



Problems, constraints, lessons learned and capacity-building needs in preparing national communications and biennial update reports

Updated technical paper by the Consultative Group of Experts

Summary

This updated technical paper compiles and synthesizes information on problems, constraints, lessons learned and capacity-building needs identified in the process and preparation of national communications and biennial update reports of developing country Parties. The paper will continue to inform the work of the Consultative Group of Experts in identifying and providing technical assistance to address the needs of developing country Parties in this regard and serve as a source of lessons learned for those Parties.



Abbreviations and acronyms

BUR	biennial update report
CGE	Consultative Group of Experts
ETF	enhanced transparency framework
GHG	greenhouse gas
ICA	international consultation and analysis
IPCC	Intergovernmental Panel on Climate Change
LDC	least developed country
MRV	measurement, reporting and verification
NC	national communication
QA/QC	quality assurance/quality control
SIDS	small island developing State(s)

I. Introduction

A. Mandate

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 serve the Paris Agreement, starting from 1 January 2019, to support the implementation of the ETF under Article 13 of the Paris Agreement 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 biennial transparency reports 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

B. Scope of the paper

3. In response to the mandate above and as part of its workplan for 2020,³ the CGE agreed to continue conducting an assessment of the existing and emerging constraints and challenges, lessons learned and capacity-building needs of developing country Parties in implementing the existing MRV arrangements under the Convention and preparing for the ETF under the Paris Agreement, and to update the technical paper prepared in 2019.⁴
4. This updated technical paper takes into account the following sources of information in addition to those consulted previously:
 - (a) The 55 NCs and 45 BURs submitted between 1 February 2018 and 31 July 2020;
 - (b) The 20 summary reports on the technical analysis of BURs published between 1 September 2019 and 31 July 2020.
5. This paper draws on the most recent 152 NCs and 58 BURs that had been submitted by 152 developing country Parties as at 31 July 2020 and the 44 summary reports on the technical analysis of BURs that had been published as at the same date. The reporting cycles of the reports compiled and synthesized range from NC1 to NC6; from first to third BURs; and from first to third summary reports on the technical analysis of BURs. Figure 1 provides an overview of the reports compiled and synthesized, by reporting cycle and region.

C. Possible action by the Subsidiary Body for Implementation

6. The Subsidiary Body for Implementation will be invited to consider this paper and to provide guidance, as appropriate, to the CGE.

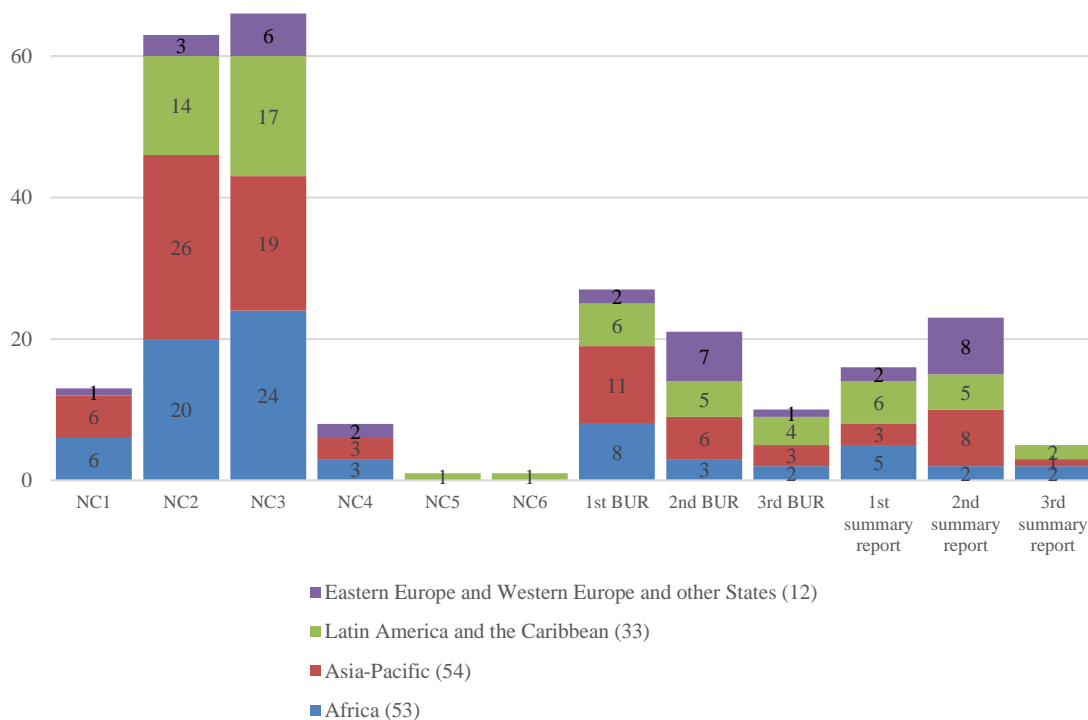
¹ Decision 11/CP.24, para. 1.

² Decision 18/CMA.1, para. 15.

³ Available at <https://unfccc.int/process/bodies/constituted-bodies/consultative-group-of-experts>.

⁴ FCCC/TP/2019/4.

Figure 1
Number of reports compiled and synthesized, by reporting cycle and region



Note: The figures in parentheses specify the number of developing country Parties whose reports were compiled and synthesized for each region.

II. Approach to the compilation and synthesis

7. Between March and October 2020, the CGE compiled and synthesized the available information on problems and constraints faced and lessons learned by developing country Parties in the process and preparation of NCs and BURs, including the challenges and needs they reported in their most recent NCs and BURs and the capacity-building needs identified in the summary reports on the technical analysis of the BURs.

