

CGE STOCKTAKE REPORT 2023

2023 Stocktake of transparency gaps and needs to inform the Consultative Group of Experts on its technical advice and support to developing country Parties

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Contents

			Page
I.	Intro	oduction	4
	A.	Background	4
	B.	Objective	4
	C.	Methodology	4
II.	Resu	ılts	5
	A.	Profile of the respondents	5
	B.	Existing measurement, reporting and verification arrangements and the enhanced	
		transparency framework	6
	C.	Expectations of the Consultative Group of Experts	22
	D.	Reflections on the results of the survey compared with those of previous surveys	24
III.	Nex	t steps	25

Annexes

I.	Areas and categories of issues used in the compilation and synthesis of information	. 26
II.	Number of Parties represented in the results for each survey question	. 28
III.	Parties represented in the survey results	. 29

Abbreviations and acronyms

2006 IPCC Guidelines	2006 IPCC Guidelines for National Greenhouse Gas Inventories
BTR	biennial transparency report
BUR	biennial update report
CBIT	Capacity-building Initiative for Transparency
CGE	Consultative Group of Experts
CORINAIR	Core Inventory of Air emissions (project)
D&I*	data and information
EMEP	Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
ETF	enhanced transparency framework (under the Paris Agreement)
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GHG	greenhouse gas
IA*	institutional arrangement(s)
IPCC	Intergovernmental Panel on Climate Change
LDC	least developed country
MPGs	modalities, procedures and guidelines for the enhanced transparency framework under the Paris Agreement
MRV	measurement, reporting and verification
M&T*	methodology(ies) and tool(s)
NC	national communication
NDC	nationally determined contribution
NSO	national statistical office
QA/QC	quality assurance/quality control
SDG	Sustainable Development Goal
SIDS	small island developing State(s)

^{*} Used exclusively in the tables.

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 their preparation for the ETF.

4. The previous surveys were conducted in 2019 and 2021. The third survey was conducted in 2023 with a view to gathering up-to-date feedback from developing country Parties on the status of implementation of the existing MRV arrangements under the Convention and preparation for the ETF, including institutional arrangements in place at the national level, and associated challenges, constraints, lessons learned and capacity-building needs.

5. This report contains the key results of the 2023 CGE stocktake survey of transparency gaps and needs, which will inform the CGE in providing technical advice and support to developing country Parties.

B. Objective

6. The objective of the survey was to gather up-to-date information on problems, constraints and 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 the 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 that ran from 1 April to 15 July 2023.

8. The survey was circulated to all developing country Parties via their respective national focal points, who were encouraged to further circulate it to their NC, BUR and BTR project coordinators, or other experts and officials, as appropriate. Where there was more than one respondent per Party, the response of the national focal point took precedence.

- 9. The survey comprised three parts:
 - (a) Demographic information;
 - (b) Existing MRV arrangements and the ETF;

¹ Decision 11/CP.24, para. 1.

² Decision 18/CMA.1, para. 15.

(c) Party expectations of the CGE.

10. During the analysis of the survey results, responses addressing similar issues and topics 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 provides an explanation of the areas and categories that emerged, together with sample responses for each category.

II. Results

A. Profile of the respondents

11. By the closing date, 23 developing country Parties³ had participated in the survey. The regional breakdown of these 23 Parties was as follows: 6 from African States, 9 from Asia-Pacific States, 6 from Latin American and Caribbean States and 2 from Eastern European States. Figure 1 illustrates the regional distribution of participants.



Number of developing country Parties participating in the survey by region



12. Surveys were completed by respondents with various roles. As shown in figure 2, there were 14 national focal points, 12 NC project coordinators, 7 BUR project coordinators, 11 BTR project coordinators, 14 national GHG inventory coordinators and 59 sectoral or thematic experts. Five respondents indicated they had other roles, such as CBIT project coordinator, or that they had responsibility for gender mainstreaming in climate action.



Profile of respondents by role in the national transparency process



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

B. Existing measurement, reporting and verification arrangements and the enhanced transparency framework

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 and of preparation for the ETF, including:

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

(b) National transparency system or process, including institutional arrangements,

in place;

- (c) Challenges in the report preparation process;
- (d) Status of preparation of the next NC, BUR and BTR.

(a) Submission status of national communication and 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 why. A total of 23 respondents answered this question. As depicted in figure 3, 61 per cent indicated that their country has submitted an NC in the last four years. The remaining 39 per cent indicated that their country is preparing an NC (67 per cent of the 39 per cent) or that there are specific reasons why an NC is not being prepared (33 per cent of the 39 per cent). These reasons included limitations in technical or institutional capacity.

Figure 3

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



15. Respondents were also asked to indicate whether their country has ever submitted a BUR. A total of 23 respondents answered this question. As depicted in figure 4, 70 per cent indicated that their country has submitted a BUR. Of the 30 per cent who indicated that their country has never submitted a BUR, about 71 per cent indicated that a BUR is under preparation, while others provided reasons including a lack of access to funding for BUR preparation and limitations in technical or institutional capacity.

Figure 4 Status of biennial update report submission



(b) National transparency systems and processes, including institutional arrangements, in place

16. This subsection of the survey aimed to obtain a snapshot of different elements of national transparency systems and processes, including institutional arrangements 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 an ad hoc mandate. The number of respondents varied depending on the type of national report. The results are as follows (see also figure 5):

(a) For national GHG inventories, there were 23 responses: 70 per cent indicated that their country has a lead entity that coordinates national GHG inventories with a permanent mandate, 17 per cent indicated that there is a lead entity but it has an ad hoc mandate and 13 per cent indicated that their country does not have a lead entity for GHG inventories;

(b) For NCs, there were 23 responses: 70 per cent indicated that their country has a lead entity that coordinates NCs with a permanent mandate, 22 per cent indicated that there is a lead entity but it has an ad hoc mandate and 9 per cent indicated that their country does not have a lead entity for NCs;

(c) For BURs, there were 23 responses: 65 per cent indicated that their country has a lead entity that coordinates BURs with a permanent mandate, 22 per cent indicated that there is a lead entity but it has an ad hoc mandate and 13 per cent indicated that their country does not have a lead entity for BURs;

(d) For BTRs, there were 22 responses: 73 per cent indicated that their country has a lead entity that will coordinate preparation of BTRs with a permanent mandate, 14 per cent indicated that there is a lead entity but it has an ad hoc mandate and 14 per cent indicated that their country does not have a lead entity for BTRs.



Figure 5 Existence of entity designated to coordinate the preparation of reports

■ Yes (with permanent mandate) ■ Yes (with ad hoc mandate) ■ No

Note: The total and grouped percentages were calculated using exact (not rounded) values and presented as rounded values, therefore total percentages may be slightly more or less than 100 per cent.

