, forecasting system and networks) serving as a basis for monitoring of climate data	2.21	34
10	(M&T) Technical capacity to interpret, analyse and translate D&I gathered from modelling	2.19	32
11	(IA) Policy or legal arrangements that mandate the preparation of national reports	2.18	33
12	(IA) Institutional capacity to retain skills and knowledge gained from training (e.g. dedicated staffing plan)	2.18	33
13	(M&T) Technical capacity to use tools that are available	2.18	33
14	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data collection and sharing)	2.16	32
15	(D&I) Accessibility of data for confidentiality reasons	2.06	34
16	(M&T) Technical backstopping (e.g. scientific research and studies to enhance climate knowledge and information)	2.03	33
17	(Other) Improvement planning	1.84	31

(d) Reporting on support needed and received

29. Among the 10 listed categories of issues, the number of respondents that indicated the relevance of each issue and its significance level varied. Table 4 below shows relevance versus significance[7] of the issues. The issue of 'identification of all relevant stakeholders related to MRV of support' was identified as most significant (score: 2.22) together with the issue of availability of quality data. This was followed by 'allocation of responsibilities for MRV of support' with a score of 2.17.

Table 4
Recurrent categories of issues in reporting on support needed and received by order of significance

No.	**Categories of issues** *(Lack of / insufficient)*	**Significance** *(Rating)*	**Relevance** *(Number of respondents)*
1	(IA) Identification of all relevant stakeholders related to MRV of support	2.22	36
2	(D&I) Availability of quality data	2.22	36
3	(IA) Allocation of responsibilities for MRV of support	2.17	36
4	(M&T) Guidelines or standards to identify support needs and report on support received, including common definitions of relevant terminology and approaches	2.17	36
5	(IA) Process for the coordination of support received	2.14	36
6	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.14	36
7	(D&I) Data collection process (including establishment of database, data sharing system and web-based knowledge management platform)	2.03	36
8	(M&T) Process or approach to integrate reporting processes to various donors on support received	1.92	36
9	(D&I) Accessibility of data for confidentiality reasons	1.83	36
10	(Other) Improvement planning	1.59	34

[7] As footnote 4 above.

3. Lessons learned and experiences

30. In this subsection of the survey, the respondents were asked to share lessons learned in the process of national reporting to the UNFCCC, in particular identifying elements that either 1) benefited the process, 2) were recognized to have improved or 3) need to be put in place, under the following four thematic areas: national GHG inventory, reporting on mitigation actions, reporting on adaptation actions, and reporting on support needed and received. The respondents were also asked to share any experiences where problems and constraints have been successfully addressed or are being addressed.

31. As illustrated in figure 13 below, respondents accounted for whether the process of reporting to the UNFCCC had benefited them, improved their processes or identified gaps that need to be addressed. Respondents acknowledged that the reporting process led to improvements in their report preparation process but there are still issues to be addressed.

32. For the purpose of the analysis, responses addressing similar issues and substance were clustered into four issue areas, namely, IA, M&T, D&I and 'other'.

33. For GHG inventories, under IA, some respondents indicated that they had benefited from improved inventory preparation compared with that of previous years, investment made in training national experts, standardization of the process using inventory preparation protocols and constant resource planning to ensure adequate resources. The respondents highlighted that, in terms of IA, their planning improved, the coordination with stakeholders has improved and some countries are using a tier 2 approach for some sectors. Some respondents also highlighted that there is still a need for a national inventory management system to be put in place and to ensure staff are retained after training to ensure a competent pool of skills and experience. In terms of D&I, respondents indicated that they benefited from setting up a QA/QC process and from innovative ways to obtain the data required. Respondents also highlighted that the coordination of data collection has improved but there is still a need to expand the scope of data collection and ensure memorandums of understanding with data providers are in place to assure confidentiality and develop country-specific emission factors.