8. Developing country Parties reported their challenges and needs in various ways, including by using terms such as “problem”, “constraint”, “gap”, “barrier”, “opportunity for improvement” and “lack of something”. Incorporating information that is reported in a wide variety of ways into a specific data structure requires a strong analytical framework. The compilation and synthesis of challenges and needs was therefore undertaken taking into account the following aspects of the challenges and needs reported:

(a) Theme: as per the mandatory information to be reported in NCs and BURs under the existing MRV arrangements and in biennial transparency reports under the ETF, challenges and needs were compiled and synthesized under the following themes:

- (i) National GHG inventories;
- (ii) Reporting on mitigation actions;
- (iii) Reporting on climate change impacts and adaptation;
- (iv) Reporting on support needed and received;
- (v) Cross-cutting issues relating to MRV and transparency at the national level, such as raising awareness of, or political buy-in for addressing, MRV and transparency issues and developing or strengthening corresponding national systems. In particular, issues that were not classified by a Party under any of the themes listed in paragraph 8(a)(i–iv) above were categorized under this theme;

(b) Area: a developing country Party may identify and report a need when there is a gap between the current state and the optimal state, namely the minimum conditions needed to sufficiently meet the reporting requirements. Barriers to addressing such a gap may exist in different areas and can be addressed by adopting different approaches. For the purpose of the compilation and synthesis, these approaches were categorized under the areas of institutional arrangements, methodology and tools, and data and information:

(i) Institutional arrangements refers to national systems, arrangements and processes to support implementation of the existing MRV arrangements and the ETF, such as the engagement of all relevant stakeholders. Issues categorized under this area include establishing and formalizing a process or working mechanism for defining roles and responsibilities and coordinating action across stakeholders; creating a designated agency or focal point to lead MRV activities; creating and strengthening stakeholder awareness of MRV and transparency; creating enabling environments such as through policy or legal arrangements that mandate the preparation of national reports; and strengthening institutional capacity to sustain and improve the MRV and transparency process over time;

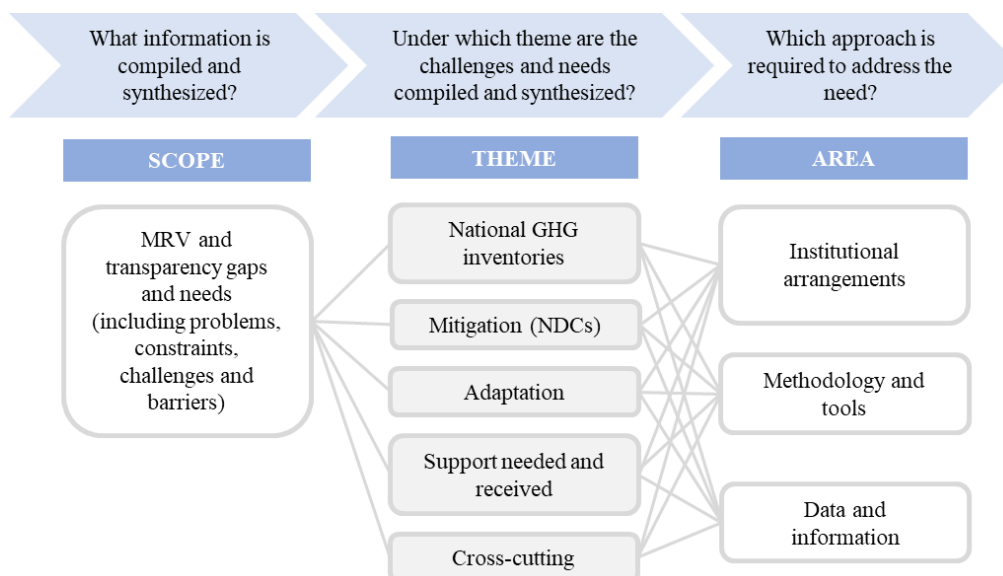
(ii) Methodology and tools refers to the means used to enhance the technical and knowledge capacity required to prepare and report information relating to the themes. Such means include practical and easy-to-apply guidance, tools and methods; training relevant national experts to apply existing guidelines, guidance, tools and methods; and interpreting and analysing information gathered using tools and methods and translating it into information that meets the requirements of the relevant reporting guidelines. This area also covers the technological infrastructure necessary for generating the required data, such as stations, networks and equipment for monitoring, observing and technical backstopping, including scientific research and studies on developing practical country-specific tools and methods, and generating necessary data;

(iii) Data and information addresses various issues relating to data, ranging from availability of quality data and accessibility of data (for confidentiality reasons) to data collection and management processes. Issues pertaining to data collection processes relate to establishing and enhancing databases and data-sharing platforms and systems, while issues relating to data management processes are associated with documenting and archiving data, developing and improving QA/QC procedures, and managing uncertainty.

9. Figure 2 provides an overview of the approach to the compilation and synthesis, including the scope and aspects of the information examined.

Figure 2

Analytical framework for the compilation and synthesis of challenges and needs



10. To examine the aspects of the challenges and needs reported, as outlined in paragraph 8 above, developing country Parties (referred to as a group in the figures below as “global”) were grouped as follows:

(a) By geographical region: Africa; Asia-Pacific; Latin America and the Caribbean; and Eastern Europe and Western Europe and other States;

(b) Taking into account the special circumstances of the LDCs and SIDS: one group consisting of the LDCs and SIDS, and one group consisting of the other developing country Parties;

(c) According to the level of engagement in the existing MRV arrangements: one group of developing country Parties that had submitted at least one BUR and participated at least once in the ICA process, and one group of developing country Parties that had submitted NCs only.

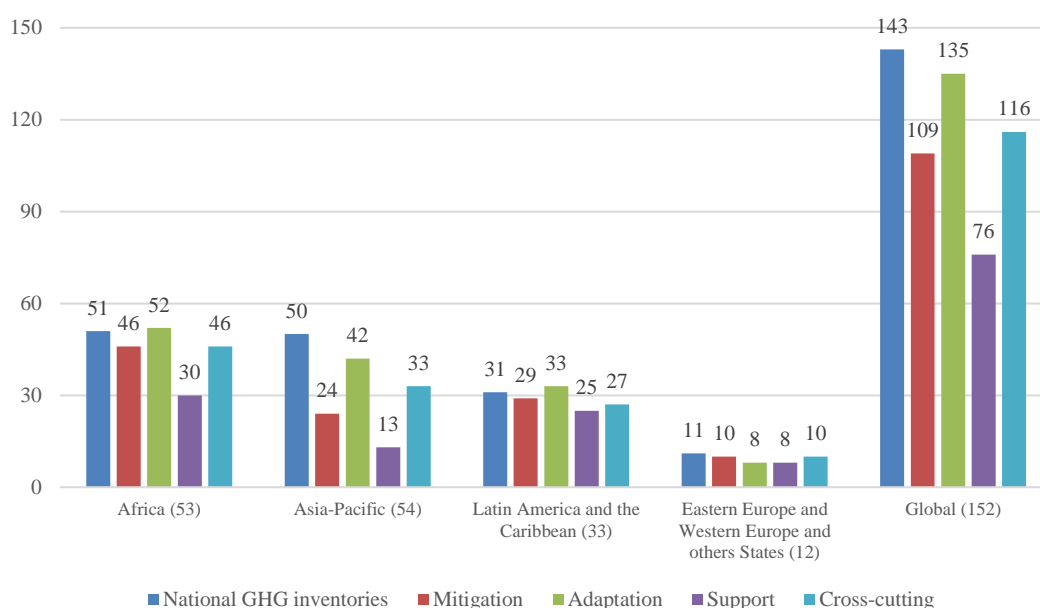
III. Results of the compilation and synthesis

A. Challenges and needs reported by developing country Parties

11. This chapter provides an overview of the challenges and needs reported by developing country Parties, broken down by theme and area and then disaggregated by region and group of developing country Parties listed in paragraph 10 above.