17. The respondents were also asked to indicate (1) the involvement of external consultants and institutions in the preparation of national GHG inventories, NCs, BURs and BTRs and the extent to which they engage with the national agency; (2) the extent to which work related to MRV and the ETF is mainstreamed in the work of line ministries and sectors that are key data and information providers; and (3) the extent to which the country takes a synergistic approach to monitoring the SDGs and Sendai Framework for Disaster Risk Reduction 2015–2030. The results are as follows (see also figures 6–8):

(a) **Involvement of external consultants and institutions and the extent to which they are engaged with the national agency.** A total of 23 respondents answered this question with respect to national GHG inventories, 21 answered regarding NCs and BURs, and 19 answered regarding BTRs:

(i) Regarding the involvement of external consultants or institutions in the preparation of national GHG inventories, 22 per cent of respondents indicated they were involved to the full extent, 35 per cent to a limited extent and 43 per cent not at all;

(ii) Regarding the involvement of external consultants or institutions in the preparation of NCs, 14 per cent of respondents indicated they were involved to the full extent, 55 per cent to a limited extent and 32 per cent not at all;

(iii) Regarding the involvement of external consultants or institutions in the preparation of BURs, 23 per cent of respondents indicated they were involved to the full extent, 45 per cent to a limited extent and 32 per cent not at all;

(iv) Regarding the involvement of external consultants or institutions in the preparation of BTRs, 20 per cent of respondents indicated they were involved to the full extent, 25 per cent to a limited extent and 25 per cent not at all, while 30 per cent of the respondents indicated they have not yet decided on what the extent of their involvement will be.

Figure 6

Involvement of external consultants or institutions in report preparation



Not yet decided Note: The total and grouped percentages were calculated using exact (not rounded) values and

Note: The total and grouped percentages were calculated using exact (not rounded) values and presented as rounded values, therefore total percentages may be slightly more or less than 100 per cent.

(b) **Mainstreaming work related to MRV and the ETF in the work of line ministries and sectors.** The respondents were asked to indicate the extent to which MRV and ETF work, namely data collection, processing and management for national GHG inventories and the reporting of mitigation and adaptation actions and support needed and received, is mainstreamed in the work of line ministries and sectors, which are key sources of the information required for preparing national reports. A total of 22 respondents answered the question. The results are shown in figure 7.

Figure 7

Extent of the mainstreaming of transparency work in the work of line ministries and sectors



Note: The total and grouped percentages were calculated using exact (not rounded) values and presented as rounded values, therefore total percentages may be slightly different more or less than 100 per cent.

(c) **Exploration of a synergistic approach to SDG and Sendai Framework monitoring.** The respondents were asked to indicate the extent to which their country takes a synergistic approach to the transparency process and the tracking and monitoring of SDGs and the Sendai Framework. A total of 21 respondents answered this question, with 14 per cent indicating that the country is taking a synergistic approach to the full extent, 76 per cent indicating that it is doing so to a limited extent and 10 per cent indicating a synergistic approach is not being taken (see figure 8).

Figure 8

Extent of taking a synergetic approach to the transparency process and Sustainable Development Goal and Sendai Framework for Disaster Risk Reduction 2015–2030 monitoring



18. 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'. All respondents (23) answered this question. The results are as follows (see also figure 9):

(a) National laws or regulations to **mandate** national reporting to the UNFCCC. Of the respondents, 26 per cent indicated that their country has a legislative framework that mandates national reporting under the Convention and that it is fully operational, 30 per cent indicated that a legal mandate has been established but is not fully operational, 22 per cent indicated that their country is currently developing a legal mandate and 22 per cent indicated that no legal mandate has yet been put in place (figure 9, column A);

(b) A plan to allocate a **domestic budget** for the compilation and submission of reports on a regular basis, including for maintaining a team of national experts, for:

(*i*) NCs: 4 per cent of respondents indicated that their country has a plan to allocate a domestic budget for the compilation and submission of NCs on a regular basis, including for maintaining a team of national experts, that is fully operational, 70 per cent indicated that a plan is under development and 26 per cent indicated that a plan has not yet been put in place (figure 9, column B);

(*ii*) *BURs*: 4 per cent of respondents indicated that their country has a plan to allocate a domestic budget for the compilation and submission of BURs on a regular basis, including for maintaining a team of national experts, that is fully operational, 74 per cent indicated that a plan is under development and 22 per cent indicated that a plan has not yet been put in place (figure 9, column C);

(*iii*) *BTRs*: 4 per cent of respondents indicated that their country has a plan to allocate a domestic budget for the compilation and submission of BTRs on a regular basis, including for maintaining a team of national experts, that is fully operational, 74 per cent indicated that a plan is under development and 22 per cent indicated that a plan has not yet been put in place (figure 9, column D);

(*iv*) National GHG inventories: 9 per cent of respondents indicated that their country has a plan to allocate a domestic budget for the compilation and submission of national GHG inventories on a regular basis, including for maintaining a team of national experts, that is fully operational, 65 per cent indicated that a plan is under development and 26 per cent indicated that a plan has not yet been put in place (figure 9, column E);

(c) A mechanism for obtaining **funds from external sources** that are not part of the domestic budget to support transparency reporting on a regular basis for:

(*i*) NCs: 26 per cent of respondents indicated that their country has a mechanism for obtaining funds from external sources to support the compilation and submission of NCs on a regular basis that is fully operational, 26 per cent indicated that a mechanism is established but not fully operational, 30 per cent indicated that a mechanism is under development and 17 per cent indicated that a mechanism has not yet been put in place (figure 9, column F);

(*ii*) BURs: 22 per cent of respondents indicated that their country has a mechanism for obtaining funds from external sources to support the compilation and submission of BURs on a regular basis that is fully operational, 22 per cent indicated that a mechanism is established but not fully operational, 43 per cent indicated that a mechanism is under development and 13 per cent indicated that a mechanism has not yet been put in place (figure 9, column G);

(*iii*) *BTRs*: 22 per cent of respondents indicated that their country has a mechanism for obtaining funds from external sources to support the compilation and submission of BTRs on a regular basis that is fully operational, 17 per cent indicated that a mechanism is established but not fully operational, 39 per cent indicated that a mechanism is under development and 22 per cent indicated that a mechanism has not yet been put in place (figure 9, column H);

(*iv*) National GHG inventories: 26 per cent of respondents indicated that their country has a mechanism for obtaining funds from external sources to support the compilation and submission of national GHG inventories on a regular basis that is fully operational, 26 per cent indicated that a mechanism is established but not fully operational, 39 per cent indicated that a mechanism is under development and 9 per cent indicated that a mechanism has not yet been put in place (figure 9, column I);

