CGE
Consultative Group of Experts
The Constituted Body for MRV & ETF

United Nations
Climate Change

CGE STOCKTAKE REPORT 2025

Stocktake of capacity-building gaps and needs in implementing the measurement, reporting and verification arrangements and the enhanced transparency framework to inform the Consultative Group of Experts of its provision of technical advice and support to developing country Parties

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Contents

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
D&I*	data and information
ETF	enhanced transparency framework under the Paris Agreement
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 transparency framework for action and support referred to in Article 13 of the Paris Agreement
MRV	measurement, reporting and verification
M&T*	methodology(ies) and tool(s)
NC	national communication
NDC	nationally determined contribution
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 by those Parties 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 the mandate in paragraph 2 above, 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 MRV arrangements and the ETF, with an aim to inform its provision of technical advice and support to the developing country Parties.

4. Previous surveys were conducted in 2019, 2021 and 2023. The fourth survey was conducted in 2025 with a view to gathering up-to-date feedback from developing country Parties on the status of implementation of transparency arrangements under the Convention and the Paris Agreement, including institutional arrangements in place at the national level, and associated problems, constraints and lessons learned and capacity-building needs.

5. This report contains the key results of the 2025 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 MRV arrangements and 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 needed from the CGE in implementing the MRV arrangements and the ETF.

C. Methodology

7. The CGE, with support from the secretariat, launched an online survey that ran from 23 April to 10 June 2025.

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) Status of implementing the 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.

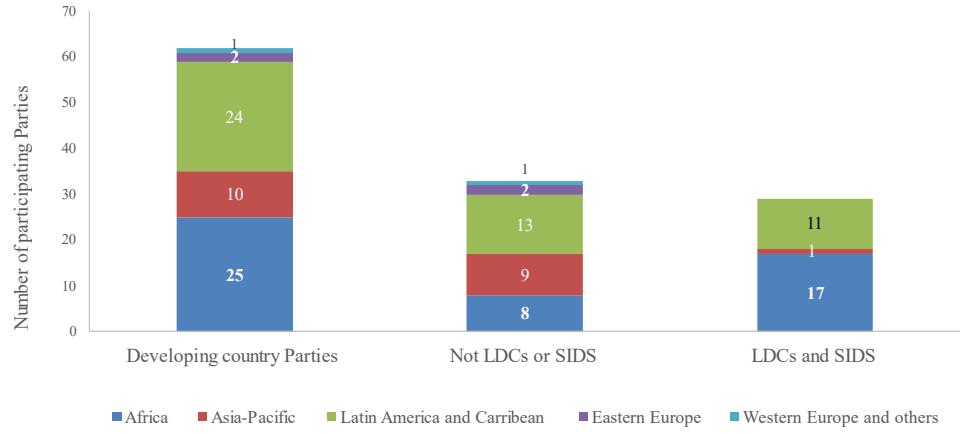
10. During the analysis of the survey results, responses addressing similar issues and topics were clustered into issue areas and then, within those areas, into categories to facilitate the presentation of information in a meaningful and manageable manner.

II. Results

A. Profile of the respondents

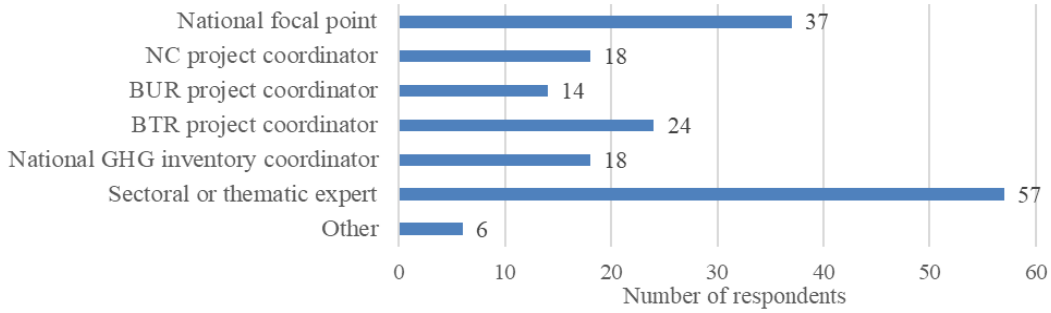
11. By the closing date of the survey, 62 developing country Parties[3] had participated in the survey, including 29 LDCs and/or SIDS. The regional breakdown of these Parties was 25 African States, 10 Asia-Pacific States, 2 Eastern European States, 24 Latin American and Caribbean States and 1 Western Europe and other State. Figure 1 illustrates the regional distribution of participants.

Figure 1
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. Six respondents indicated that they had roles other than the categories provided in the survey, such as CBIT project coordinator, or that they had responsibility for a national MRV system or oversight of the coordination of the BTR and NDC preparation process.

Figure 2
Profile of respondents by role in the national transparency process



[3] The total number of represented Parties per question varied. A list of represented Parties, including an overview of the total number of Parties represented per question, is provided in the annex.

B. Status of implementing the measurement, reporting and verification arrangements and the enhanced transparency framework

1. Implementation status

13. This section of the survey aimed to take a snapshot of the status of implementing the MRV arrangements and the ETF, including:

(a) Submission status of the NC, BUR and BTR;

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

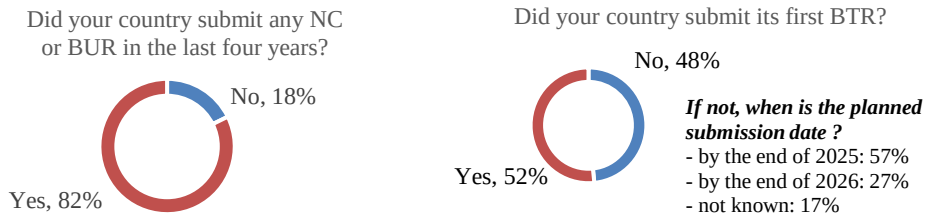
(c) Challenges in the report preparation process;

(d) Status of preparation of the next NC, BUR and BTR.

(a) Submission status of national communication, biennial update report and biennial transparency report

14. Respondents were asked to indicate whether their country had submitted any NCs or BURs in the past four years and whether their country had submitted its first BTR. If their country had not yet submitted the BTR, respondents were asked to indicate the planned submission date. All 62 respondents answered this question (see figure 3). As depicted in figure 3, 82 per cent indicated that their country has submitted an NC or a BUR in the past four years. A total of 52 per cent indicated their country has submitted its first BTR, and more than half of the remaining 48 per cent indicated that their country is planning to submit its first BTR by the end of 2025.