12. Figure 3 shows the number of developing country Parties, both regionally and globally, that reported one or more challenges and needs under each theme. At the global level, most of the challenges and needs reported related to national GHG inventories (reported by 143 developing country Parties, or 94 per cent of the total developing country Parties whose reports were compiled), followed by reporting on climate change impacts and adaptation (by 135 developing country Parties, or 89 per cent) and cross-cutting issues (by 116 developing country Parties, or 76 per cent). For Africa and Latin America and the Caribbean, most of the challenges and needs reported were associated with reporting on climate change impacts and adaptation, followed by national GHG inventories.

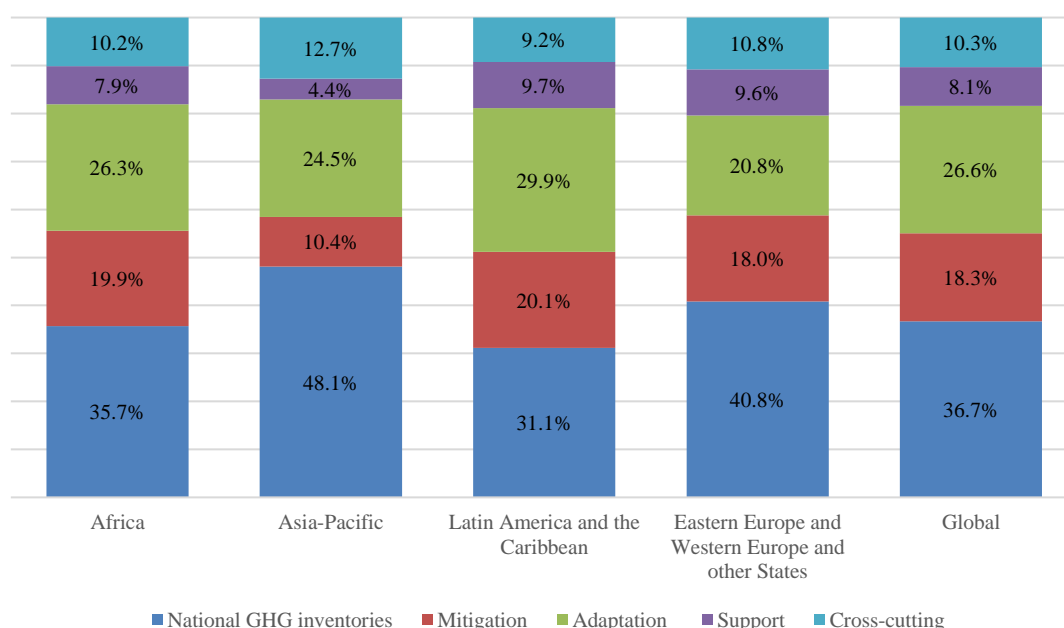
Figure 3
Number of developing country Parties that reported one or more challenges and needs under each theme, by region and globally



Note: The figures in parentheses specify the number of developing country Parties whose reports were compiled and synthesized, by region and globally.

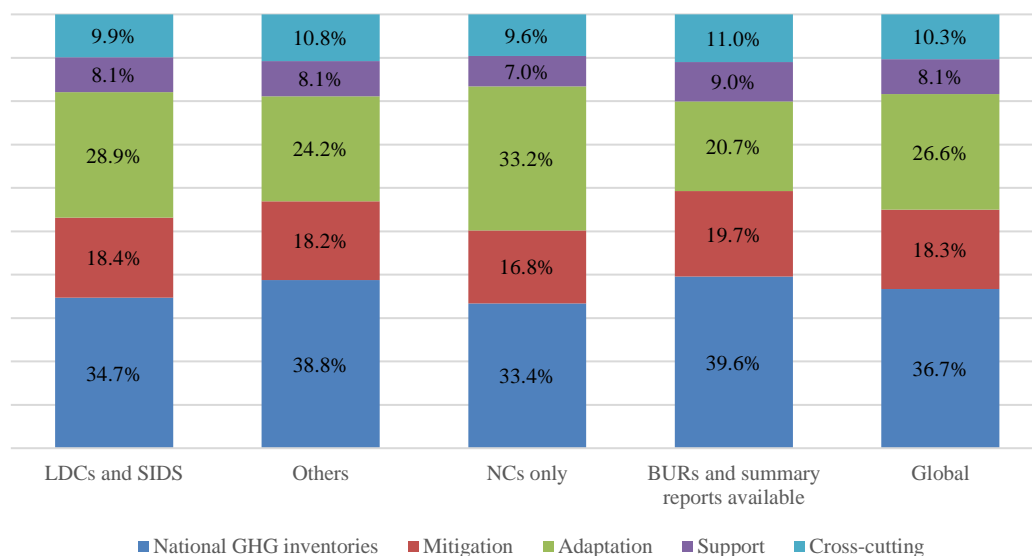
13. The themes under which challenges and needs were reported differed by region. Figure 4 shows the thematic breakdown of the challenges and needs reported by developing country Parties at the regional and global level. Although there were similar patterns in the order by frequency of the reporting of challenges and needs under the different themes across the regions, the exact share of each theme as a percentage of the total challenges and needs identified varied in each region. For example, for Asia-Pacific, almost half of the challenges and needs reported related to national GHG inventories (48.1 per cent), with issues pertaining to reporting on mitigation actions accounting for around 10 per cent. For Latin America and the Caribbean, issues pertaining to national GHG inventories and to reporting on climate change impacts and adaptation accounted for around 30 per cent each of the challenges and needs reported, while issues associated with reporting on mitigation actions accounted for around 20 per cent.