(d) A formal process for **stakeholder engagement** for:

(*i*) Development of a GHG inventory: 4 per cent of respondents indicated that their country has a formal process for stakeholder engagement for developing a GHG inventory that is fully operational, 74 per cent indicated that a process is under development and 22 per cent indicated that a process has not yet been put in place (figure 9, column J);

(*ii*) *MRV of mitigation actions, including the tracking of progress in implementing and achieving NDCs*: 4 per cent of respondents indicated that their country has a formal process for stakeholder engagement for the MRV of mitigation measures over time that is fully operational, 74 per cent indicated that a process is under development and 22 per cent indicated that a process has not yet been put in place (figure 9, column K);

(*iii*) Monitoring of adaptation measures and climate change impacts: 9 per cent of respondents indicated that their country has a formal process for stakeholder engagement for the monitoring of efficacy of adaptation measures and of climate change impacts over time that is fully operational, 65 per cent indicated that a process is under development and 26 per cent indicated that a process has not yet been put in place (figure 9, column L);

(*iv*) *MRV of support needed and received*: 26 per cent of respondents indicated that their country has a formal process for stakeholder engagement for the MRV of support needed and received that is fully operational, 26 per cent indicated that a process is established but not fully operational, 30 per cent indicated that a process is under development and 17 per cent indicated that a process has not yet been put in place (figure 9, column M);

(e) A formal process for **data provision**, such as a **data-sharing agreement** or memorandum of understanding between the data provider and data compilers, for:

(*i*) *Reporting national GHG inventories*: 22 per cent of respondents indicated that their country has a formal process for data provision for national GHG inventories

that is fully operational, 22 per cent indicated that a process is established but not fully operational, 43 per cent indicated that a process is under development and 13 per cent indicated that a process has not yet been put in place (figure 9, column N);

(*ii*) *Reporting information on mitigation*: 22 per cent of respondents indicated that their country has a formal process for data provision for reporting information on mitigation actions, including tracking progress in implementing and achieving NDCs, that is fully operational, 17 per cent indicated that a process is established but not fully operational, 39 per cent indicated that a process is under development and 22 per cent indicated that a process has not yet been put in place (figure 9, column O);

(*iii*) Reporting information on adaptation: 26 per cent of respondents indicated that their country has a formal process for data provision for reporting information on climate change impacts and adaptation actions that is fully operational, 26 per cent indicated that a process is established but not fully operational, 39 per cent indicated that a process is under development and 9 per cent indicated that a process has not yet been put in place (figure 9, column P);

(*iv*) *Reporting information on support needed and received*: 39 per cent of respondents indicated that their country has a formal process for data provision for reporting information on support needed and received that is fully operational, 39 per cent indicated that a process is established but not fully operational, 9 per cent indicated that a process is under development and 13 per cent indicated that a process has not yet been put in place (figure 9, column Q);

(f) A **tool** such as a data-collection template or online data-sharing platform, which data providers can use for providing data in a consistent manner and making them accessible to compilers, for:

(*i*) *Reporting national GHG inventories:* 17 per cent of respondents indicated that their country has a tool for providing data for national GHG inventories that is fully operational, 30 per cent indicated that a tool is established but not fully operational, 30 per cent indicated that a tool is under development and 22 per cent indicated that a tool has not yet been put in place (figure 9, column R);

(*ii*) Reporting information on mitigation: 9 per cent of respondents indicated that their country has a tool for providing data for mitigation that is fully operational, 35 per cent indicated that a tool is established but not fully operational, 17 per cent indicated that a tool is under development and 39 per cent indicated that a tool has not yet been put in place (figure 9, column S);

(*iii*) Reporting information on adaptation: 13 per cent of respondents indicated that their country has a tool for providing data for adaptation that is fully operational, 22 per cent indicated that a tool is established but not fully operational, 26 per cent indicated that a tool is under development and 39 per cent indicated that a tool has not yet been put in place (figure 9, column T);

(iv) Reporting information on support needed and received: 30 per cent of respondents indicated that their country has a tool for providing data for support needed and received that is fully operational, 22 per cent indicated that a tool is established but not fully operational, 17 per cent indicated that a tool is under development and 30 per cent indicated that a tool has not yet been put in place (figure 9, column U);

(g) A procedure for data **QA/QC**. Of the respondents, 9 per cent indicated that their country has a procedure for data QA/QC that is fully operational, 22 per cent indicated that a procedure is established but not fully operational, 26 per cent indicated that a procedure is under development and 43 per cent indicated that a procedure has not yet been put in place (figure 9, column V);

(h) A process to identify and implement **areas of improvement.** Of the respondents, 4 per cent indicated that their country has a process to identify and implement areas of improvement that is fully operational, 22 per cent indicated that a process is established but not fully operational, 30 per cent indicated that a process is under

development and 43 per cent indicated that a process has not yet been put in place (figure 9, column W).

Figure 9



Implementation status of key elements that facilitate national reporting processes

Note: The total and grouped percentages were calculated using exact (not rounded) values and presented as rounded values, therefore total percentages may be slightly different more or less than 100 per cent. Key to x axis:

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

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

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

D: A plan to allocate a **domestic budget** for the compilation and submission of **BTRs** on a regular basis, including for maintaining a team of national experts

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

F: A mechanism for obtaining funds from **external sources** (all sources that are not part of the domestic budget) to support transparency reporting on a regular basis for **NCs**

G: A mechanism for obtaining funds from **external sources** (all sources that are not part of the domestic budget) to support transparency reporting on a regular basis for **BURs**

H: A mechanism for obtaining funds from **external sources** (all sources that are not part of the domestic budget) to support transparency reporting on a regular basis for **BTRs**

I: A mechanism for obtaining funds from **external sources** (all sources that are not part of the domestic budget) to support transparency reporting on a regular basis for **national GHG inventories**

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

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

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

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

N: A formal process for **data provision**, such as a datasharing agreement or memorandum of understanding between the data provider and data compiler, for **national GHG inventories**

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

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

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

R: A **tool**, such as a data-collection template or online datasharing platform, which data providers can use to provide data in a consistent manner and make them accessible to compilers, for **national GHG inventories**

S: A **tool**, such as a data-collection template or online datasharing platform, which data providers can use to provide data in a consistent manner and make them accessible to compilers, for reporting information on **mitigation**

T: A **tool**, such as a data-collection template or online datasharing platform, which data providers can use to provide data in a consistent manner and make them accessible to compilers, for reporting information on **adaptation**

U: A **tool**, such as a data-collection template or online datasharing platform, which data providers can use to provide data in a consistent manner and make them accessible to compilers, for reporting information on **support needed and received**

V: A procedure for data QA/QC

W: A process to identify and implement areas of improvement

(c) Most challenging phases in the national report preparation process

19. This subsection of the survey aimed to capture country experience with the most challenging phases of national report preparation. Respondents were asked to choose from a list the three phases that had been the most challenging for them in the process of preparing the latest national report in terms of duration of phase and responsiveness of stakeholders. Of the 23 respondents, 26 per cent identified data collection as the most challenging phase, 25 per cent identified setting up and engaging thematic and national expert groups, and 15 per cent identified compilation of information and drafting components of the report. The results, including other phases identified as challenging by the respondents, are presented in figure 10.