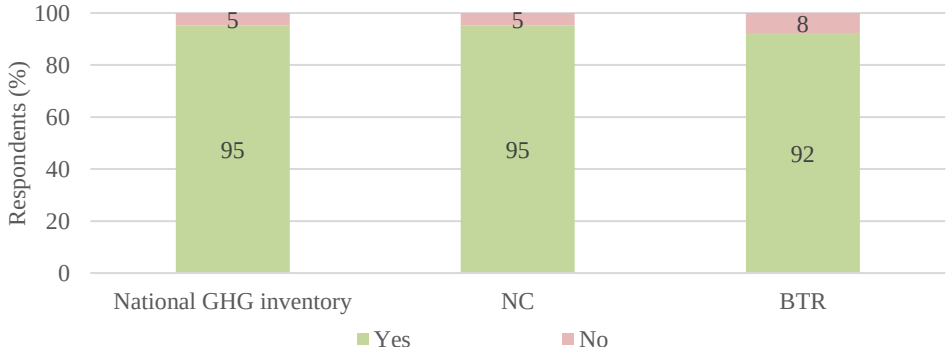
Figure 3
Submission status of national transparency reports



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

15. This subsection of the survey aimed to take 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 had a specific entity designated to coordinate the preparation of national GHG inventories, NCs and BTRs. All respondents answered this question, and the results are presented in figure 4.

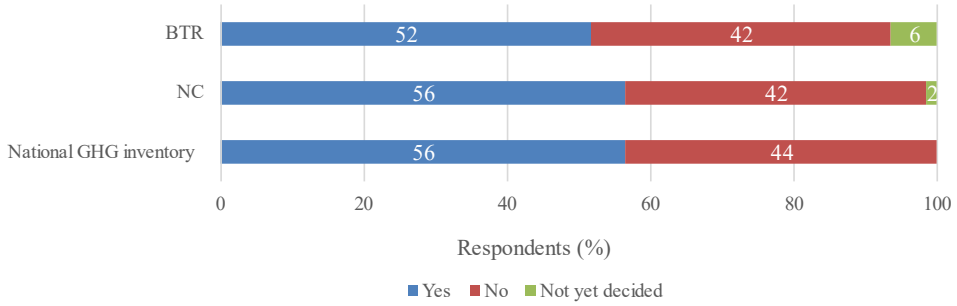
Figure 4
Existence of entity designated to coordinate the preparation of reports



16. The respondents were also asked to indicate (1) the involvement of external consultants and institutions in the preparation of national GHG inventories, NCs 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 the Sendai Framework for Disaster Risk Reduction 2015–2030. The results are as follows (see also figures 5–7):

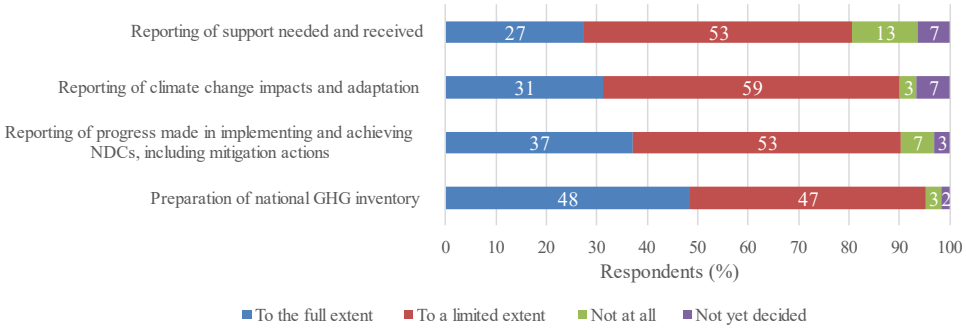
(a) **Involvement of external consultants and institutions and the extent to which they are engaged with the national agency.** All respondents answered this question with respect to national GHG inventories, NCs and BTRs (see figure 5).

Figure 5
Involvement of external consultants or institutions in report preparation



(b) **Mainstreaming work related to MRV and the ETF in line ministries and sectors.** 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 progress in implementing and achieving NDCs, including mitigation actions, climate change impacts and adaptation, as well as support needed and received, is mainstreamed in line ministries and sectors, which are key sources of the information required for preparing national reports. All respondents answered the question (see figure 6).

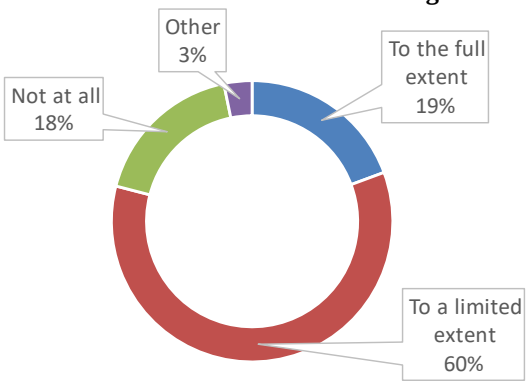
Figure 6
Extent of the mainstreaming of transparency work in line ministries and sectors



(c) **Exploration of a synergistic approach to the SDGs and Sendai Framework monitoring.** 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 the SDGs and the Sendai Framework. All respondents answered this question (see figure 7). Two respondents indicated other approaches, such as establishing consultation frameworks (e.g. platforms or databases) to improve decision-making.