Figure 4
Thematic breakdown of challenges and needs reported, at the regional and global level



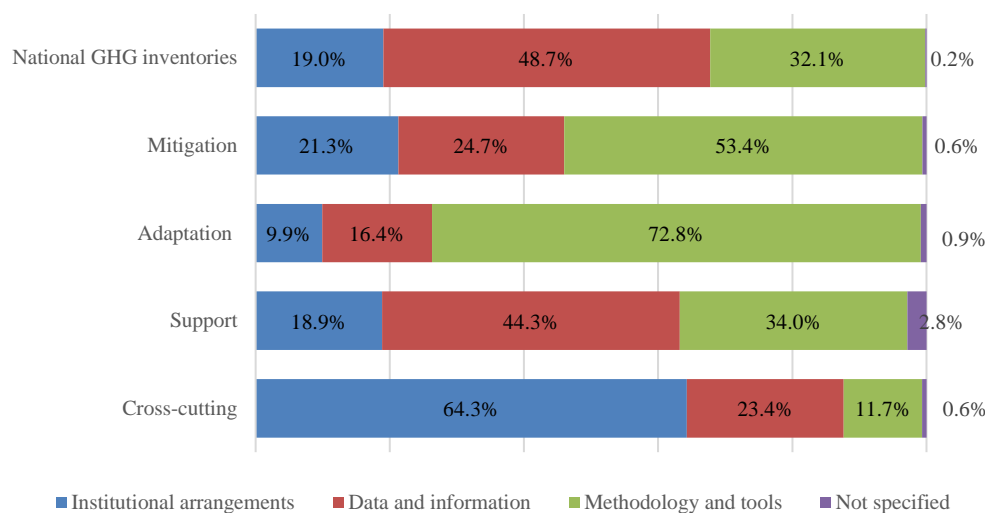
14. The thematic breakdown of challenges and needs reported differed between the group consisting of the LDCs and SIDS and the group consisting of the other developing country Parties. The LDCs and SIDS reported a 4.7 per cent higher share of challenges and needs associated with reporting on climate change impacts and adaptation compared with other developing country Parties. The thematic breakdown also differed between developing country Parties that had submitted NCs only and those that had submitted at least one BUR and participated at least once in the ICA process. In the former group, issues associated with reporting on climate change impacts and adaptation were reported to the same extent as those pertaining to national GHG inventories (accounting for 33 per cent each of the challenges and needs reported). In the latter group, almost 40 per cent of the challenges and needs reported were associated with national GHG inventories. Figure 5 shows the thematic breakdown of the challenges and needs reported by the different groups of developing country Parties.

Figure 5
Thematic breakdown of challenges and needs reported, by group of developing country Parties



15. The breakdown of areas in which challenges and needs were identified also differed by theme, as shown in figure 6. With regard to preparing national GHG inventories, almost half of the challenges and needs reported related to data and information, followed by methodology and tools. Issues related to reporting on support needed and received show a similar pattern. Meanwhile, the majority of challenges and needs associated with reporting on mitigation actions and climate change impacts and adaptation pertained to methodology and tools. In fact, methodology and tools accounted for more than 70 per cent of the challenges and needs identified under the theme of reporting on climate change impacts and adaptation.

Figure 6
Breakdown of areas in which challenges and needs were identified, by theme



B. Preparing national greenhouse gas inventories

16. With regard to preparing national GHG inventories, almost half of the challenges and needs reported related to data and information (48.7 per cent), followed by methodology and tools (32.1 per cent) and institutional arrangements (19.0 per cent). In particular, challenges due to lack of an adequate data collection process and lack of availability of quality data accounted for approximately 20 per cent each, while issues pertaining to lack of technical

capacity to apply existing guidelines, guidance, tools and methods accounted for 12.7 per cent. Table 1 summarizes the identified issues in preparing national GHG inventories by category.

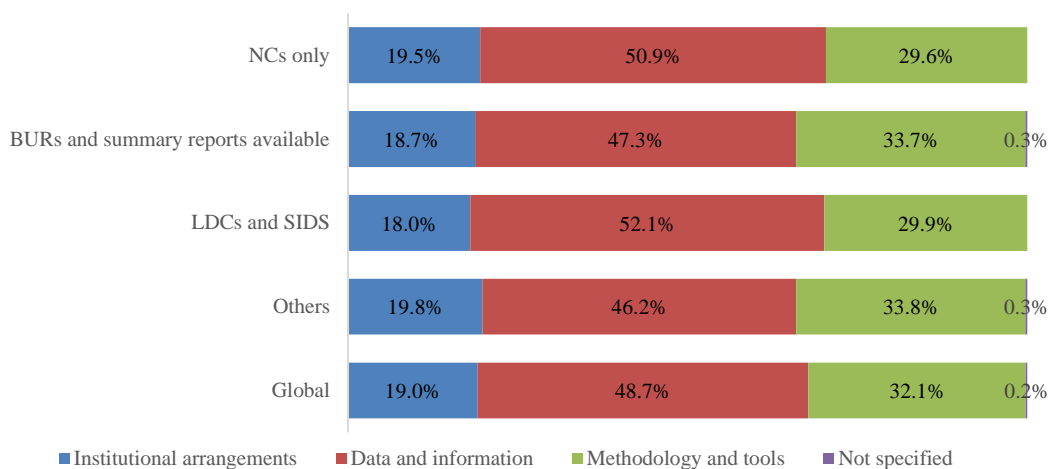
Table 1
Categories of identified issues in preparing national greenhouse gas inventories

<i>Area and category of issues (lack thereof or insufficient)</i>	<i>Percentage of total reported issues under theme</i>
Data and information	48.7
Data collection process (including establishment of a database, data-sharing system and web-based knowledge management platform)	20.5
Availability of quality data	20.0
Data management process (including documentation, archiving, QA/QC protocols and uncertainty management procedures)	6.8
Accessibility of data for confidentiality reasons	1.4
Methodology and tools	32.1
Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training	12.7
Technical backstopping	12.4
Practical guidance, tools and methods	5.7
Technological infrastructure	0.8
Technical capacity (knowledge capacity) to interpret, analyse and translate data and information gathered using tools and methods etc., including training	0.5
Institutional arrangements	19.0
Coordination across sectors and institutions to collect and share data	6.5
Institutional capacity to sustain and improve the MRV and transparency process over time	5.0
Leadership (e.g. an entity appointed to undertake and coordinate data collection and sharing)	2.4
Policy or legal arrangements that mandate the preparation of national reports	1.9
Stakeholder awareness, especially in the private sector	1.6
Definition of roles and responsibilities across the institutions involved	1.6
Not specified	0.2
Total	100.0

17. The percentage breakdown by area of reported challenges and needs related to preparing GHG inventories differed by group of developing country Parties, although there were similar patterns in the order by frequency of the reporting of challenges and needs in those areas. The LDCs and SIDS reported a higher share of issues relating to data and information and a lower share of issues relating to methodology and tools compared with other developing country Parties. The group of developing country Parties that had submitted NCs only reported a higher share of issues pertaining to data and information and a lower share pertaining to methodology and tools compared with developing country Parties that had submitted at least one BUR and participated at least once in the ICA process. Figure 7 provides a breakdown of the areas in which challenges and needs relating to preparing national GHG inventories were identified by the different groups of developing country Parties. Box 1 provides examples from the categories with the three highest shares of the identified issues associated with preparing national GHG inventories.