Figure 10





Note: The total and grouped percentages were calculated using exact (not rounded) values and presented as rounded values, therefore total percentages may be slightly different more or less than 100 per cent.

20. The respondents also elaborated on the challenges and issues they experienced during the most challenging phases. With respect to the collection of data, respondents indicated that data from stakeholders were not always received in a timely manner and were not always in the format required for input into IPCC software, resulting in processing delays. Lack of standardized data-collection templates, difficulties in collecting data for specific sectors (e.g. forestry, land use, fugitive emissions, waste, agriculture), lack of data availability (e.g. for vulnerability assessment), lack of stakeholder data ownership, lack of centralized data-collection arrangements, and lack of funding for data management activities continue to be challenges.

21. With respect to setting up and engaging thematic and national expert groups, respondents indicated that national expertise was limited and so it was difficult to access this expertise when needed. Lack of institutional arrangements to coordinate the work, limited technical capacity of national sectoral experts on reporting areas or sectors, and lack of finance for capacity-building for line ministries and stakeholders resulted in challenges for data processing and preparation of the national reports. High turnover rates of staff and delays in recruitment, putting additional burden on existing staff, were also indicated as challenges.

22. With respect to the application for GEF funding and disbursement of funds to the implementing agency or to the national executing agency, respondents indicated that procedures are laborious, finalizing the project proposals is very challenging and delays are faced in disbursement of the funds.

(d) Preparation status of next national communication, biennial update report and biennial transparency report

23. 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. The results are as follows (see also figure 11):

(a) A total of 18 respondents indicated that their country is preparing its NC: 6 countries have sent a proposal to the GEF, 5 countries are at the conceptual stage, 3 countries are setting up a coordination body or expert groups, 2 countries are collecting data or drafting components of the report, 1 country has a first draft under review and 1 country is at the finalization stage (i.e. final version under review and approval);

(b) A total of 10 respondents indicated that their country is preparing its BUR: 5 countries are at the conceptual stage, 2 countries are at the finalization stage, 1 country has sent a proposal to the GEF, 1 country is collecting data or drafting components of the report, and 1 country has a first draft under review;

(c) A total of 17 respondents indicated that their country is preparing its BTR: 8 countries are at the conceptual stage, 6 countries have sent a proposal to the GEF, 2 countries are setting up a coordination body or expert groups, and 1 country is collecting data or drafting components of the report.

Figure 11

Status of preparation of national reports



24. The respondents were asked to provide information on the planned submission date of the BTR. Of the 23 respondents, 1 country indicated that it is planning to submit its initial BTR in 2023, 14 countries plan to submit at the latest by 31 December 2024 and 8 countries plan to submit in 2025 or later (these latter countries are LDCs and/or SIDS).

25. Further, the respondents were asked to specify the version of IPCC guidelines that the country is using or plans to use for the national GHG inventory that is under preparation and to what extent. Of the 23 respondents, 87 per cent indicated that their country is using the 2006 IPCC Guidelines, of which 90 per cent of countries are using the 2006 IPCC Guidelines for all reporting sectors and 10 per cent is using the 2006 IPCC Guidelines for two to four reporting sectors. Figure 12 illustrates the results.

Figure 12 Use of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories



26. The respondents were asked to specify the software that their country has used for preparing national GHG inventories. A total of 22 respondents answered this question and the most common software being used was found to be the IPCC inventory software (59 per cent), followed by Microsoft Excel (27 per cent). Some respondents indicated that their country has used other software, including the Collect Earth tool (FAO), GHG software for Parties not included in Annex I to the Convention (UNFCCC secretariat), and the EMEP/EEA air pollutant emission inventory guidebook (European Environment Agency).

27. The respondents were asked about the methods and tools their country uses for assessing mitigation policies and outcomes, assessing climate change impacts and adaptation, and identifying support needed and tracking support received. The results were as follows:

(a) Assessing mitigation policies and outcomes: 16 respondents provided information on the tools and methods they use, which include the Long-Range Energy Alternatives Planning System (LEAP) (Stockholm Environment Institute), the Greenhouse Gas Abatement Cost Model (GACMO) (United Nations Environment Programme Copenhagen Climate Centre), clean development mechanism methodologies, and the Ex-Ante Carbon-balance Tool (EX-ACT) (FAO). Some respondents indicated that their country's policies are evaluated against the GHG inventory, a national strategy document, mitigation project reports or analysis tools developed by national authorities;

(b) **Assessing climate change impacts and adaptation**: 19 respondents provided information on the tools and methods they use, which include the climate impact models, geographic information system modelling and remote sensing, climate scenarios developed using the HadGEM2-ES model (Hadley Centre for Climate Science and Services of the Meteorological Office of the United Kingdom of Great Britain and Northern Ireland), the MPI-ESM-MR model (Max Planck Institute for Meteorology) and the GFDL-ESM2M model (Geophysical Fluid Dynamics Laboratory of the National Oceanic and Atmospheric Administration of the United States of America), atmospheric global circulation models, Microsoft Excel-based tools, Hadley Centre Coupled Models, multi-criteria analysis, costbenefit analysis, cost-effectiveness analysis, climate risk modelling and adaptation plans developed by international consultants, national adaptation plans, national vulnerability mapping, national post-disaster analysis reports, community surveys, monitoring and evaluation procedures, and adaptation project reports;

(c) **Identifying support needed and tracking support received**: 18 respondents provided information on the tools and methods they use, which include designated national entities that monitor and compile information and data on support needed and received, information exchange with support providers and other stakeholders, surveys, nationally developed tools for assessing capacity and support gaps and needs, domestic information management systems, national climate change expenditure tagging systems and the GEF database.

28. The respondents were also asked to indicate the extent to which they are familiar with the MPGs. A total of 21 respondents answered this question, with 67 per cent indicating that they are familiar with the MPGs but need more guidance and detailed information to identify needs in terms of implementing the ETF, 19 per cent indicating that they have limited knowledge of the MPGs and 14 per cent indicating that they are knowledgeable enough to identify needs and start planning for ETF implementation. Figure 13 illustrates the results.