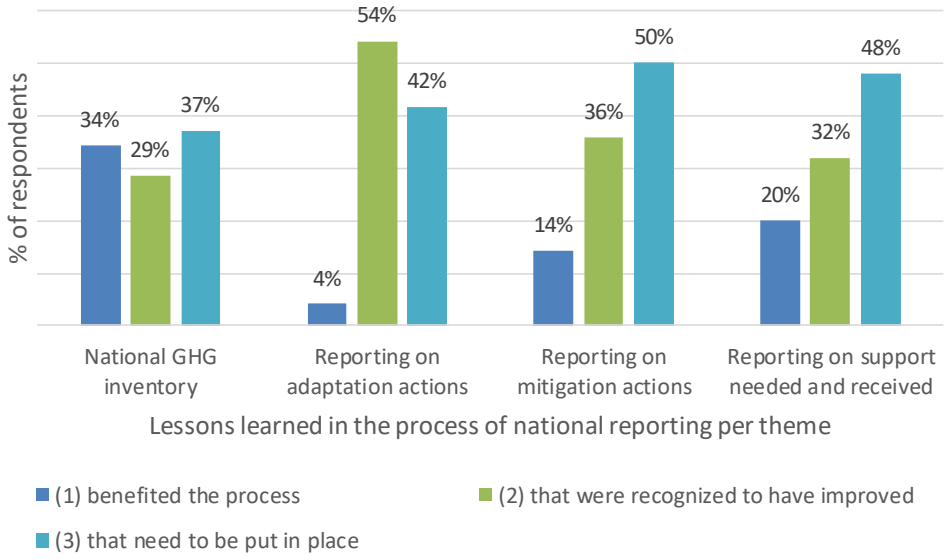
34. For mitigation, respondents highlighted aspects that have improved, such as the increase in capacity of national experts for mitigation and the mainstreaming of mitigation into the national planning process. In terms of IA, respondents further explained that there is a need to establish a framework for sectoral reporting of mitigation actions, build capacity with respect to application of methodologies and tools for carrying out mitigation assessments and improving coordination of mitigation reporting across the sectors.

35. For adaptation, in terms of IA, respondents highlighted the need to establish a framework for continuous reporting from the national, provincial, district and ward level on adaptation. In terms of M&T, respondents highlighted the need for building capacity to carry out adaptation assessments and, in terms of D&I, respondents highlighted the need for templates and guidelines for data collection.

36. For support needed and received, in terms of IA, respondents highlighted the need to strengthen existing IA for reporting information on support needed and received, and to clearly define roles and responsibilities of key stakeholders. respondents also noted, in terms of M&T, that a support tracking tool will prove useful for them for tracking climate finance flows and differentiating between climate finance and development assistance.

Figure 13

Lessons learned in the process of national reporting to the UNFCCC



37. Further, the respondents were asked to share experiences in the process of national reporting to the UNFCCC where problems and constraints have been successfully addressed or are being addressed. A total of 31 respondents answered this question; and shared their experiences. For the purpose of the analysis, responses addressing similar experiences were clustered into two areas, namely IA and D&I.

38. Under IA, Parties mentioned the following:

a) In order to improve data collection from stakeholders, staff from the national climate change unit conducted in-person visits to stakeholders and went through the protocols for data collection with them;

b) The creation of a climate change law has helped to further cement the MRV system in the country;

c) The national committee for climate change was not functional due to high staff turnover so a wider network of individuals from, for example, non-governmental organizations, academia and national institutions were brought in to share the responsibilities and proceed with the work;

d) In order to address lack of coordination and a weak institutional structure, the country is establishing a legal instrument on climate change that outlines the roles and responsibilities of key stakeholders and actors;

e) A national inventory plan was developed, and this will help improve the next GHG inventory;

f) The country is in the process of looking for a stakeholder to take over responsibility for the monitoring of emissions and removal from land categories.

39. Under D&I, Parties mentioned the following:

a) The country has benefited from the training on QA/QC of the GHG inventory provided by the secretariat and specific support from the Global Support Programme to resolve a QA problem;

b) In order to improve the GHG inventory, the climate change unit embarked on an awareness-raising activity that resulted in suppliers becoming more willing to share data;

c) Training provided for national experts helped improve the preparation of activity data so that they served as useful inputs into the IPCC inventory software;

d) A national task team was established to improve data collection for the AFOLU sector so that the country can report on it in its next GHG inventory;

e) It remains challenging to achieve staff capacity to ensure that data collection and management processes are performed successfully;

f) The restrictions due to the COVID-19 pandemic disrupted stakeholder interaction and data collection processes.

40. Parties were asked to share any experience, if applicable, where an NSO is involved in the process of preparing NCs, BURs or national GHG inventories and to indicate specific arrangements that the country has put in place, or plans to establish, to facilitate that engagement or collaboration.

41. Parties shared the following experiences with respect to the involvement of NSOs:

a) The NSO initially had very limited engagement with climate change activities but it is now assisting data compilers to prepare information for climate change reporting;

b) The NSO has actively participated in various knowledge-sharing training and is closely engaged in all phases of national reporting;

c) The NSO forms part of the technical working groups and sub-working groups as the agency responsible for statistics;

d) NSO staff have been trained in GHG inventory preparation and are supporting this work;

e) The NSO supports GHG inventory preparation through a memorandum of understanding with the climate change unit;

f) The NSO has provided useful information on population indicators, economic indicators, including the contributions of sectors in gross domestic product, and activity data (agriculture and industry) for GHG inventories;

g) The country intends to develop its IA with the NSO as part of its Capacity-building Initiative for Transparency project;

h) The close cooperation with the NSO has resulted in additional questions regarding the amount of firewood consumed being included in the household surveys to enable the analysis of those data and to improve the accuracy of GHG inventories;

i) The NSO has not yet been involved since most of the work is currently carried out by consultants.