Figure 7

Breakdown of areas in which challenges and needs relating to preparing national greenhouse gas inventories were identified, by group of developing country Parties



Box 1

Examples from categories of issues associated with preparing national greenhouse gas inventories

Data collection process: For many developing country Parties, establishing a database is considered a fundamental step towards filling data gaps in terms of ensuring time-series consistency and completeness. Several developing country Parties also identified the need to build and capitalize on their existing data collection processes, such as commissioning surveys by subsectoral organizations (especially in the industrial processes and product use sector, for which facility-level information is important), compiling energy statistics or an energy balance, and integrating questions relevant to collecting the data necessary for preparing national GHG inventories into existing surveys.

Availability of quality data: Many developing country Parties stated that lack of reliable data impeded the accurate estimation of emissions and increased uncertainty. The data issues reported related to unavailability of activity data, inconsistency in reported years and inconsistency between data sources. In some cases, lack of quality data was due to an inadequate data collection process. For example, several developing country Parties reported that some of the data collected were not in a format conducive to estimating emissions in accordance with the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*.

Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training: Many developing country Parties identified needs to enhance technical capacity through training, undertake key category analysis and uncertainty assessment, use notation keys, estimate emissions of indirect GHGs (e.g. carbon monoxide, non-methane volatile organic compounds and nitrogen oxides) and fluorinated gases in accordance with the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* and use existing software such as CRF Reporter.

C. Reporting on mitigation actions

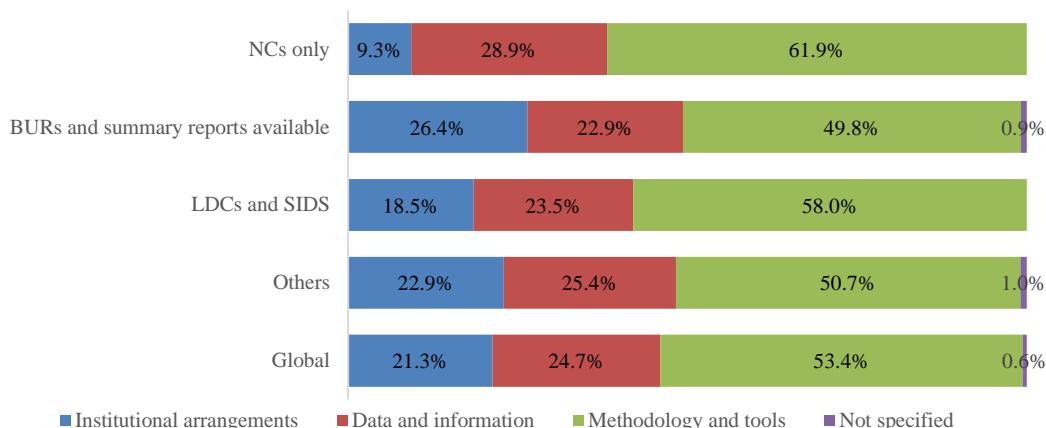
18. With regard to reporting on mitigation actions, more than half of the challenges and needs reported related to methodology and tools (53.4 per cent), followed by data and information (24.7 per cent) and institutional arrangements (21.3 per cent). In particular, challenges due to lack of practical guidance, tools and methods accounted for 27.8 per cent, followed by issues pertaining to lack of technical capacity to apply existing guidelines, guidance, tools and methods (13.9 per cent) and data collection process issues (13.6 per cent). Table 2 summarizes the identified issues in reporting on mitigation actions by category.

Table 2
Categories of identified issues in reporting on mitigation actions

<i>Area and category of issues (lack thereof or insufficient)</i>	<i>Percentage of total reported issues under theme</i>
Methodology and tools	53.4
Practical guidance, tools and methods	27.8
Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training	13.9
Technical backstopping	8.0
Technical capacity (knowledge capacity) to interpret, analyse and translate data and information gathered using tools and methods etc., including training	2.5
Technological infrastructure	0.9
Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training	0.3
Data and information	24.7
Data collection process (including establishment of a database, data-sharing system and web-based knowledge management platform)	13.6
Availability of quality data	6.8
Data management process (including documentation, archiving, QA/QC protocols and uncertainty management procedures)	3.7
Accessibility of data for confidentiality reasons	0.6
Institutional arrangements	21.3
Coordination across sectors and institutions to collect and share data	8.0
Institutional capacity to sustain and improve the MRV and transparency process over time	5.6
Policy or legal arrangements that mandate the preparation of national reports	2.5
Stakeholder awareness, especially in the private sector	2.2
Definition of roles and responsibilities across the institutions involved	1.5
Leadership (e.g. an entity appointed to undertake and coordinate data collection and sharing)	1.5
Not specified	0.6
Total	100.0

19. The percentage breakdown by area of reported challenges and needs related to reporting on mitigation actions differed by group of developing country Parties, although there were similar patterns in the order by frequency of the reporting of challenges and needs in those areas. For example, the LDCs and SIDS reported a 7.3 per cent higher share of issues relating to methodology and tools compared with other developing country Parties. The group of developing country Parties that had submitted NCs only reported a 12.1 per cent higher share of issues pertaining to methodology and tools and a 17.1 per cent lower share of issues pertaining to institutional arrangements compared with those that had submitted at least one BUR and participated at least once in the ICA process. Figure 8 provides a breakdown of the areas in which challenges and needs related to reporting on mitigation actions were identified by the different groups of developing country Parties. Box 2 provides examples from the categories with the three highest shares of the identified issues associated with reporting on mitigation actions.