Figure 7

Extent of taking a synergetic approach to the transparency process and Sustainable Development Goals and the Sendai Framework monitoring



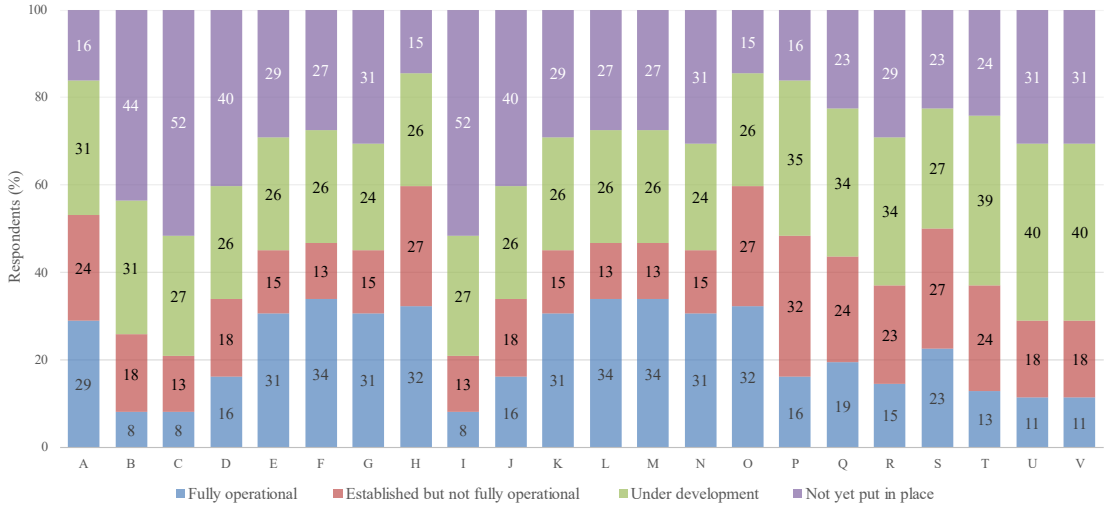
17. Further, the respondents were asked to indicate the implementation status of key elements that facilitate national reporting processes on a scale of 1–4, with 1 being 'not yet put in place', 2 being 'under development', 3 being 'established but not fully operational' and 4 being 'fully operational'. All respondents answered this question. The results are presented in figure 8.

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

18. This subsection of the survey aimed to capture countries' 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 62 respondents, 28 per cent identified data collection as the most challenging phase, 17 per cent identified application of MRV and ETF provisions, and 12 per cent identified setting up and engaging thematic and national expert groups. The results, including other phases identified as challenging by the respondents, are presented in figure 9.

19. Some of the other challenges identified include difficulties in engaging with technical consultants in accordance with financial and procurement regulations; delays in accessing and receiving financial resources, resulting in difficulties with timely and sustainable preparation, approval and submission of national reports; difficulties in validating calculations made by consultants; difficulties in implementing the procurement modalities of implementing agencies; and technical problems experienced with the interoperability between the IPCC inventory software and ETF reporting tools.

Figure 8
Implementation status of key elements that facilitate national reporting processes



Key to x axis:

A: National laws, regulations and/or memorandums of understanding 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 **BTRs** 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 **national GHG inventories** on a regular basis, including for maintaining a team of national experts

E: 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**

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 **BTRs**

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 **national GHG inventories**

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

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

J: A formal process for **stakeholder engagement** (e.g. coordination bodies, working groups, discussion forums, regular meetings and consultations) for monitoring **adaptation measures and climate impacts**

K: A formal process for **stakeholder engagement** (e.g. coordination bodies, working groups, discussion forums, regular meetings and consultations) for the MRV of **support needed and received**

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

M: A formal process for **data provision**, such as a data-sharing agreement or memorandum of understanding between the data provider and the data compiler, for reporting information on **tracking progress of NDCs**, including mitigation actions

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

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

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

Q: A **tool**, such as a data-collection template or online data-sharing platform, which data providers can use to provide data in a consistent manner and make them accessible to compilers, for reporting information on **tracking progress of NDCs**, including mitigation actions

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

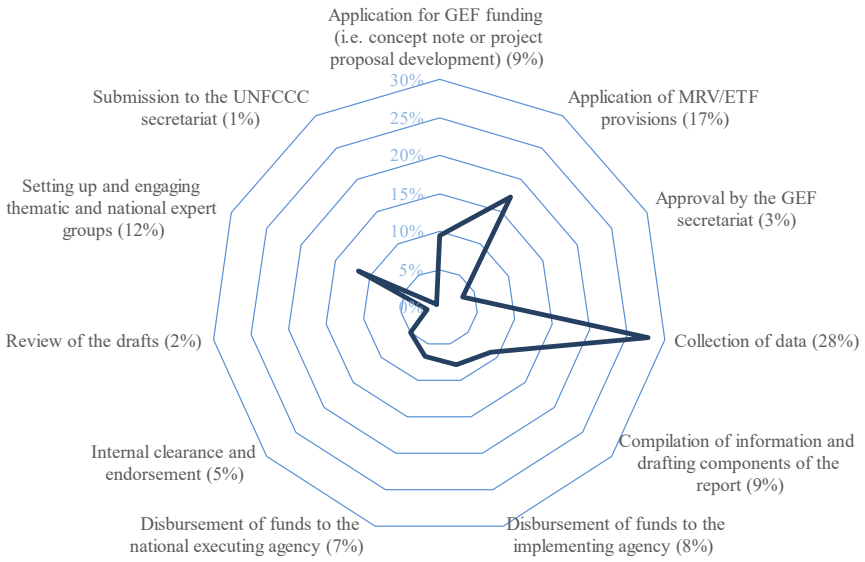
S: A **tool**, such as a data-collection template or online data-sharing platform, which data providers can use to provide data in a consistent manner and make them accessible to compilers, for reporting information on **support needed and received**

T: A procedure for **QC** of data

U: A procedure for **QA** of data

V: A process to **identify and implement areas of improvement**

Figure 9
Most challenging phases in the national report preparation process



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

20. This subsection of the survey aimed to take 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 10):

(a) All respondents indicated the status in preparing the BTR: 11 countries were at the conceptual stage, 6 had sent a proposal to the GEF, 15 were setting up a coordination body or expert groups, 11 were collecting data or drafting components of the report, 3 had a first draft under review, 4 were at the finalization stage (i.e., final version under review and approval) and 12 had not started the process;

(b) All respondents indicated the status in preparing the next NC: 10 countries were at the conceptual stage, 9 had sent a proposal to the GEF, 10 were setting up a coordination body or expert groups, 14 were collecting data or drafting components of the report, 2 had a first draft under review, 3 were at the finalization stage (i.e., final version under review and approval) and 14 had not started the process.