42. Parties were asked to share any experience, if applicable, where an opportunity was identified to synergize data collection for climate reporting under the UNFCCC and for tracking and monitoring of SDGs, and to indicate any process, system or structure the country has put in place, or plans to establish, to streamline data collection and reporting processes.

43. Parties shared the following experiences with respect to synergizing data collection for climate reporting under the UNFCCC and for tracking and monitoring of SDGs:

a) The NSO is responsible for tracking and monitoring the SDGs and there is opportunity for close cooperation between the entity responsible for coordination of reporting and NSOs to link climate reporting

b) A methodological tool has been developed for quantifying the identified positive or negative impacts of the enhanced NDC and SDGs on each other at SDG target level;

c) The Party is in the process of identifying the SDG to which each adaptation and mitigation measure is contributing and to define the relevant indicators to track progress;

d) Establishing an online national integrated MRV tool will help to identify the synergies with tracking and monitoring SDGs;

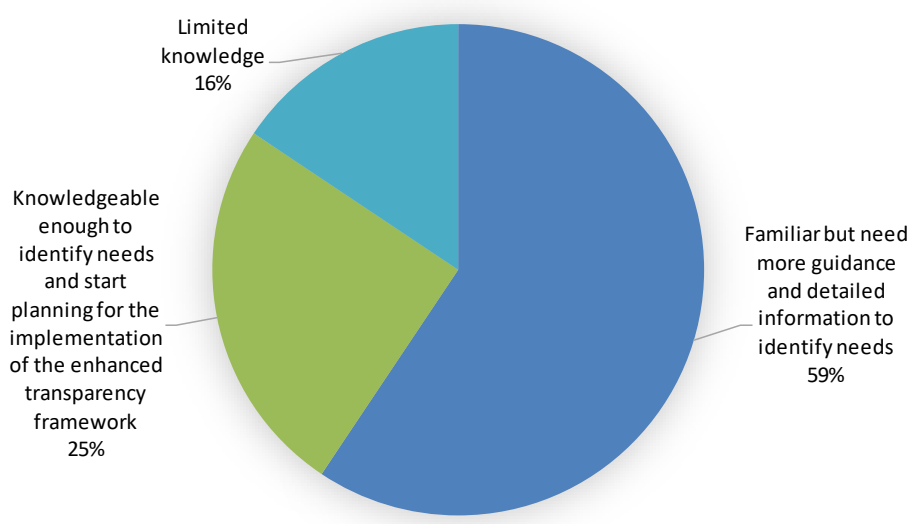
e) Reports on SDGs are being prepared by the same teams as those used for climate reporting.

C. Enhanced transparency framework under the Paris Agreement

44. This section of the survey aimed to gauge the emerging needs from developing country Parties resulting from the ETF. The respondents were asked to indicate 1) their level of knowledge of the MPGs, 2) the status of planning for reporting under the ETF, 3) key needs that the country has identified in preparing and reporting on thematic areas of the BTR and 4) key areas of capacity-building.

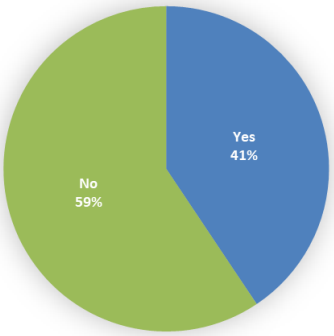
45. Firstly, respondents were asked to indicate the extent to which they are familiar with the MPGs. A total of 32 respondents answered this question, with 59 per cent indicating that they were familiar with the MPGs but would need more guidance and detailed information to identify needs in the implementation of the ETF, 25 per cent indicating that they were knowledgeable enough to identify needs and start planning for its implementation and 16 per cent indicating that they had limited knowledge. Figure 14 below summarizes the results.

Figure 14
Level of knowledge of the modalities, procedures and guidelines for the enhanced transparency framework under the Paris Agreement



46. Secondly, the respondents were asked to indicate whether their country has started planning for reporting under the ETF. A total of 32 respondents answered this question, with 41 per cent indicating that their country has started planning and 59 per cent indicating that it has not. Figure 15 below presents the results.

Figure 15
Status of national planning for reporting under the enhanced transparency framework under the Paris Agreement



47. Some respondents also described the steps taken so far to start preparing the first BTR, which is due by 31 December 2024, noting the following:

a) The country is working with an external support provider to enhance the MRV system and build the requirements of the MPGs into the system;

b) The country will not be developing a second BUR but will move to requesting funds for its first BTR;

c) The gaps have been identified and a road map is being developed for the country to prepare its first BTR;

d) The requirements of the MPGs have been integrated both into the NDC plan and the MRV platform;

e) The country is in the process of estimating the resource and capacity needs for the focal point to be able to implement the MPGs;

f) Capacity-building Initiative for Transparency projects have been developed to address the capacity-building needs for preparing the first BTR.