Figure 8
Breakdown of areas in which challenges and needs related to reporting on mitigation actions were identified, by group of developing country Parties



Box 2

Examples from categories of issues associated with reporting on mitigation actions

Practical guidance, tools and methods: Many developing country Parties encountered technical constraints in conducting mitigation assessment owing to lack of a coherent approach or methodology for assessing the impacts of mitigation measures in different sectors. Some developing country Parties reported the need for practical guidance for them to develop progress indicators, identify and formulate baselines and develop methodological assumptions for estimating emission reductions resulting from individual mitigation actions, while others highlighted the need to improve their existing methodologies and tools in various sectors together with the need for more detailed guidance on estimating emission reductions resulting from various policies, programmes and mitigation actions.

Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training: Many developing country Parties reported limited technical capacity or skills in using the tools and methods available, especially with regard to developing mitigation and reference scenarios, projections and economic analyses for mitigation options and identifying viable technological options. Several developing country Parties highlighted the need to establish training programmes in order to address such capacity gaps, acknowledging the enhanced reporting requirements under the ETF and the continuous process of preparing or updating nationally determined contributions and tracking progress towards achieving and implementing them.

Data collection process: In some developing country Parties, data collection processes for reporting on mitigation actions are not integrated into the regular data collection processes and systems of the related agencies, which impedes standardized and effective data collection and compilation. Similarly, several developing country Parties highlighted the need to develop the capacity of relevant agencies to align their data on mitigation actions with the national GHG inventory management system with a view to ensuring consistency between the data on mitigation measures and the data in the inventory and facilitating a coherent approach to quantifying emission reductions. Further, Parties highlighted the need to design a data collection process or system that meets data requirements for different models and software and facilitates systematic collection of information among stakeholders to enable progress of mitigation actions to be tracked across sectors.

D. Reporting on climate change impacts and adaptation

20. With regard to reporting on climate change impacts and adaptation, almost three quarters of the challenges and needs reported related to methodology and tools (72.8 per

cent), followed by data and information (16.4 per cent) and institutional arrangements (9.9 per cent). In particular, the need for technical backstopping, including scientific research and studies, accounted for 28.0 per cent, followed by challenges due to lack of practical guidance, tools and methods (17.5 per cent). Further, 17.0 per cent of the challenges and needs reported under this theme related to the need to establish or maintain technological infrastructure. Table 3 summarizes the identified issues in reporting on climate change impacts and adaptation by category.

Table 3

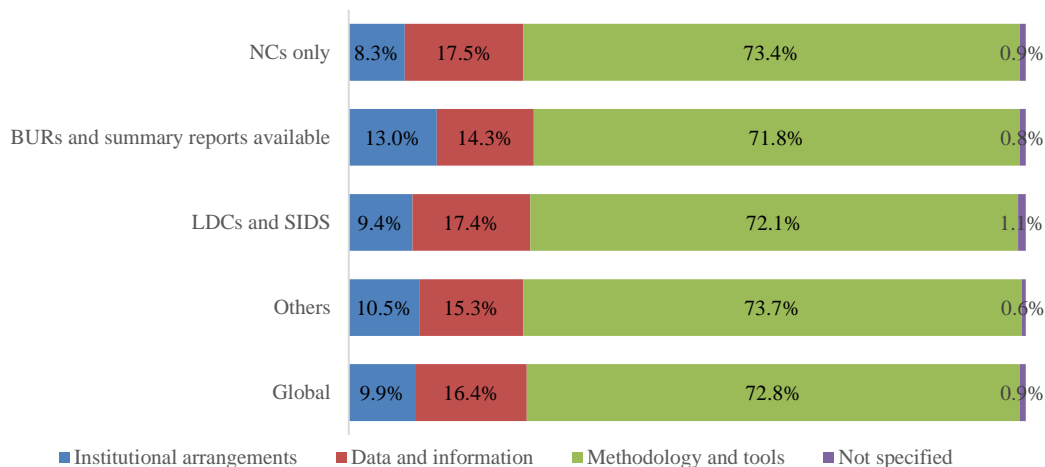
Categories of identified issues in reporting on climate change impacts and adaptation

<i>Area and category of issues (lack thereof or insufficient)</i>	<i>Percentage of total reported issues under theme^a</i>
Methodology and tools	72.8
Technical backstopping	28.0
Practical guidance, tools and methods	17.5
Technological infrastructure	17.0
Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training	6.8
Technical capacity (knowledge capacity) to interpret, analyse and translate data and information gathered using tools and methods etc., including training	3.6
Data and information	16.4
Data collection process (including establishment of a database, data-sharing system and web-based knowledge management platform)	9.3
Availability of quality data	4.6
Data management process (including documentation, archiving, QA/QC protocols and uncertainty management procedures)	2.4
Institutional arrangements	9.9
Coordination across sectors and institutions to collect and share data	3.6
Institutional capacity to sustain and improve the MRV and transparency process over time	2.7
Leadership (e.g. an entity appointed to undertake and coordinate data collection and sharing)	1.4
Stakeholder awareness, especially in the private sector	0.9
Policy or legal arrangements that mandate the preparation of national reports	0.9
Definition of roles and responsibilities across the institutions involved	0.4
Not specified	0.9
Total	100.0

^a The area-level percentages were calculated using exact (not rounded) values and may therefore differ from total percentages calculated with the rounded category-level percentages provided in the table.

21. The percentage breakdown by area of challenges and needs related to reporting on climate change impacts and adaptation shows similar patterns in the order by frequency of the reporting of challenges and needs in those areas and across the different groups of developing country Parties. It is notable that the group of other developing country Parties and the group of those that had submitted at least one BUR and participated at least once in the ICA process reported a higher share of issues relating to institutional arrangements compared with the group of the LDCs and SIDS and the group of developing country Parties that had submitted NCs only, respectively. Figure 9 provides a breakdown of the areas in which challenges and needs related to reporting on climate change impacts and adaptation were identified by the different groups of developing country Parties. Box 3 provides examples from the categories with the three highest shares of the identified issues associated with reporting on climate change impacts and adaptation.