Figure 10
Status of preparation of national reports

21. The respondents were asked to provide information on the use of the ETF reporting tools, including their interoperability, and on any issues they had faced:

(a) 61 respondents provided information on their use of the ETF reporting tools in preparing their BTRs. Of these, 49 indicated that they had either used the tools or planned to use them, while 12 indicated that they did not plan to use them;

(b) The 49 respondents who had used or planned to use the tool were also asked which ETF reporting tool – the GHG inventory reporting tool, the progress reporting tool or the support reporting tool – they used or were using. Of these respondents, 46 responded to this question, which indicated they used one or more of the tools: 44 respondents indicated the GHG inventory reporting tool, 33 the progress reporting tool and 24 the support reporting tool. Of the 46 respondents, 23 indicated they used all three tools;

(c) Respondents were asked to specify if they used the interoperability function between the IPCC software and the GHG inventory reporting tool and if they faced any issues. A total of 24 respondents reported using this function, and the issues in using these tools included technical failures such as data entry glitches, synchronization errors, data inconsistency on gas emission categorization between the tools and problems with automatic data entry functions (e.g. in relation to notation keys and fluorinated gases), and system-specific issues such as the need for large screens to view tables, lack of interoperability with existing national systems, obtaining access to the platform and slow upload speeds. In addition, respondents noted the need for technical training and support.

2. Problems and constraints

22. This section of the survey aimed to understand the problems and constraints that impeded the preparation of NCs and BTRs and reporting therein of information across four thematic areas, namely national GHG inventory, progress in implementing NDCs (including mitigation actions), climate change impacts and 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 from 1 to 3.

(a) National greenhouse gas inventory

23. Among the 18 listed categories of issues, the number of respondents who indicated the relevance of each issue and its significance level varied. Table 1 shows the relevance and significance of the issues.[4] Accessibility of data for confidentiality reasons was identified as most significant (score: 2.52), followed by data management process (including documentation, archiving and QA/QC protocols) (score: 2.42), technical backstopping (e.g. developing country-specific emission factors, development of higher tier methodologies) (score: 2.41) and availability of quality data (2.41).

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

No.	*Categories of issues (lack of or insufficient)*	*Significance (rating)*	*Relevance (number of respondents)*
1	(D&I) Accessibility of data for confidentiality reasons	2.52	62
2	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.42	62
3	(M&T) Technical backstopping (e.g. developing country-specific emission factors and higher tier methodologies)	2.41	61
4	(D&I) Availability of quality data	2.41	61
5	(M&T) Technical capacity to use IPCC software or other calculation tools	2.39	62
6	(M&T) Technical capacity to perform uncertainty assessment	2.37	62

[4] The formula used to measure the significance was {∑ (number of respondents per level of significance multiplied by scale (1–3)} / (number of respondents who selected the issue category as relevant).

No.	*Categories of issues (lack of or insufficient)*	*Significance (rating)*	*Relevance (number of respondents)*
7	(IA) Institutional capacity to retain skills and knowledge gained from training sessions (e.g. dedicated staffing plan)	2.36	61
8	(M&T) Practical guidance to facilitate use of available tools and methods	2.26	62
9	(Other) Preparation for technical expert reviews	2.3	62
10	(M&T) Technical capacity to understand and apply 2006 IPCC Guidelines	2.23	61
11	(M&T) Technical capacity to perform key category analysis	2.21	62
12	(IA) Policy or legal arrangements that mandate the preparation of national reports	2.15	60
13	(IA) Coordination across sectors and institutions to collect and share data	2.15	61
14	(Other) Improvement planning	2.07	61
15	(IA) Awareness of stakeholders, especially in the private sector	2.03	61
16	(IA) Definition of roles and responsibilities across involved institutions	1.98	60
17	(D&I) Data-collection process (including establishment of a database, data-sharing system or web-based knowledge management platform)	1.95	62
18	(IA) Leadership (e.g. an entity appointed to undertake or coordinate data collection and sharing)	1.95	61

(b) Reporting progress in implementing nationally determined contributions, including mitigation actions

24. Among the 22 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] Methods for quantification of estimates for expected and achieved emission reductions or removals from mitigation actions, policies and measures was identified as the most significant (score: 2.50), followed by practical guidelines for developing projections of GHG emissions and removals (score: 2.41) and practical guidelines or methods for setting baselines, target values and NDC progress indicators (score: 2.40).

Table 2
Recurrent categories of issues in reporting progress in implementing nationally determined contributions, including mitigation actions by order of significance

No.	*Categories of issues (lack of or insufficient)*	*Significance (rating)*	*Relevance (number of respondents)*
1	(M&T) Methods for quantification of estimates for expected and achieved emission reductions or removals from mitigation actions, policies and measures	2.50	62
2	(M&T) Practical guidelines for developing projections of GHG emissions and removals	2.41	61
3	(M&T) Practical guidelines or methods for setting baselines, target values and NDC progress indicators	2.40	62
4	(M&T) Practical tool to conduct assessment of progress towards NDC targets	2.35	62
5	(M&T) Practical guidelines or methods for mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans	2.35	62
6	(M&T) Practical guidelines or methods on assessment of economic and social impacts of response measures	2.35	62

[5] As footnote 4 above.

No.	*Categories of issues (lack of or insufficient)*	*Significance (rating)*	*Relevance (number of respondents)*
7	(M&T) Technical backstopping (e.g. sector-specific studies and research on mitigation potential)	2.35	62
8	(D&I) Availability of quality data	2.34	61
9	(M&T) Practical guidelines or methods for NDC accounting	2.34	62
10	(M&T) Technical capacity to use tools that are available	2.29	62
11	(IA) Institutional capacity to retain skills and knowledge gained from training sessions (e.g. dedicated staffing plan)	2.26	62
12	(D&I) Accessibility of data for confidentiality reasons	2.15	61
13	(D&I) Data-collection process (including establishment of a database, data-sharing system or web-based knowledge management platform)	2.15	61
14	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.15	61
15	(Other) Improvement planning	2.15	61
16	(Other) Preparation for technical expert reviews	2.15	61
17	(IA) Coordination across sectors and institutions to collect and share data	2.15	62
18	(IA) Definition of roles and responsibilities across involved institutions	2.13	62
19	(IA) Policy or legal arrangements that mandate the preparation of national reports	2.11	62
20	(IA) Awareness of stakeholders, especially in the private sector	2.08	61
21	(IA) Leadership (e.g. an entity appointed to undertake and coordinate data collection and sharing)	2.03	62
22	(M&T) Technical capacity to interpret, analyse and translate data and information gathered from modelling	1.75	61

(c) Reporting on adaptation actions

25. Among the 21 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] Technical infrastructure (e.g. weather stations, forecasting system and networks) serving as a basis for monitoring of climate data was identified as the most significant (score: 2.47), followed by technical capacity to monitor and evaluate the implementation of and progress on adaptation actions (score: 2.40) and practical guidelines to compile information related to averting, minimizing and addressing loss and damage associated with climate change impacts (score: 2.39).