Figure 13

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



2. Problems and constraints

29. This section of the survey aimed to understand the problems and constraints that impeded the preparation of NCs, BURs and BTRs and reporting therein of information across four thematic areas, namely, national GHG inventory, mitigation actions, adaptation actions, 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. They 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

30. Among the 17 listed categories of issues, the number of respondents who indicated the relevance of each issue and its significance level varied. Table 1 shows relevance and significance of the issues.⁴ The issue "Institutional capacity to retain skills and knowledge gained from training" was identified as most significant (score: 2.39), followed by the issues "Technical capacity to perform uncertainty assessment" (score: 2.36) and "Improvement planning" (score: 2.30).

Table 1

Recurrent categories of issues in p	oreparing national	greenhouse g	gas inventories b	y
order of significance				

			Relevance
	Categories of issues	Significance	(number of
No.	(lack of / insufficient)	(rating)	respondents)
1	(IA) Institutional capacity to retain skills and knowledge gained from	2.39	23
	training (e.g. dedicated staffing plan)		
2	(M&T) Technical capacity to perform uncertainty assessment	2.36	22
3	(Other) Improvement planning	2.30	23
4	(D&I) Availability of quality data	2.22	23
5	(M&T) Technical backstopping (e.g. development of country-specific emission factors)	2.13	23
6	(D&I) Data management process (including documentation, archiving	2.13	23
	and QA/QC protocols)		
7	(M&T) Technical capacity to perform key category analysis	2.09	23
8	(D&I) Data-collection process (including establishment of database,	2.05	21
	data-sharing system and web-based knowledge management platform)		
9	(M&T) Technical capacity to understand and apply IPCC guidelines	2.04	23
10	(IA) Awareness of stakeholders, especially the private sector	2.00	23
11	(M&T) Practical guidance to facilitate the use of available tools and methods	2.00	22
12	(D&I) Accessibility of data constrained by confidentiality issues	1.90	21
13	(M&T) Technical capacity to use IPCC software or other calculation tools	1.87	23
14	(IA) Coordination across sectors or institutions to collect and share data	1.63	16
15	(IA) Definition of roles and responsibilities across relevant institutions	1.52	21
16	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data collection and sharing)	1.52	23
17	(IA) Policy or legal arrangements that mandate the preparation of national reports	1.48	23

(b) Reporting on mitigation actions

31. Among the 18 listed categories of issues, the number of respondents who indicated the relevance of each issue and its significance level varied. Table 2 shows relevance and significance of the issues.⁵ The issue "Practical tool for conducting mitigation assessment" (score: 2.17) was identified as the most significant, followed by the issues "Practical

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.

guidelines for setting mitigation scenarios" and "Data management process (including documentation, archiving and QA/QC protocols", each with a score of 2.13.

Table 2

Recurrent categories of issues in reporting on mitigation actions by orde	er of
significance	

	Catagorian of issues		Relevance
	(lack of / insufficient)	Significance	(number of
No.	(lack of / linsufficient)	(rating)	respondents)
1	(M&T) Practical tool for conducting mitigation assessment (e.g. sector-	2.17	23
	specific modelling)		
2	(M&T) Practical guidelines for setting mitigation scenarios	2.13	23
3	(D&I) Data management process (including documentation, archiving and	2.13	23
	QA/QC protocols)		
4	(IA) Institutional capacity to retain skills and knowledge gained from	2.09	23
	training (e.g. dedicated staffing plan)		
5	(M&T) Practical guidelines or methods for setting baselines, target values,	2.09	23
	indicators, etc.		
6	(M&T) Methods for quantification of direct and indirect effects of mitigation	2.09	23
	actions		
7	(M&T) Technical capacity to use the tools that are available	2.09	23
8	(M&T) Technical capacity to interpret, analyse and translate D&I gathered	2.04	23
	from modelling		
9	(D&I) Availability of quality data	2.04	23
10	(M&T) Technical backstopping (e.g. sector-specific studies and research on	2.00	23
	mitigation potential)		
11	(IA) Coordination across sectors or institutions to collect and share data	2.00	23
12	(Other) Improvement planning	2.00	22
13	(D&I) Data-collection process (including establishment of database, data-	1.86	22
	sharing system and web-based knowledge management platform)		
14	(IA) Awareness of stakeholders, especially the private sector	1.86	21
15	(IA) Definition of roles and responsibilities across relevant institutions	1.78	23
16	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data	1.57	23
	collection and sharing)		
17	(D&I) Accessibility of data constrained by confidentiality issues	1.52	23
18	(IA) Policy or legal arrangements that mandate the preparation of national	1.39	23
	reports		

(c) Reporting on adaptation actions

32. Among the 17 listed categories of issues, the number of respondents who indicated the relevance of each issue and its significance level varied. Table 3 shows relevance and significance of the issues. ⁶ The issues "Institutional capacity to retain skills and knowledge gained from training" and "Availability of quality data" were identified as the most significant, each with a score of 2.26, followed by the issue "Technical backstopping (e.g. scientific research and studies to enhance climate knowledge and information)" (score: 2.22).

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) Institutional capacity to retain skills and knowledge gained from	2.26	23
	training (e.g. dedicated staffing plan)		
2	(D&I) Availability of quality data	2.26	23
3	(M&T) Technical backstopping (e.g. scientific research and studies to	2.22	23
	enhance climate knowledge and information)		
4	(M&T) Technical infrastructure (e.g. weather stations, forecasting	2.17	23
	system, networks) serving as the basis for the monitoring of climate data		
5	(IA) Coordination across sectors or institutions to collect and share data	2.17	23

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	2.09	23
	assessment (e.g. sector-specific modelling, regional or downscaling		
	climate models)		
7	(D&I) Data-collection process (including establishment of database,	2.09	23
	data-sharing system and web-based knowledge management platform)		
8	(M&T) Practical guidelines for the development of baseline and	2.04	23
	socioeconomic scenarios for vulnerability and adaptation assessments		
9	(M&T) Technical capacity to use the tools that are available	2.04	23
10	(IA) Definition of roles and responsibilities across relevant institutions	2.00	23
11	(IA) Awareness of stakeholders, including the private sector and rural	2.00	23
	communities		
12	(D&I) Data management process (including documentation, archiving	2.00	23
	and QA/QC protocols)		
13	(M&T) Technical capacity to interpret, analyse and translate D&I	1.96	23
	gathered from modelling		
14	(D&I) Accessibility of data constrained by confidentiality issues	1.87	23
15	(Other) Improvement planning	1.83	23
16	(IA) Policy or legal arrangements that mandate the preparation of	1.48	23
	national reports		
17	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data	1.35	23
	collection and sharing)		

(d) Reporting on support needed and received

33. Among the 10 listed categories of issues, the number of respondents who indicated the relevance of each issue and its significance level varied. Table 4 shows relevance and significance of the issues.⁷ The issue "Data management process (including documentation, archiving and QA/QC protocols" was identified as the most significant (score: 2.22), followed by the issues "Guidelines or standards for identifying support needs and reporting on support received (including common definitions of relevant terminology and approaches)" and "Data-collection process (including establishment of database, data-sharing system and web-based knowledge management platform", each with a score of 2.13.