Figure 9
Breakdown of areas in which challenges and needs related to reporting on climate change impacts and adaptation were identified, by group of developing country Parties



Box 3

Examples from categories of issues associated with reporting on climate change impacts and adaptation

Technical backstopping: Many developing country Parties highlighted the need to promote research with a view to better understanding the impacts of climate change in various sectors (e.g. biodiversity, health, water resources and agriculture) and improving impact and vulnerability assessment. Some Parties, acknowledging that there is limited country-specific scientific research on climate change, highlighted the need for more empirical research that looks at the geospatial dynamics of the economy and the climate in a given country. The demand for studies to develop common indicators for assessing the impacts of climate change at the national and regional level, to promote integrated assessment across sectors and to develop sectoral cost-benefit analysis methods was highlighted. Several Parties pointed out the limited funding allocated to climate change research domestically and lack of international financial support. At the same time, many Parties acknowledged that the more rigorous the vulnerability and adaptation assessment is, the easier it is to identify feasible adaptation options and hence better plan adaptation measures.

Practical guidance, tools and methods: Some developing country Parties found that there is a gap between the data available and the data required for the existing models for vulnerability and adaptation assessment. This highlighted the need for practical, country-specific models with less complex metrics. The need to develop regional climatic models with greater spatial and temporal resolution to facilitate downscaling of climate scenarios was also identified.

Technological infrastructure: Many developing country Parties reported the need to establish, improve or maintain technological infrastructure with a view to improving data quality and addressing data gaps. Such infrastructure includes weather forecasting centres, hydrological stations, meteorological stations and climatological observation networks. Several Parties reported that existing observation networks or stations were outdated or had been damaged by extreme weather events, and highlighted the need to improve this equipment and software to improve observation and monitoring.

E. Reporting on support needed and received

22. With regard to reporting on support needed and received, challenges and needs in the area of data and information were reported most recurrently (44.3 per cent), followed by those in the areas of methodology and tools (34.0 per cent) and data and information (18.9 per cent). In particular, challenges due to lack of an adequate data collection process

accounted for 37.7 per cent, followed by lack of practical guidance, tools and methods (31.1 per cent) and lack of or insufficient coordination across sectors and institutions (8.5 per cent). Table 4 summarizes the issues identified in reporting on support needed and received by category.

Table 4

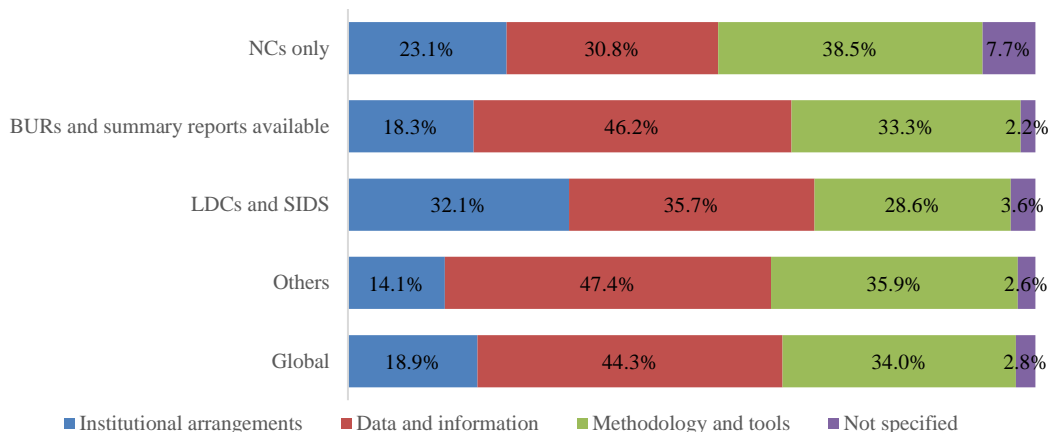
Categories of identified issues in reporting on support needed and received

<i>Area and category of issues (lack thereof or insufficient)</i>	<i>Percentage of total reported issues under theme^a</i>
Data and information	44.3
Data collection process (including establishment of a database, data-sharing system and web-based knowledge management platform)	37.7
Availability of quality data	2.8
Data management process (including documentation, archiving, QA/QC protocols and uncertainty management procedures)	2.8
Accessibility of data for confidentiality reasons	0.9
Methodology and tools	34.0
Practical guidance, tools and methods	31.1
Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training	2.8
Institutional arrangements	18.9
Coordination across sectors and institutions to collect and share data	8.5
Institutional capacity to sustain and improve the MRV and transparency process over time	4.7
Leadership (e.g. an entity appointed to undertake and coordinate data collection and sharing)	3.8
Definition of roles and responsibilities across the institutions involved	0.9
Policy or legal arrangements that mandate the preparation of national reports	0.9
Not specified	2.8
Total	100.0

^a The area-level percentages were calculated using exact (not rounded) values and may therefore differ from total percentages calculated with the rounded category-level percentages provided in the table.

23. The percentage breakdown by area of reported challenges and needs related to reporting on support needed and received differed by group of developing country Parties. The group consisting of other developing country Parties reported a higher share of issues relating to data and information and to methodology and tools, but an 18.0 per cent lower share of issues pertaining to institutional arrangements compared with the group consisting of the LDCs and SIDS. The group of developing country Parties that had submitted at least one BUR and participated at least once in the ICA process reported a 15.4 per cent higher share of issues relating to data and information compared with the group of those that had submitted NCs only, but a lower share of issues associated with institutional arrangements and methodology and tools. Figure 10 provides a breakdown of the areas in which challenges and needs relating to reporting on support needed and received were identified by the different groups of developing country Parties. Box 4 provides examples from the categories with the three highest shares of the identified issues associated with reporting on support needed and received.

Figure 10
Breakdown of areas in which challenges and needs relating to reporting on support needed and received were identified, by group of developing country Parties



Box 4

Examples from categories of issues associated with reporting on support needed and received

Data collection process: Many developing country Parties found it challenging to collect data and information on support needed and received owing to lack of a standardized data collection process and the relevant data being dispersed across various agencies (such as ministries, private sector organizations, research and academic institutes and civil society organizations).

Practical guidance, tools and methods: Several developing country Parties noted that there is no coherent or common definition of climate finance or approach to classifying, monitoring and reporting on climate finance, with publications and reports on this topic often inconsistent. The need was highlighted for a clear methodology and clear guidance to ensure that climate finance is accounted for, assessed and reported consistently. Further, several developing country Parties highlighted the need for nationally endorsed definitions of finance, capacity-building and technology transfer to create a common understanding of aspects to consider when tracking support, for the purposes of both international reporting and national decision-making.