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	(M&T) Technical infrastructure (e.g. weather stations, forecasting system and networks) serving as a basis for monitoring of climate data	2.47	62
2	(M&T) Technical capacity to monitor and evaluate the implementation of and progress on adaptation actions	2.40	62
3	(M&T) Practical guidelines to compile information related to averting, minimizing and addressing loss and damage associated with climate change impacts	2.39	62
4	(M&T) Practical tools to conduct impact, risk and vulnerability assessment (e.g. sector-specific modelling, regional and	2.35	62

[6] As footnote 4 above.

No.	*Categories of issues (lack of / insufficient)*	*Significance (rating)*	*Relevance (number of respondents)*
	downscaling climate models, long-term risks and identifying at-risk assets)		
5	(M&T) Technical capacity to use adaptation-related and comprehensive risk management tools that are available	2.35	62
6	(M&T) Technical capacity to interpret, analyse and translate data and information gathered from modelling	2.35	62
7	(M&T) Technical backstopping (e.g. scientific research and studies to enhance climate knowledge and information)	2.35	62
8	(D&I) Availability of quality data	2.32	62
9	(M&T) Practical guidelines on developing baseline and socioeconomic scenarios	2.31	62
10	(IA) Institutional capacity to retain skills and knowledge gained from training sessions (e.g. dedicated staffing plan)	2.30	61
11	(IA) Awareness of stakeholders, including the private sector and rural communities	2.23	61
12	(M&T) Technical capacity to identify adaptation priorities and barriers	2.21	62
13	(IA) Policy or legal arrangements that mandate the preparation of national reports	2.15	61
14	(D&I) Accessibility of data for confidentiality reasons	2.11	62
15	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.11	62
16	(Other) Preparation for technical expert reviews	2.11	62
17	(IA) Coordination across sectors and institutions to collect and share data	2.10	61
18	(IA) Definition of roles and responsibilities across involved institutions	2.10	61
19	(D&I) Data-collection process (including establishment of a database, data-sharing system or web-based knowledge management platform)	2.10	62
20	(Other) Improvement planning	2.10	62
21	(IA) Leadership (e.g., an entity appointed to undertake/coordinate data collection and sharing)	1.93	61

(d) Reporting on support needed and received

26. Among the 11 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] Data-collection process (including establishment of a database, data-sharing system or web-based knowledge management platform) was identified as the most significant (score: 2.32), followed by availability of quality data (score 2.26) and process or approach to integrate reporting processes to various donors on support received (score: 2.24).

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	(D&I) Data-collection process (including establishment of a database, data-sharing system or web-based knowledge management platform)	2.32	62
2	(D&I) Availability of quality data	2.26	62

[7] As footnote 4 above.

No.	*Categories of issues (lack of / insufficient)*	*Significance (rating)*	*Relevance (number of respondents)*
3	(M&T) Process or approach to integrate reporting processes to various donors on support received	2.24	62
4	(M&T) Guidelines or standards to identify support needs and report on support received, including common definitions of relevant terminology and approaches	2.23	62
5	(IA) Allocation of responsibilities for MRV of support	2.20	59
6	(IA) Process for the coordination of support received	2.20	61
7	(IA) Identification of all relevant stakeholders related to MRV of support	2.18	61
8	(D&I) Data management process (including documentation, archiving and QA/QC protocols)	2.11	62
9	(Other) Improvement planning	2.03	62
10	(Other) Preparation for technical expert reviews	2.03	62
11	(D&I) Accessibility of data for confidentiality reasons	1.90	62

3. Lessons learned and experience

27. In this subsection of the survey, the respondents were asked to share lessons learned in the process of national reporting to the UNFCCC, under four thematic areas: national GHG inventory, reporting on progress in implementing NDCs and mitigation actions, reporting on climate change impacts and adaptation actions, and reporting on support needed and received.

28. For **national GHG inventories**, respondents emphasized the importance of robust institutional arrangements and legal frameworks to ensure effective GHG inventory preparation. Respondents also noted that having a legal mandate or national law to guide climate-related data collection and inventory processes greatly improved coordination and consistency. Establishing permanent technical teams and legally designated coordinating bodies, defining clear roles and responsibilities, and forming inter-institutional committees or working groups were identified as critical for ensuring continuity in data collection and management across sectors, even during changes in staffing or organizational structure. Stakeholder engagement was also highlighted as a key component in producing accurate and complete inventories. Improving bilateral communication with data providers (e.g. line ministries and research institutions), formalizing data-sharing through memorandums of understanding and involving sectoral experts in the compilation or review of the inventory preparation process were among the recommendations shared by respondents. Strengthening inter-institutional collaboration, streamlining data-collection protocols and maintaining comprehensive documentation were noted as effective practices for producing transparent, reliable and policy-relevant GHG inventories. Furthermore, establishing realistic timelines for each step of the preparation process, setting up a technical working group early and planning early for the availability of resources with a contingency plan were highlighted as essential for meeting the submission timeline.

29. In addition, investing in continuous training and awareness-raising activities across all relevant sectors was seen as essential for strengthening national capacity, which retains a pool of local experts, and ensuring the sustainability of the national inventory preparation system. Priority areas mentioned by the respondents include the use of IPCC software, ETF reporting tools and MPGs; the preparation of JavaScript Object Notation files and common reporting tables; and the assessment of uncertainty analysis. In addition, respondents highlighted that adapting tools and methodologies to national circumstances, enhancing interoperability between data systems to maintain institutional knowledge and improving data quality would be helpful in addressing several persistent technical challenges pertaining to limited availability of disaggregated activity data, inadequate data-collection protocols, insufficient national emission factors and incompatibility with existing software tools. Moreover, to facilitate the quality of and efficient reporting, the importance of developing country-specific emission factors with sectoral models, adopting higher tier methodologies that support the systematic use of default data, establishing data management and monitoring

mechanisms with traceable data sources and incorporating the feedback received during the technical expert review into the improvement plan was also noted by some respondents.