48. Thirdly, respondents were asked to indicate key needs that their country has identified in preparing and reporting on the following themes under the ETF: national GHG inventory, tracking progress of implementation and achievement of NDCs, climate change impacts and adaptation, and support needed and received. The combined total number of needs varied depending on the theme. Tables 5–8 below summarize key areas and categories of needs identified in each theme, including examples.

Table 5
Key areas and categories of needs identified associated with national greenhouse gas inventories

Area or category of needs	*Frequency of occurrence*	*Percentage of total*
Institutional arrangements	**5**	**17**
Establishment of an MRV system (process-related)	3	
Formalization of the MRV process, through laws and strengthened coordination procedures	2	
Methodology and tools	**14**	**47**
Enhancing technical capacity (e.g. in the use of IPCC guidelines in order to move to using the 2006 IPCC Guidelines and the 2019 Refinement to the 2006 IPCC Guidelines to conduct uncertainty analyses, and projections)	11	
Technical backstopping (i.e. development of country-specific emission factors)	2	
Practical tools or guidelines (i.e. for completing common reporting tables)	1	
Data and information	**9**	**30**

Area or category of needs	*Frequency of occurrence*	*Percentage of total*
Enhancement of data collection process	3	
Enhanced data availability	1	
Enhanced data quality	1	
Establishment of technology infrastructure (i.e. web-based data management system/ or platform)	4	
Capacity-building (area or category not specified)	**2**	**7**
Total	**30**	**100**

Table 6

Key areas and categories of needs identified associated with tracking progress of implementation and achievement of nationally determined contributions

Area or category of needs	*Frequency of occurrence*	*Percentage of total*
Institutional arrangements	**5**	**19**
Establishment of an MRV system (process-related)	2	
Formalization of the MRV process, through laws and strengthened arrangements for coordination	2	
Retaining institutional capacity, including in-house capacity-building and securing adequate financial resources	1	
Methodology and tools	**17**	**65**
Enhancing technical capacity (e.g. use of tools for policy and measures evaluation, carrying out projections, setting indicators and baselines, refining previous estimates of emissions and tracking by sector)	1	
Technical backstopping (i.e. development of indicators for tracking NDCs)	7	
Practical tools or guidelines (e.g. for completion of common tabular format, modelling, co-benefits analysis and quantification of mitigation actions as part of NDCs)	9	
Data and information	**1**	**4**
Establishment of technology infrastructure (e.g. national emissions registry)	1	
Insufficient information	**3**	**12**
Capacity-building (area or category not specified)	3	
Total	**26**	**100**

Table 7

Key areas and categories of needs identified associated with reporting on climate change impacts and adaptation

Area or category of needs	*Frequency of occurrence*	*Percentage of total*
Institutional arrangements	**6**	**23**
Establishment of an MRV system (process-related)	1	
Strengthening IA and coordination	5	
Methodology and tools	**14**	**54**
Enhancing technical capacity (e.g. in the use of tools, modelling, vulnerability and adaptation assessment, and understanding of MPGs and their implications)	4	
Technical backstopping (i.e. development of indicators)	4	
Practical tools or guidelines (e.g. for monitoring and evaluation; qualitative reporting on adaptation actions, impacts, risks and vulnerability; and practical guidelines or tools for adaptation reporting requirements under the Paris Agreement)	6	
Data and information	**6**	**23**

Area or category of needs	*Frequency of occurrence*	*Percentage of total*
Enhancement in data collection process (i.e. at different governance levels)	3	
Establishment of technology infrastructure (e.g. climate monitoring system and a shared platform)	3	
Total	**26**	**100**

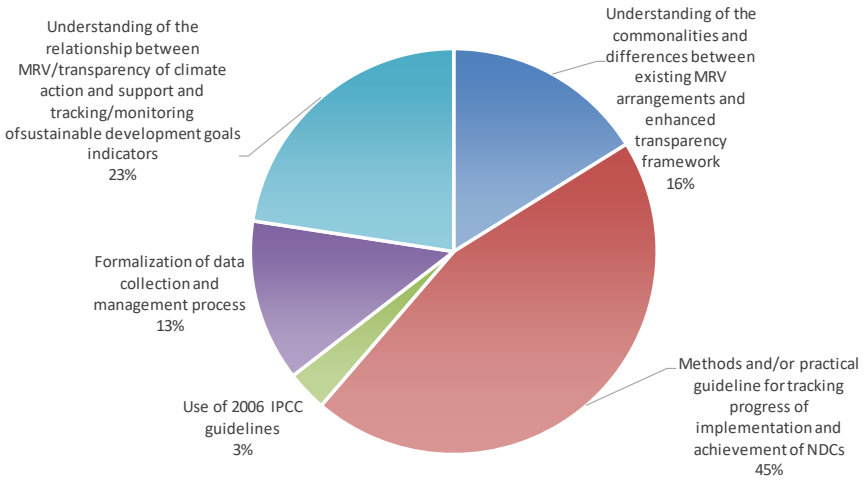
Table 8
Key areas and categories of needs identified associated with reporting on support needed and received