Table 4

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

			Relevance
	Categories of issues	Significance	(number of
No.	(lack of / insufficient)	(rating)	respondents)
1	(D&I) Data management process (including documentation,	2.22	23
	archiving and QA/QC protocols)		
2	(M&T) Guidelines or standards for identifying support needs and	2.13	23
	reporting on support received (including common definitions of		
	relevant terminology and approaches)		
3	(D&I) Data-collection process (including establishment of database,	2.13	23
	data-sharing system and web-based knowledge management		
	platform)		
4	(M&T) Process or approach for integrating reporting processes to	2.00	23
	various donors on support received		
5	(Other) Improvement planning	2.00	23
6	(D&I) Availability of quality data	1.96	23
7	(IA) Process for coordinating support received	1.96	23
8	(IA) Identification of all relevant stakeholders related to the MRV	1.87	23
	of support		
9	(IA) Allocation of responsibilities for the MRV of support	1.83	23
10	(D&I) Accessibility of data constrained by confidentiality issues	1.57	23

⁷ As footnote 4 above.

3. Lessons learned and experience

34. 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 to identify elements that (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 climate change impacts and adaptation actions, and reporting on support needed and received.

35. As illustrated in figure 14, respondents provided their opinion on 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 the overall report preparation process but indicated that there are still issues to be addressed.

36. For national GHG inventories, some respondents indicated that they had benefited from institutionalizing the inventory process, appointing an inventory team coordinator and establishing a team of technical experts, mainstreaming the reporting provisions and IPCC guidelines in the inventory preparation process, involving data providers in the preparation process, participating in capacity-building activities, and conducting technical exchange with other countries and organizations, as well as from the support provided by the secretariat for the quality assurance of GHG inventories. The respondents highlighted the improvements realized, such as the following: using the IPCC guidelines and tools helps to improve the preparation of successive national inventories in terms of developing consistent and robust time series for specific sectors or categories; establishing a legal framework and institutionalizing the inventory preparation process helps to improve the completeness and quality of the inventory; improving data collection systems helps to enable the use of highertier approaches; and establishing technical teams proves useful in enabling the transfer of knowledge and the retention of technical capacity. In addition, some respondents highlighted that there is still a need to establish institutional arrangements, streamline and/or institutionalize data-collection and data management processes, expand the scope of data collection, improve capacity for the estimation of emissions and removals, create countryspecific methodologies and emission factors, and enhance technical capacity and understanding related to applying the MPGs and IPCC guidelines and software.

For mitigation, some respondents indicated that they had benefited from the legal 37. mandate established by an executive decree setting the modalities for reporting on mitigation actions and that the reporting process itself was useful in improving subsequent reports. Respondents also reported developing a database of climate actions to monitor progress in implementing mitigation policies and tracking NDC goals, setting up an online platform to track mitigation actions and the NDC, participating in capacity-building activities, and conducting technical exchange with other countries and organizations, which allowed national experts to assess mitigation outcomes for specific sectors. The respondents highlighted aspects of reporting on mitigation actions that have improved, such as the standardization of protocols for quantifying mitigation actions, the institutionalization of reporting processes on mitigation, and the availability of data and information. Some respondents noted that a data platform is to be developed with the aim of facilitating data collection and that, owing to a CBIT project under implementation, the capacity of national experts to gather information and report on mitigation actions will improve. Nevertheless, respondents indicated that there is a need to establish a framework or mechanism to facilitate the systematic collection of data and information from stakeholders to enable the tracking of progress of mitigation actions in all sectors, expand engagement with stakeholders in identifying gaps and needs, and train policymakers in technical areas and sectoral experts in the quantification of mitigation outcomes.

38. For **climate change impacts and adaptation**, some respondents indicated that the compiled data and information benefited them in making informed decisions at the national level and that an online platform developed with a module on tracking adaptation actions as well as access to international adaptation databases and knowledge platforms helped them in preparing reports. The respondents highlighted aspects of reporting on adaptation actions that have improved, such as the use of national reports as key vehicles for describing concrete adaptation actions the country is undertaking with the aim of increasing resilience and

reducing vulnerability. Among the aspects of adaptation reporting that need to be put in place, respondents noted the need to enhance institutional frameworks and technical expertise, develop a vulnerability assessment process and country-specific climate models, establish a system for monitoring adaptation actions, and collect data (as well as systematize data collection) on the impacts of climate change through an inter-institutional mechanism.

39. For **support needed and received**, some respondents indicated that they had benefited from financial, technical and capacity-building support provided for developing the technical capacity of national experts and from an online platform developed with a module on tracking climate finance received. Some respondents highlighted aspects of reporting on support needed and received that have improved, such as the topic gaining importance at the national level, collaboration among line ministries and other agencies advancing, and additional stakeholders becoming involved in the process. Among the aspects that need to be put in place, respondents noted the need to revise and improve their institutional arrangements to address the roles and responsibilities associated with reporting in this thematic area, establish a system for tracking data on support needed and received, and strengthen national capacity in identifying technical, financial and technology needs in a standardized manner.



Figure 14 Lessons learned in the process of national reporting to the UNFCCC

40. Further, the respondents were asked to share their experience in the process of national reporting to the UNFCCC regarding problems and constraints that have been successfully addressed or are being addressed. A total of 19 respondents shared their experience. For the analysis, responses addressing similar experience were clustered into three areas: institutional arrangements, data and information, and capacity-building.

41. Under **institutional arrangements**, respondents mentioned the following:

(a) Coordination and stakeholder consultation processes were put in place to aid the development of long-term climate policies and strategies;

(b) A project management unit was established to coordinate the preparation of reports, and a technical advisory committee was created to contribute to the validation of the information reported;

(c) A multi-institutional arrangement was formed under the patronage of the ministry of climate change to prepare GHG inventories and NCs;

(d) Domestic arrangements were put in place and resources provided by the government to address problems encountered with accessing financial support for preparing the national reports;

(e) Cooperation arrangements were put in place with regional organizations, such as the Caribbean Cooperative MRV Hub, which has been instrumental in building the capacity of its member countries in reporting;

(f) Stakeholders were involved in report preparation projects and automated data collection processes.