30. Respondents underscored the importance of using clear institutional arrangements and robust coordination mechanisms, as well as aligning with national development priorities, for reporting on **progress in implementing NDCs, including mitigation actions**. A recurring theme was the need to define institutional roles and involve relevant sectors early in the reporting process to facilitate timely and consistent data flows. Strengthening inter-institutional coordination – including revitalizing national coordination authorities and creating inter-agency working groups – was seen as key to improving information traceability, quality and continuity. Respondents also highlighted the usefulness of developing well-defined SMART indicators linked to specific mitigation actions, noting that clearly articulating the relationship between mitigation actions and NDC targets improves the ability to track implementation and progress. Respondents also emphasized the need to harmonize data-collection methodologies, establish baselines and create systematic MRV systems integrated with domestic policy frameworks and sectoral plans.

31. Technical capacity gaps were cited as a major constraint, particularly in areas such as emissions modelling, data management and use of ETF reporting tools. To address these gaps, sustained training programmes, technical assistance and South–South cooperation were recommended. Additionally, the need to improve stakeholder engagement – especially with sectoral ministries and data providers – was noted as essential for ensuring data accuracy and completeness. Formalizing stakeholder involvement and building stakeholder capacity in data collection and reporting methodologies were among the suggested approaches.

32. Advance planning and the early mobilization of resources were considered essential for ensuring continuity and timeliness of reporting. Respondents also indicated the importance of creating report templates, standardizing formats across various reporting instruments (e.g. BURs, BTRs and NDCs) and developing sector-specific guidelines with the aim of supporting consistency in tracking and evaluating mitigation outcomes. To address the challenges pertaining to poor inter-agency coordination, limited funding, overreliance on consultants and lack of institutional memory, respondents recommended enhancing the technical capacities of lead agencies, embedding climate-reporting responsibilities within permanent institutional structures and linking NDC implementation plans with dedicated budgets and timelines.

33. For reporting on **climate change impacts and adaptation**, respondents highlighted the importance of strong institutional coordination and inclusive governance. Respondents indicated a key lesson learned is the value of integrating adaptation into broader national and sectoral planning frameworks, which helps ensure consistency and alignment across policies. Respondents also highlighted the benefit of involving a wide range of stakeholders – including local communities, academia and the private sector – to enrich the data, validate the findings and improve the overall credibility of the reports. Integrating local and ancestral knowledge into adaptation planning was also an effective strategy for grounding national reports in lived experience and promoting more relevant and inclusive measures.

34. Another lesson learned was the need to build and sustain technical capacity at multiple levels. Respondents recognized the importance of developing national expertise to manage data, apply assessment tools and understand reporting provisions under the ETF. Investing in training for government staff and fostering collaboration with research institutions have helped improve the quality of vulnerability assessments and adaptation indicators. Where implemented, documentation and archiving of information and data in implementing adaptation action has enhanced transparency and laid the foundation for future reporting cycles.

35. Respondents underlined that development of monitoring and evaluation systems was a crucial enabler of effective adaptation reporting. Countries that established clear data-collection processes, used templates and defined consistent reporting timelines were better positioned to track progress and inform decision-making. Respondents also emphasized the importance of developing specific indicators for loss and damage, improving community-level data systems and using reporting as a means to not only fulfil reporting requirements but also strengthen national adaptation planning.

36. For reporting on **support needed and received**, respondents highlighted the importance of having consistent methodologies across institutions. They also indicated that understanding and applying the MPGs required training and ongoing technical support. Strengthening sectoral capacities to identify, quantify and report on support needs – especially for climate finance, technology transfer and capacity-building – was noted as essential.

37. In addition, respondents noted that involving key ministries – especially ministries of finance – is essential to centralizing and validating data on financial, technical and capacity-building support needed and received. Developing clearly defined procedures and institutional arrangements helped improve collaboration, especially when support data came from multiple national and international sources. Establishing standardized templates and centralized databases greatly improved data quality and traceability, while stakeholder mapping and early identification of support needs enabled more targeted engagement with donors and technical partners.

38. Respondents acknowledged that transparency and collaboration emerged as powerful enablers. Where reporting systems were implemented successfully, they not only improved accuracy but also promoted accountability and trust among stakeholders and donors. Regular engagement with local communities, non-governmental organizations and the private sector ensured that reported needs aligned with realities on the ground. The act of documenting support needs and support received helped countries identify funding gaps, improve donor coordination and prioritize actions for future mobilization. Embedding these lessons into national systems positions countries to use international climate finance more strategically and fulfil their commitments to implementing the Paris Agreement more effectively.

39. Further, the respondents were asked to share their best practices in the process of reporting to the UNFCCC regarding problems and constraints that have been successfully addressed or are being addressed. A total of 45 respondents shared their experience. For the analysis, responses addressing similar experience were clustered into three areas: institutional arrangements, data and information, and capacity-building.

40. Under **institutional arrangements**, respondents mentioned the following best practices:

(a) Formal structures and legal mandates: establishing formal coordination bodies such as national commissions for BTRs, inter-institutional committees and technical working groups, often backed by legal mandates or regulations, helped to define roles, responsibilities and approval protocols, improving both clarity and ownership of transparency related structures and mandates;

(b) Continuous coordination and leadership: creating stability in technical teams and leadership – among both government personnel and consultants – enabled consistency in reporting processes and implementation of lessons learned;

(c) Designated national entities: appointing a lead institution for BTR and NC preparation improved institutional memory, maintained process continuity and helped build trust with stakeholders;

(d) Participatory planning and approval: using structured planning tools (e.g. technical road maps, sectoral timelines or formalized workplans) ensured better engagement and timely approvals from all parties;

(e) Leveraging national climate governance: building upon existing governance systems and climate-related legal frameworks streamlined institutional collaboration and aligned BTR and NC processes with national priorities.

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

(a) Centralized data systems and templates: establishing online platforms, such as GHG inventory information systems and climate transparency platforms, improved data accessibility, quality control and institutional transparency;

(b) Sectoral focal points and thematic groups: designating nodal institutions and sector leads facilitated systematic data flow, minimized duplication and improved data ownership across ministries;

(c) Validated and historical data sets: using previously verified data sets and maintaining archiving systems provided continuity, improved data quality and reduced time spent collecting new data;

(d) Standardized reporting tools: templates and guidance materials (based on MPGs and IPCC methodologies) enhanced sectoral understanding and harmonized inputs, especially for GHG inventories and support tracking systems;

(e) Collaborative data validation: workshops and bilateral consultations helped verify data accuracy, strengthen stakeholder buy-in and reduce reporting errors.