Coordination across sectors and institutions to collect and share data: Noting that data and information on support needed and received are dispersed across different agencies, many developing country Parties highlighted the need to enhance coordination between stakeholders to facilitate the data collection process and improve accessibility of data. Establishing a collaborative framework, such as a memorandum of understanding, with data-providing agencies was identified as one solution permitting information to be shared in a detailed and disaggregated manner.

F. Cross-cutting issues

24. With respect to cross-cutting issues, 64.3 per cent of the challenges and needs reported related to institutional arrangements, followed by data and information (23.4 per cent) and methodology and tools (11.7 per cent). In particular, challenges and needs pertaining to enhancing institutional capacity to sustain and improve the MRV and transparency process over time accounted for 21.7 per cent, followed by lack of an adequate data collection process (16.6 per cent) and lack of coordination across sectors and institutions to collect and share data (13.0 per cent). Table 5 summarizes the identified cross-cutting issues by category.

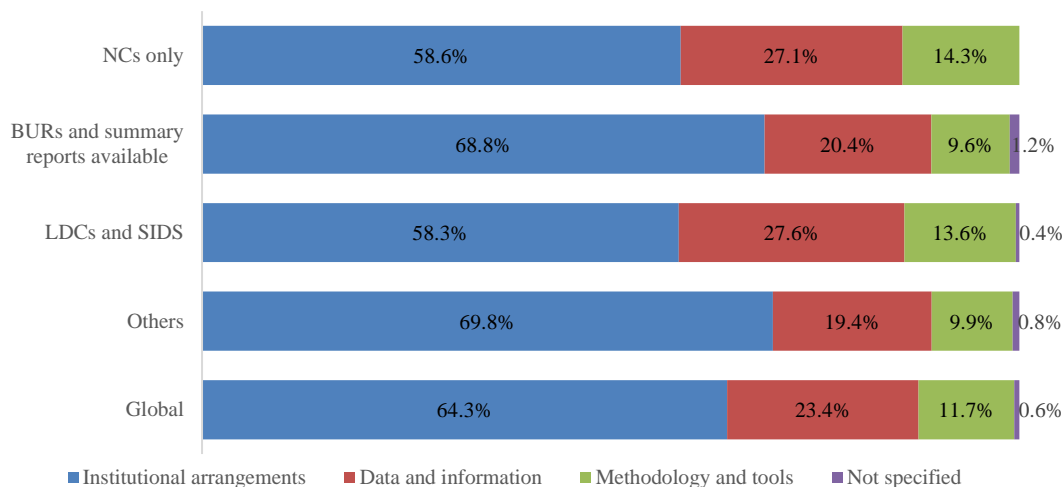
Table 5
Categories of identified cross-cutting issues

<i>Area and category of issues (lack thereof or insufficient)</i>	<i>Percentage of total reported issues under theme^a</i>
Institutional arrangements	64.3
Institutional capacity to sustain and improve the MRV and transparency process over time	21.7
Coordination across sectors and institutions to collect and share data	13.0
Policy or legal arrangements that mandate the preparation of national reports	12.8
Leadership (e.g. an entity appointed to undertake and coordinate data collection and sharing)	10.0
Definition of roles and responsibilities across the institutions involved	4.7
Stakeholder awareness, especially in the private sector	2.1
Data and information	23.4
Data collection process (including establishment of a database, data-sharing system and web-based knowledge management platform)	16.6
Data management process (including documentation, archiving, QA/QC protocols and uncertainty management procedures)	3.6
Availability of quality data	2.3
Accessibility of data for confidentiality reasons	0.6
Data management processes, including documentation, archiving, QA/QC protocols and uncertainty management procedures.	0.2
Methodology and tools	11.7
Technical capacity (knowledge capacity) to apply guidelines, guidance, tools and methods, including training	4.3
Practical guidance, tools and methods	3.6
Technical backstopping	2.3
Technological infrastructure	0.9
Technical capacity (knowledge capacity) to interpret, analyse and translate data and information gathered using tools and methods, including training	0.6
Not specified	0.6
Total	100.0

^a The area-level percentages were calculated using exact (not rounded) values and may therefore differ from total percentages calculated with the rounded category-level percentages provided in the table.

25. The percentage breakdown by area of challenges and needs reported under this theme differed by group of developing country Parties, although there were similar patterns in the order by frequency of the reporting of challenges and needs in the areas. The group of other developing country Parties and the group of those that had submitted at least one BUR and participated at least once in the ICA process both reported an approximately 10 per cent higher share of issues related to institutional arrangements compared with the group of the LDCs and SIDS and the group of developing country Parties that had submitted NCs only, respectively. Figure 11 provides a breakdown of the areas in which challenges and needs relating to cross-cutting issues were identified by the different groups of developing country Parties. Box 5 provides examples from the categories of identified cross-cutting issues.

Figure 11
Breakdown of areas in which challenges and needs relating to cross-cutting issues were identified, by group of developing country Parties



Box 5

Examples from categories of cross-cutting issues

Institutional capacity to sustain and improve the MRV and transparency process over time: Many developing country Parties reported that national reports were prepared on an ad hoc basis and did not result in a permanent process or team of national experts being set up. Recognizing the enhanced reporting requirements under the ETF, however, those Parties reported a strong need to establish a permanent framework to enable the preparation of national reports in a sustainable and timely manner and thus improve the quality of reporting over time. With this in mind, the need to establish or maintain a permanent team of experts was highlighted, along with the need to continue capacity-building efforts. In particular, a high staff turnover rate in government agencies was considered to have a key impact on longer-term MRV activities. Therefore, Parties reported the need to develop a dynamic training plan for existing, new and incoming technical experts involved in the reporting process and to ensure that technical capacity for different sectoral reporting is retained over time, while ensuring an adequate level of financial resources.

Coordination across sectors and institutions to collect and share data: Many developing country Parties reported challenges due to lack of a coordination mechanism for data-sharing among various stakeholders, which sometimes resulted in conflicts between different ministries and agencies. Several developing country Parties reported finding it important to communicate to stakeholders the mutual benefits arising from MRV activities in order to incentivize their engagement and boost commitment. Some developing country Parties identified the need to improve institutional coordination structures at both the cross-ministerial level (horizontal) and between national and subnational authorities (vertical).

Policy or legal arrangements that mandate the preparation of national reports: Many developing country Parties highlighted the importance of a legal or policy framework that mandates the preparation of national reports, as it can facilitate and formalize the sharing of data and information from relevant stakeholders and help secure permanent funding for reporting activities. Several developing country Parties reported this as a critical need in preparing for implementation of the ETF.