Area category of needs	*Frequency of occurrence*	*Percentage of total*
Institutional arrangements	**9**	**38**
Establishment of an MRV system (process-related)	5	
Formalization of the MRV process, through laws and strengthened arrangements for coordination	3	
Stakeholder engagement	1	
Methodology and tools	**8**	**33**
Enhancing technical capacity (e.g. in the use of guidelines, understanding of MPGs and their implications, and identifying needs)	3	
Technical backstopping (i.e. development of criteria for climate finance)	2	
Practical tools or guidelines (e.g. for completion of common tabular format and rigorous methodology to collect and process information)	3	
Data and information	**5**	**21**
Enhancement of data collection process	3	
Establishment of technology infrastructure (e.g. web-based platform and central database)	2	
Insufficient information	**2**	**8**
Capacity-building (area or category not specified)	2	
Total	**24**	**100**

49. Lastly, the respondents were asked to select the area of capacity-building that their country can benefit from the most in facilitating the implementation of the ETF from among five capacity-building areas. A total of 31 respondents answered this question, the most frequently selected capacity-building area being methods and practical guidelines for tracking progress of implementation and achievement of NDCs (45 per cent), followed by understanding of the relationship between MRV and transparency of climate action and support, and tracking and monitoring of SDG indicators (23 per cent), understanding of the commonalities and differences between existing MRV arrangements and the ETF (16 per cent) and formalization of data collection and management process (13 per cent) and use of 2006 IPCC guidelines (3 per cent). Figure 16 below summarizes these results.

Figure 16
Areas of capacity-building developing country Parties could benefit the most from, to

facilitate the implementation of the enhanced transparency framework under the Paris Agreement



D. Developing country Parties' expectations of the Consultative Group of Experts

50. This section of the survey aimed to gauge expectations regarding assistance from the CGE for developing country Parties in implementing the MRV and ETF. A list of categories of support was provided and the respondents were asked to select all that were relevant to their country and to provide topics of interests in the selected category of support. A total of 24 respondents answered this question.

(a) Development and dissemination of guidance documents. A total of 92 per cent of respondents expected this category of support from the CGE. Topics of interest identified by the respondents included:

i. Transition from MRV arrangements to the ETF and MPGs;

ii. Methods and practical guidelines for tracking progress of implementation and achievement of NDCs;

iii. Guidance on AFOLU sector, similar to the Compendium for GHG baselines and monitoring;

iv. Guidance on reporting on adaptation and support needed and received;

v. Guidance on assessment of social and economic consequences of response measures.

(b) Delivery of in-person training (hands-on training workshops). All respondents expected this category of support from the CGE. Topics of interest specified by the respondents included:

i. Developing training workshops on using the MPGs which include examples, case studies or country experiences; mitigation assessments and tracking progress and achievement of NDCs; adaptation and vulnerability assessments; training on use of IPCC guidelines and software; and training on reporting information for support needed and received;

ii. Use of consultants in training workshops that understand the regional or country circumstances relevant to the topic covered;

iii. Provision of training on participation in the international consultation and analysis process and, for the future, the technical review and facilitative sharing of views process.

(c) Provision of information sessions (e.g. webinars). A total of 88 per cent of respondents expected this category of support from the CGE and topics of interest encompassed the following: information sessions on the MPGs; lessons learned by other countries in formalizing data sharing agreements and data management; training on the common reporting tables and formats currently being prepared by the Subsidiary Body for Scientific and Technological Advice; training on management of GEF funds and training on QA/QC plans for GHG inventories.

(d) Provision of online training (e-learning programme). A total of 92 per cent of respondents expected this category of support from the CGE and topics of interest encompassed the following: online training on the MPGs for the various areas covered, namely national GHG inventories, tracking progress and achievement of NDCs, adaptation, support and action plans; online training on conducting a capacity-building needs assessment and alignment with SDG reporting. One respondent indicated that a young professional graduate course should be developed.