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

(a) Continuous training of national experts: organizing workshops and targeted training on IPCC guidelines, GHG projections, NDC tracking, MRV systems and vulnerability assessments helped reduce reliance on international consultants and built national self-sufficiency;

(b) Tailored capacity-strengthening: identifying sector-specific gaps (e.g. data analysis, modelling, MRV and uncertainty management) and responding with targeted technical assistance (including the Partnership on Transparency in the Paris Agreement and CBIT) led to more competent national teams;

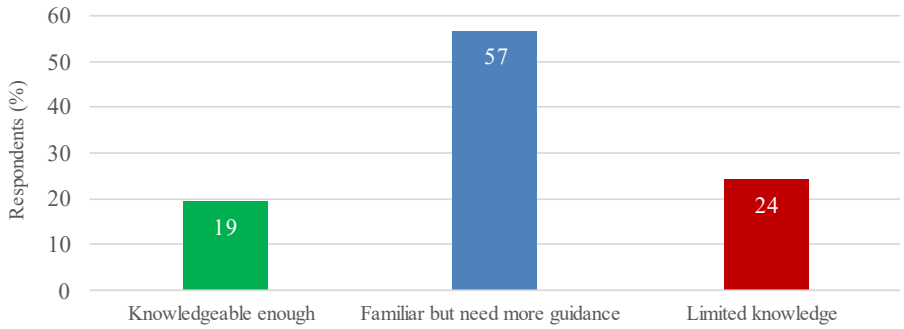
(c) Cross-learning and regional exchanges: engaging with countries in the same region through dialogues and experience-sharing platforms accelerated collective learning and the application of tested methodologies;

(d) Use of local content and experts: including domestic technical expertise in consultancies and training fostered long-term capacity and contextual relevance;

(e) Inception and orientation workshops: implementing early-stage stakeholder sensitization helped clarify expectations, build alignment on roles and set a strong foundation for reporting processes.

43. The respondents were also asked to indicate the extent to which they were familiar with the MPGs. All respondents answered this question. Figure 11 illustrates the results.

Figure 11
Level of knowledge of the modalities, procedures and guidelines for the enhanced transparency framework under the Paris Agreement



44. The respondents were also asked to indicate the extent to which their level of knowledge has improved over the past two years. A total of 58 respondents answered this question. Of these, 81 per cent indicated the level of knowledge has been improved, primarily through structured training and capacity-building activities, with international support and with hands-on experience gained through "learning-by-doing". For example, respondents cited national and international training sessions, workshops and online courses offered by the secretariat, the CGE and other organizations, including CBIT, Initiative for Climate Action Transparency, German Agency for International Cooperation, United Nations Development Programme and United Nations Environment Programme. These training

sessions helped national teams to understand the MPGs. Respondents also explained that preparing and submitting the first BTR as well as participating in negotiations was a valuable learning opportunity that provided direct involvement in reporting processes. Respondents indicated that inter-institutional coordination and resource-sharing helped to improve collaboration among ministries and technical teams in building a shared understanding, establishing structured processes and developing documentation to facilitate preparation of the next BTRs.

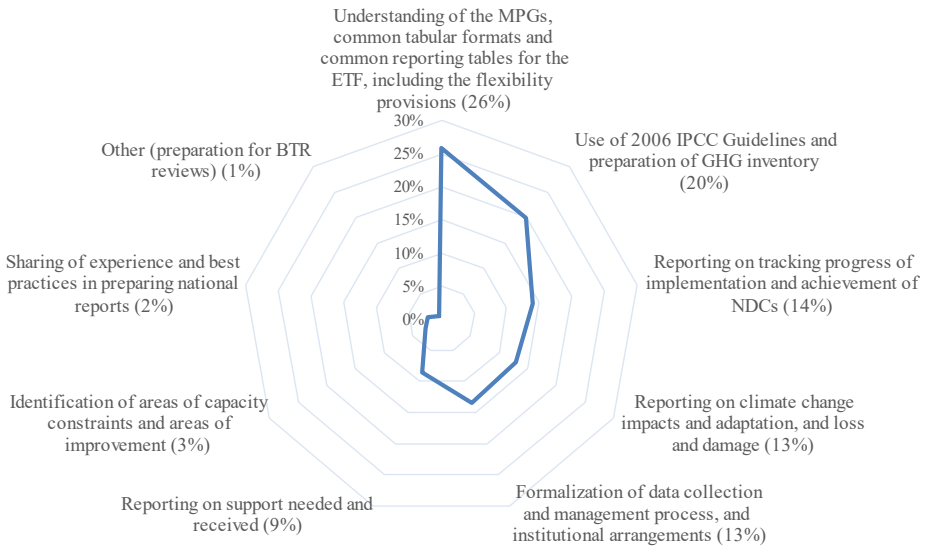
45. In addition, 19 per cent of the respondents, who indicated their level of knowledge had not improved, provided reasons, which included a need for additional in-person training sessions, the complexity of MPGs, challenges with institutional arrangements such as high turnover of staff and ongoing vacancies for responsible officers, and limited access to financial support for carrying out training and reporting tasks.

C. Expectations of the Consultative Group of Experts

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

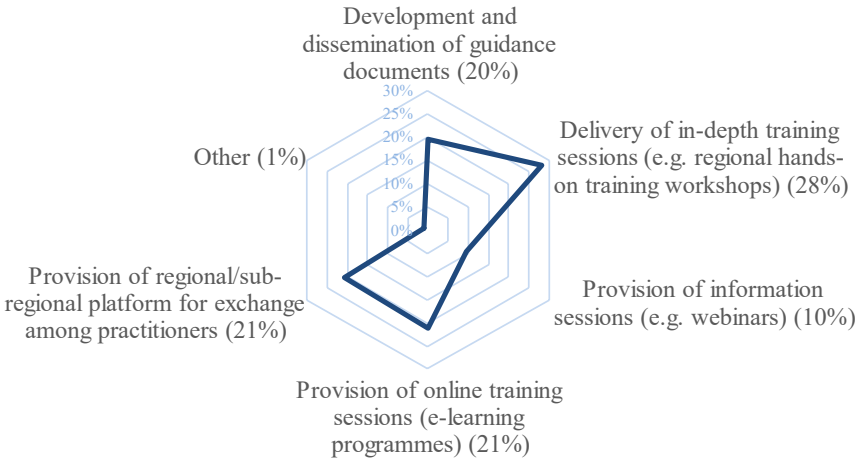
47. The respondents were asked to select the top three areas of capacity-building that could benefit their country in facilitating the implementation of the MRV and the ETF. All respondents answered this question, with the most frequently selected capacity-building area being "Understanding of the MPGs, common tabular formats and common reporting tables for the ETF, including the flexibility provisions" (26 per cent), followed by "Use of 2006 IPCC Guidelines and preparation of GHG inventory" (20 per cent) and "Reporting on tracking progress of implementation and achievement of NDCs" (14 per cent). Figure 12 shows the results.