42. Under **data and information**, respondents mentioned the following:

(a) Preparation of national GHG inventories has gradually improved data collection systems and data over the years, and the country's use of the 2006 IPCC Guidelines for the latest three inventories has been helpful in terms of preparing the initial BTR;

(b) The country has benefited from training on QA/QC of the GHG inventory provided by the secretariat as well as from targeted support provided under a CBIT project to develop emission factors for tier 2 and tier 3 IPCC methodologies;

(c) The national climate change department developed a memorandum of understanding with data providers in order to improve data collection from stakeholders;

(d) Line ministries responsible for key sectors were involved in the inventory preparation process to facilitating the sharing of relevant data and NSO was involved to help with the QA/QC process;

(e) The country has benefited from the technical support provided by various international organizations and initiatives (e.g. FAO, SilvaCarbon, UNFCCC secretariat, United States Forest Service, World Bank) to improve data availability, data quality and uncertainty assessment.

43. Under **capacity-building**, respondents mentioned the following:

(a) The country has benefited from training programmes provided by international organizations in several areas, including the preparation of activity data for national inventories, the formulation of a national forest reference emission level, and the development and use of data-collection and management tools and methods;

(b) The country has benefited from the international consultation and analysis process and its results in identifying areas to be improved;

(c) Technical exchange among countries and international organizations and technical backstopping provided by international organizations have helped the country to enhance the technical capacity of national experts.

44. Parties were asked to share any experience, if applicable, where an NSO is involved in the process of preparing NCs, BURs, BTRs 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.

45. Parties shared the following experience with respect to the involvement of NSOs:

(a) The NSO has actively participated in knowledge-sharing and/or capacitybuilding activities and is closely engaged in all phases of national reporting, including compiling, processing and validating data and information;

(b) The NSO is a standing member of the technical advisory committee and contributes to validating the data and information reported in NCs, BURs, BTRs and GHG inventories;

(c) A representative of the NSO is a member of the thematic working group responsible for the preparation and submission of national reports to the secretariat;

(d) The NSO is greatly involved in the reporting, especially in data collection and validation;

(e) The NSO forms part of the technical working groups and sub-working groups, namely as the agency responsible for statistics;

(f) The NSO disseminates the results of the national GHG inventory as part of the institutional arrangements;

(g) The NSO initially had very limited engagement in climate change activities, but is now assisting data compilers with preparing information for climate change reporting;

(h) The NSO provides data and information for a few sectors, but no comprehensive approach or regulation is in place regarding this function;

(i) The country intends to develop its institutional arrangements, including the role of the NSO, as part of its CBIT project;

(j) The NSO is not directly involved in the process of preparing national reports.

46. 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 the SDGs, as well as other reporting processes (such as the FAO Global Forest Resources Assessment), 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.

47. Parties shared the following experience with respect to synergizing data collection for climate reporting under the UNFCCC and for tracking and monitoring of the SDGs and other reporting processes:

(a) Close cooperation was established with the NSO and improvements were made relating to synergizing the management of data for the GHG inventory and the energy balance;

(b) The department of environment produced a state of the environment report in 2021, and in preparing that report, data was collected for climate reporting as well as to track and monitor the environmentally focused SDGs;

(c) A state commission was established by a presidential decree for coordinating implementation of the commitments under the Convention, the Paris Agreement and other multilateral agreements;

(d) Integration or establishment of national data-tracking systems to enable efficient data generation and assurance of data quality is ongoing;

(e) The information used to report on climate change is sourced from key documents, including the voluntary national reviews for the SDGs and national annual economic reports;

(f) An online platform is being set up to enable the country to monitor and report on the implementation and achievement of the NDCs, including policies and measures, action plans and indicators for both mitigation and adaptation. The platform also covers crosscutting policies and measures from economic diversification plans with co-benefits for other areas of society, such as resilience, which will generate data for monitoring SDGs;

(g) A national forest monitoring system was established with the aims of providing information to support decision-making at the national level and of contributing to fulfilling national and international reporting commitments, including those related to the Convention and the Paris Agreement;

(h) An NDC monitoring tool, which will help in identifying synergies with the tracking and monitoring of SDGs, is under development.

C. Expectations of the Consultative Group of Experts

48. This section of the survey aimed to gauge expectations regarding assistance from the CGE for developing country Parties in implementing the MRV and ETF.

49. First, the respondents were asked to select the top three areas of capacity-building that can benefit their country in facilitating the implementation of the ETF. A total of 23 respondents answered this question, with the most frequently selected capacity-building area being "Understanding of the MPGs, common tabular formats and common reporting tables for the ETF, including the flexibility provisions" (23 per cent), followed by the areas "Methods and/or practical guidelines for tracking progress of implementation and achievement of NDCs" (20 per cent) and "Methods and/or practical guidelines for assessing climate change impacts and adaptation" (14 per cent). Figure 15 shows the results.

Figure 15

Areas of capacity-building developing country Parties could benefit from the most in implementing the enhanced transparency framework under the Paris Agreement



50. Second, a list of categories of technical support was provided and respondents were asked to select all those that were relevant to their country and to provide topics of interest in the selected category of support. The results for each category are as follows:

(a) **Delivery of in-depth training (i.e. regional hands-on training workshops).** A total of 91 per cent of respondents expected this category of support from the CGE. The topics of interest included the provision of training on the following: establishing sustainable MRV/ETF systems, implementing the ETF and its MPGs, tracking progress and achievement of NDCs and developing indicators for doing so, preparing the national GHG inventory and using IPCC guidelines and software, and tracking adaptation actions and formulating indicators for doing so;

(b) **Development and dissemination of guidance documents.** A total of 83 per cent of respondents expected this category of support from the CGE. The topics of interest included the provision of reference documents on the following: MPGs, common tabular formats and common reporting tables; methods and tools for monitoring climate change impacts and conducting vulnerability assessments; methods and tools for preparing national GHG inventories and applying IPCC guidelines; practices for data processing and archiving; methods and tools for tracking progress of implementation and achievement of NDCs; tracking and reporting of climate finance needed and received; and project development and implementation for the preparation of NCs and BTRs;

(c) **Provision of online training (i.e. e-learning programmes).** A total of 83 per cent of respondents expected this category of support from the CGE. The topics of interest included online training on the following: QA/QC of national GHG inventories, identification of indicators to track progress in implementing and achieving the NDCs, collection of activity data required for preparing national GHG inventories in accordance with the IPCC guidelines, assessment and quantification of mitigation outcomes, implementation of the ETF and its MPGs, assessment of climate change impacts and adaptation, and management of climate change impacts and disaster risk reduction. One respondent indicated that it would be useful to develop online training in United Nations languages other than English;