(e) Provision of a regional or subregional platform for exchange among practitioners**.** A total of 75 per cent of respondents expected this category of support from the CGE. The respondents noted the value of regional platforms in facilitating information and experience exchange, promoting networking of practitioners and strengthening South–South cooperation. An exchange on adapting or moving towards implementation of the ETF, including the steps taken to prepare and overcome challenges and barriers, would be useful. A suggestion was made to organize a networking platform for bringing together countries with similar national circumstances, not necessarily confined to geographical region, and practitioners with similar level of expertise.

(f) Provision of information on practical tools and methods that are available**.** A total of 92 per cent of respondents expected this category of support from the CGE, noting the usefulness of having updated information on practical tools and methods.. Several respondents also highlighted the need to provide training on the tools and methods associated with data collection and compilation of GHG inventory reports; developing GHG emissions projections, avoiding double counting and making corresponding adjustments; and tools for developing mitigation scenarios.

(g) Provision of information on good practices and examples of national benefits of climate reporting**.** A total of 75 per cent of respondents expected this category of support from the CGE, highlighting that this information can be very useful and is needed.

(h) Provision of information on the linkages with other components of climate action and support, such as NDCs, long-term low GHG emissions development strategies, global stocktake and SDGs. A total of 71 per cent of the respondents expected this category of support from the CGE, highlighting that this information can be very useful and is needed. In particular, several respondents indicated that it will be useful to align NDCs, long-term low GHG emission development strategies, the global stocktake and SDGs, so as to have a more comprehensive understanding of the linkages.

E. Reflections in comparison with the 2019 Consultative Group of Experts survey

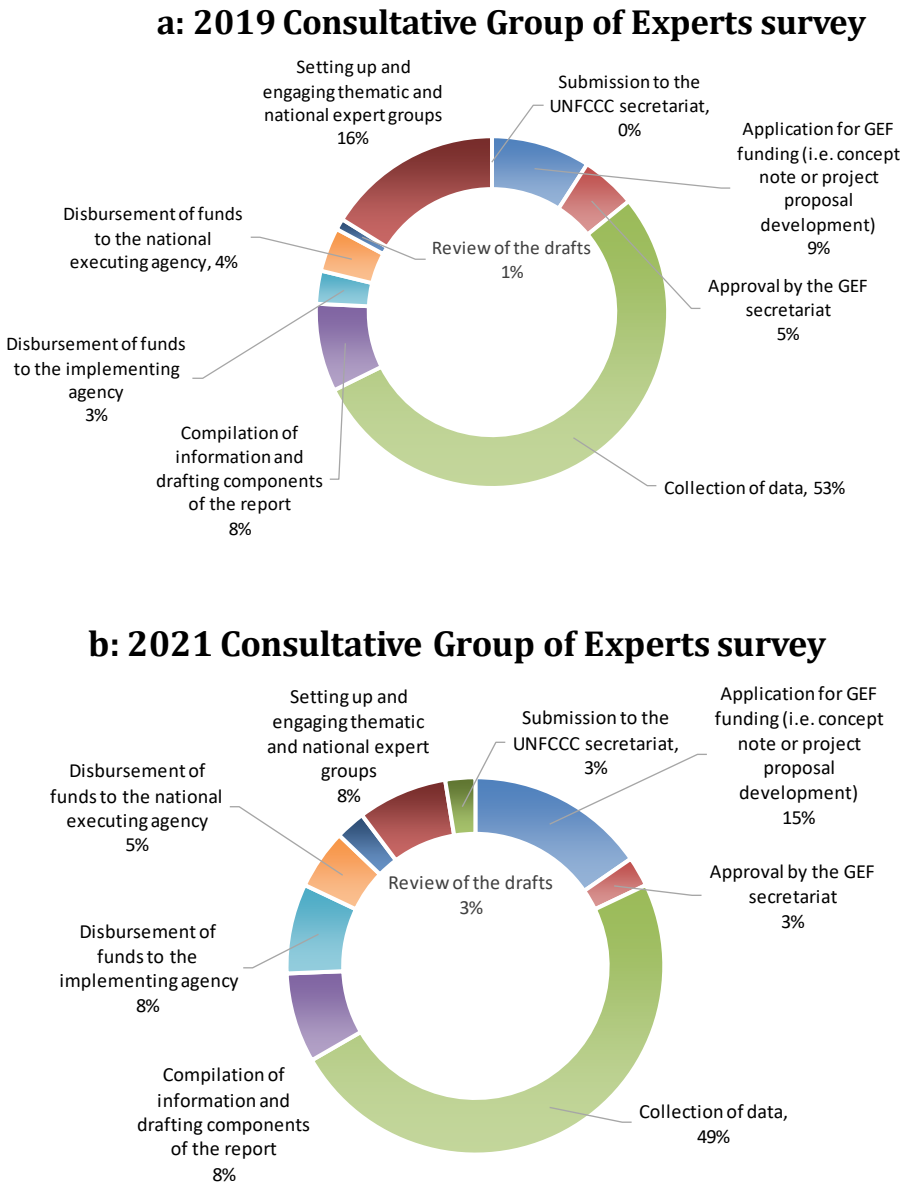
51. A total of 86 developing country Parties participated in the 2019 survey. The trends shown in the survey are similar to those reflected in the 2021 survey where the same questions were asked.