Figure 12
Areas of capacity-building that developing country Parties could benefit from the most in implementing the enhanced transparency framework under the Paris Agreement



48. Respondents were also provided with a list of categories of technical support and were asked to select the most effective category to assist developing country Parties in implementing the ETF. The results are presented in figure 13.

Figure 13
Most effective category of technical support to assist developing country Parties in implementing the enhanced transparency framework



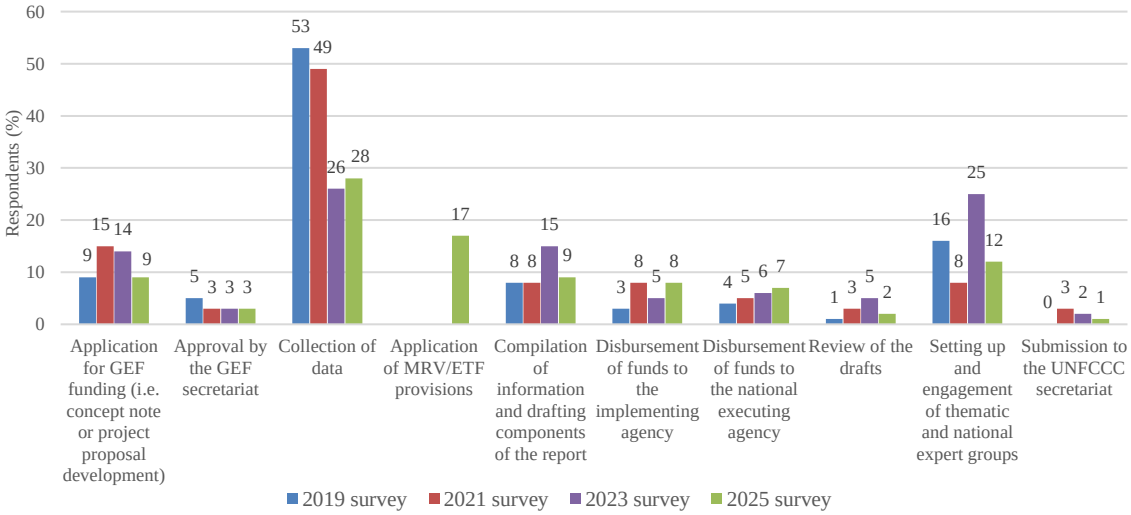
49. Respondents noted the difficulty of accessing online training sessions owing to insufficient facilities that provide Internet access; the importance of other modalities of technical support, such as a help desk for reporting related technical problems, and experience-sharing opportunities via online platforms; and support most frequently provided only in English.

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

50. A total of 86 developing country Parties participated in the 2019 survey, 46 in the 2021 survey, 23 in the 2023 survey and 62 in the 2025 survey. Incremental improvements and changes were observed when making broad comparisons between the results of the surveys; however, it is difficult to draw conclusions from these.

51. A comparison was made across the four surveys of the most challenging phase in the national report preparation process. Figure 14 illustrates the results.

Figure 14
Most challenging phase in the national report preparation process over time



52. A comparison was also made across the results pertaining to the involvement of external consultants or institutions in report preparation and the percentage of respondents who mainstreamed transparency work in line ministries and sectors to the full extent. The results are presented in figures 15 and 16.

Figure 15
Involvement of external consultants or institutions in report preparation over time

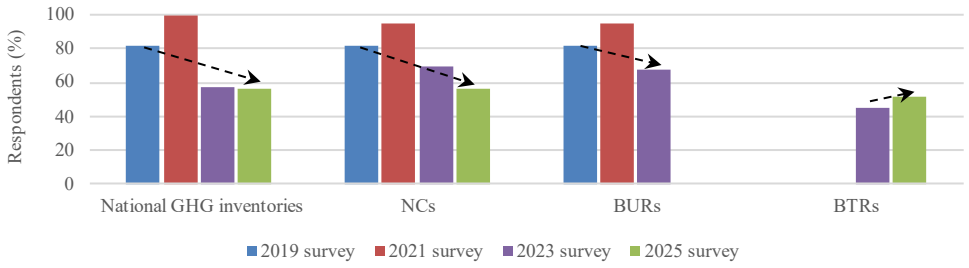
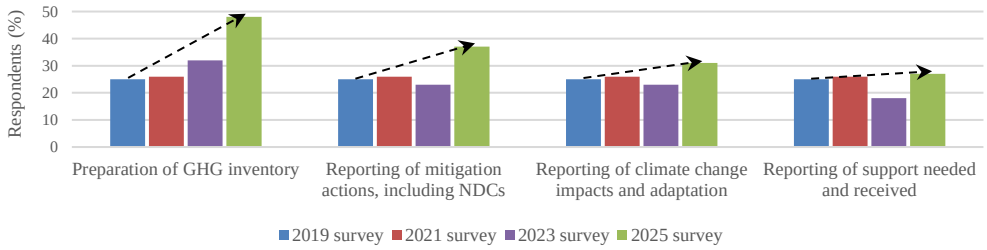


Figure 16
Mainstreaming of transparency work in line ministries and sectors to the full extent over time



III. Next steps

53. 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 and capacity-building needs for the preparation of NCs, BURs and BTRs, to be published before October 2025.

54. Further, the CGE will take the results of this survey into consideration in the development of its workplan for 2026.

Annex

Parties represented in the survey results

The Parties represented in the survey results were as follows: Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Bahamas, Barbados, Bolivia (Plurinational State of), Brazil, Burundi, Cabo Verde, Chile, China, Colombia, Cook Islands, Costa Rica, Côte d'Ivoire, Cuba, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Eswatini, Ethiopia, Gambia, Guinea, Guyana, Haiti, Honduras, India, Jamaica, Kazakhstan, Lebanon, Lesotho, Liberia, Madagascar, Mali, Mauritius, Mexico, Montenegro, Morocco, Mozambique, Namibia, Panama, Peru, Philippines, Republic of Korea, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, Sri Lanka, State of Palestine, Suriname, Togo, Uruguay, Viet Nam and Zimbabwe.

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