(d) **Provision of a regional or subregional platform for exchange among practitioners.** A total of 83 per cent of respondents expected this category of support from the CGE. The respondents noted the value of regional and subregional platforms in facilitating information and experience exchange, enabling regional peer-to-peer learning, promoting networking of practitioners and strengthening South-South cooperation. They

Figure 16

considered that exchanges on the following topics would be useful: implementing the ETF, including the steps taken to prepare for and overcome challenges and barriers; assessing climate change impacts and adaptation; exploring case studies related to QA/QC procedures; and establishing systems for collecting data and for tracking progress in implementing NDCs;

(e) **Provision of information sessions (i.e. webinars).** A total of 78 per cent of respondents expected this category of support from the CGE. The topics of interest included exchanges on experience and lessons learned by countries in preparing national GHG inventories, reporting on adaptation and mitigation actions, and reporting on support needed and received; and information sessions on the ETF and its MPGs, provisions for report preparation (NCs, BURs and BTRs), IPCC software and national benefits of climate transparency;

(f) **Other.** A total of 22 per cent of the respondents highlighted other expectations regarding support from the CGE, including the organization of study tours to exchange experience on the national transparency systems of developed countries; the organization of exchange programmes, fellowships, scholarships between countries on preparing GHG inventory and reporting on mitigation and adaptation; the delivery of capacity-building on preparing BTRs, with guidance to be provided on each chapter and on how to take into account national circumstances; a document with compilation of available technical materials; and the provision of technical support in United Nations languages other than English.

D. Reflections on the results of the survey compared with those of previous surveys

51. A total of 86 developing country Parties participated in the 2019 survey, while 46 participated in the 2021 survey and 23 participated in the 2023 survey. The 2023 survey contained additional questions on BTR preparation (see paras. B.1(b)1616 and 23–24 above).

52. The trends shown in the 2019 and 2021 surveys are similar to those reflected in the 2023 survey where similar questions were asked. Incremental improvements and changes have been observed when making broad comparisons between the results of the surveys; however, it is difficult to draw conclusions from these.

53. A comparison was made across the three surveys of the most challenging phase in the national report preparation process. Figure 16 illustrates the results. It shows, for example, that collecting data has become less of a challenge over time, which could be linked to countries putting in place relevant institutional arrangements and data-sharing agreements. In contrast, the challenges of setting up and engaging thematic and national expert groups and of compiling information and drafting components of the reports have increased.



Most challenging phase in the national report preparation process over time

54. A comparison was also made of the results for the extent to which the respondents were familiar with the MPGs. The results (figure 17) indicate an increase in the number of respondents who are familiar with the MPGs but require more guidance and detailed information to identify needs and a drop in the number of those that are knowledgeable enough to identify needs and start planning for the implementation of the ETF.

Figure 17





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 October 2023.

56. Further, the CGE will take the results of this survey into consideration in the development of its workplan for 2024.

Annex I

Areas and categories of issues used in the compilation and synthesis of information

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 climate change impacts and adaptation actions, and reporting on support needed and received, it is important to understand the type of process 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. Barriers to addressing such a gap may exist in different areas and can be addressed by adopting different approaches. For the purpose of analysing the survey results, these approaches were categorized under three areas: institutional arrangements, methodologies and tools, and data and information. Descriptions of the key categories of issues under each area, including examples, are provided in the table below.

(Area) and category	Description and examples
(IA) Formalization or institutionalization of the transparency process	This refers to the need or experience associated with formalizing the MRV- and ETF-related process and arrangements through (1) the development of a policy or legislative framework that mandates national reporting under 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 institutions, avoiding loss of knowledge or skills due to staff turnover, training and using national experts other than external consultants or institutions, and retaining a team of experts that are qualified for technical work.
(IA) Leadership	This is associated with the critical role of the lead entity in coordinating and facilitating the MRV and ETF processes. 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 the awareness of stakeholders, including those in the private sector (for climate change, and MRV and transparency), and 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 them 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 the 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 or practical process to conduct assessments in a systematic and methodologically consistent manner. Examples included:

(Area) and category	Description and examples
	 (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 the principles of transparency, accuracy completeness, comparability and consistency; (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 the 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	This is associated with the collection of data and information from various data providers. Examples included challenges in collecting scattered data on support received; a need thus 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 assessment.
(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 the inaccessibility of data owing to confidentiality issues (especially in the private sector).
(D&I) Quality of 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 transparency	This refers to the cases where respondents identified benefits of the transparency process beyond the end product itself. Examples included decision-making and policymaking being informed by the transparency process; improvements being made in monitoring and reporting on adaptation actions nationally in terms of scope and quality of information available; and preparation of national reports helping the country to identify needs, constraints and gaps, which attracted international financial support.
(Other) Transparency as a continuous process	This refers to the experience where MRV- and ETF-related arrangements 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 in sectoral strategic and policy planning, which helped the country identify and assess mitigation measures.
(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

Number of Parties represented in the results for each survey question

	Question		Number of Parties
Question summary	number		represented
I. Demographic information			
	1	Country	23
	2	Profile	23
II. MRV and ETF arrangements			
Submission status	3-4	Submission status of NC	23
	5	Submission status of BUR	23
	6–8	Preparation status of BTR	17
National transparency	9	Mandate	23
system or process,	10	Consultants	23
including IA in place	11-12	Extent of system or process	22
	13	Implementation status of key elements of	23
		the transparency process	
Challenges	14	Most challenging phases in the process	23
Implementation status of	15	Preparation status of the next national report	18
national reporting	16-17	Use of IPCC guidelines	23
	18	Use of software	22
	19–21	Use of methods and tools	19
	30	Level of knowledge of the MPGs	21
Problems and constraints	22–25	Problems and constraints for various themes	23
Lessons learned	26	Lessons learned	20
	27	Experience in addressing challenges	19
		identified	
	28	Experience with NSOs	21
	29	Experience of SDG linkages	19
III. Expectations of the CGE			
	31	Key areas of capacity-building	23
	32–33	Topics of interest and preferred types of	21
		technical support	
	34–35	Other information	22

Annex III

Parties represented in the survey results

Antigua and Barbuda Armenia Azerbaijan Bhutan Cambodia Comoros Dominican Republic Ethiopia Fiji Iraq Malawi Mauritius Mexico Nauru Pakistan Panama Peru Philippines Saint Lucia Somalia Sri Lanka Togo Vanuatu