52. The 2021 survey contained additional questions on the impact of the COVID-19 pandemic on NC and/or BUR preparation (see para. 16 above) and the involvement of the NSO in MRV work (paras. 18 and 40 above).

53. Incremental improvements and changes have been observed when making broad comparisons between the results of the two surveys; however, it would be difficult to draw conclusions from these. Figure 17 below illustrates this. When respondents were asked what was the most challenging phase in the national report preparation process, the figures below, for example, show a 4 per cent reduction in data collection being a challenge, and this could

be linked to the setting up of thematic and national expert groups, which had increased by 8 per cent.

Figure 17
Most challenging phase in the national report preparation process



54. A comparison was also made of the results of the 2019 and 2021 CGE surveys on the extent to which the respondents were familiar with the MPGs. The results (figure 18 below) indicate an increase of 4 per cent in the number of respondents that are familiar with the MPGs but require more guidance and detailed information to identify needs in the implementation of the ETF, corresponding with a drop of 5 per cent in the number of those that have limited knowledge of the MPGs.

Figure 18

Level of knowledge of the modalities, procedures and guidelines for the enhanced transparency framework under the Paris Agreement

III. Next steps

55. The CGE, with support from the secretariat, will incorporate, as appropriate, the results of this survey into the information compiled for the preparation of a technical paper synthesizing the problems and constraints, lessons learned, as well as capacity-building needs for the preparation of NCs and BURs, to be published by September 2021.

56. Further, the CGE will take the results of this survey into consideration in the development of its workplan for 2022.

Annex I

Description of areas and categories of issues used in the compilation and synthesis of information

Note: To understand gaps and needs identified by developing country Parties, further to the themes of information to be reported, namely, national GHG inventories, reporting on mitigation actions, reporting on adaptation actions, and reporting on support needed and received, it is important to understand the type of process is required to address the need. A country would identify and report the need when there is a gap between the current state (what is) and the desirable state (what should be). A barrier that impedes the country in addressing this gap can exist in various areas and can be tackled by various processes. For the purpose of this exercise, substantial processes emerge in three areas, namely, IA, M&T and D&I. Descriptions of key categories of issues under each area, including examples, are provided in the table below:

(Area) and Category	*Description*
(IA) Formalization or institutionalization of the process	This refers to the need or experience associated with formalizing the MRV process and arrangements through 1) the development of a policy or legislative framework that mandates national reporting to the Convention and the Paris Agreement, thereby encouraging stakeholders to provide data in a timely and continuous manner and 2) putting in place formal arrangements or mechanisms for data sharing, such as protocols or memorandums of understanding across ministries and institutions.
(IA) In-house capacity-building	This refers to the need or experience associated with building and retaining institutional capacity. Examples included retaining skilled human resources in the institutions; avoiding loss of knowledge or skills due to staff turnover; training and use of national experts other than external consultants or institutions; and retaining a team of experts that are qualified for technical work. In many cases, these needs or experiences were captured in line with the notion of the continuous reporting process.
(IA) Leadership	This is associated with the critical role of the lead entity in coordinating and facilitating the MRV process. Examples included the establishment of a designated team to lead the process and the appointment of a focal point in each contributing agency.
(IA) Stakeholder engagement	The emphasis in this category is on communicating and engaging with different stakeholders, with the aim of involving them and ensuring their commitment to the MRV process. Examples included raising awareness of stakeholders including those in the private sector (for climate change, and MRV and transparency); enhancing high-level political commitment to send signals and encourage stakeholder involvement. Further, clear articulation to the stakeholders of the process and strategic results, importance of their commitment, and the usability of the data provided by stakeholders was clustered under this category.
(IA) Establishment of a national MRV system	Many responses referred to a national MRV system. However, in the respondents' own description of this need or experience, a national MRV system would entail key elements of IA, as outlined in other categories of issues under IA. Thus, in the cases where the respondents elaborated the elements of a national MRV system, the issue or experience was clustered in different categories as appropriate and was only placed under this category where the respondents did not elaborate on any specific elements.
(M&T) Practical guidance, tools and methods	This refers to the need or experience associated with development of guidance, tools and methods that are practical and easy to apply to the country context. It also refers to the development of a technical

(Area) and Category	*Description*
	or practical process to conduct assessments in a systematic and methodologically consistent manner. Examples included: - (GHG) Development of a new approach for sectoral activity data collection and emission estimation, and development of reporting templates (to help data custodians submit relevant data); - (Mitigation) Sectoral modelling (e.g. energy sector) and provision of accounting rules or guidance for formulation, implementation and reporting of the mitigation actions in accordance with Transparency, Accuracy Completeness, Comparability, Consistency principles; - (Support) Practical guidance, standards or guidelines on setting criteria to collect information on, and thereby track, support received and identify support needed; - A simple and practical format for D&I sharing.
(M&T) Technical backstopping	This refers to the need or experience associated with conducting research, studies or technical backstopping with a view to developing applicable methods for country context and enhancing technical capacity to apply available guidelines, tools and methods. Examples included: - (GHG) Development of country-specific emission factors (involving independent research institutions); - (Adaptation) Development or improvement of indicators so that they are practical and applicable to country or local context (considering different levels of vulnerability).
(M&T) Technical capacity	This is associated with a lack of understanding of reporting requirements; lack of technical capacity to interpret, analyse and translate D&I gathered; and lack of technical capacity to conduct assessments and/or use the available tools or methods.
(D&I) Data collection process	Examples included: challenges in collecting scattered data on support received and thus a need emerged to streamline or otherwise enhance the data collection process.
(D&I) Data management process	The data management process includes the documentation and archiving of data, the QA/QC process and uncertainty management.
(D&I) Data availability	This is associated with the unavailability of data.
(D&I) Data accessibility	This refers to the need or experience associated with inaccessibility of data owing to confidentiality issues (especially in the private sector).
(D&I) Quality data	This refers to the need or experience associated with high quality data that are consistent, complete and accurate.
(D&I) Technology infrastructure	This refers to the need or experience associated with the establishment of a web-based database, platform or knowledge management system to facilitate the data collection process and make information available to all stakeholders.
(Other) Benefits of MRV	This refers to the cases where the respondents identified benefits of the MRV process beyond the end product itself. Examples included: decision- and policy- making were informed by the MRV process; improvements were made in monitoring and reporting on adaptation actions nationally, in terms of scope and quality of information available; and preparation of national reports helped the country to identify needs, constraints and gaps, which attracted international financial support.
(Other) MRV as a continuous process	This refers to the experience where MRV as a continuous process helped a country to improve reporting over time, as a country can build on the analysis from the preparation of previous reports.
(Other) Mainstreaming climate actions	This refers to the need or experience associated with mainstreaming climate actions into sectoral strategic and policy planning, which helped the country identify and assess mitigation measures.

(Area) and Category	*Description*
(Other) Implementation-related support needs	Financial support needs were identified in the areas of NDC revision and implementation of mitigation or adaptation measures.

Annex II

Overview of the total number of Parties represented in the results for each survey question

Question summary	*Question number*		*Number of Parties represented*
I. Demographic information			
	1	Country	46
	2	Profile	46
II. Existing MRV arrangements under the Convention			
Submission status	3–4	Submission status of NC	46
	5–6	Submission status of BUR	46
National MRV system or process, including IA in place	7–8	COVID--19 impact	46
	9	Mandate	40–45
	10–11	Consultants	38–40
	12–14	Extent of system or process	42
	15	Implementation status of key elements of the MRV process	24–25
Experience in access to GEF funding	16	Challenging phases	39
Implementation status of national reporting	17	Preparation status of the next national report	6–35
	18–19	Use of IPCC guidelines	39
	20	Use of software	34
Problems and constraints)	21–24	Problems and constraints for various themes	33–36
Lessons learned	25	Lessons learned	25–-35
	26	Experiences in addressing challenges identified	27
	27	Experiences with NSOs	27
	28	Experiences of SDG linkages	24
III. ETF			
	29	Level of knowledge of the MPGs	32
	30–31	Status of national planning for reporting under the ETF	32
	32	Key needs identified for implementation of the ETF	24–26
	33	Key areas of capacity-building	31
IV. Developing country Parties' expectations of the CGE			
	34	Expectations of the CGE	2–24

Annex III

List of Parties represented in the survey results

Antigua and Barbuda
Armenia
Bahamas
Belize
Botswana
Brunei Darussalam
Burkina Faso
Cambodia
Colombia
Comoros
Costa Rica
Democratic Republic of the Congo
Dominican Republic
Eritrea
Eswatini
Ethiopia
Georgia
Ghana
Grenada
Guatemala
Guinea
Guyana
Honduras
Lesotho
Malaysia
Mauritius
Mongolia
Montenegro
Mozambique
Namibia
Nauru
North Macedonia
Pakistan
Palau
Paraguay
Saint Kitts and Nevis
Saint Lucia
Serbia
Singapore
South Africa
South Sudan
Sudan
Suriname
United Republic of Tanzania
Uruguay
Zimbabwe