



CGE TECHNICAL PAPER 2020

DISTILLED

**UPDATED TECHNICAL PAPER ON PROBLEMS, CONSTRAINTS, LESSONS
LEARNED AND CAPACITY-BUILDING NEEDS IN PREPARING NATIONAL
COMMUNICATIONS AND BIENNIAL UPDATE REPORTS 2020**



**FEBRUARY 2021
CONSULTATIVE GROUP OF EXPERTS**

TRANSPARENCY

Transparency of climate action and support under the UNFCCC process includes measurement, reporting and verification (MRV) under the Convention and enhanced transparency framework under the Paris Agreement. Transparency is key to achieving the goals set out in the Convention and the Paris Agreement.

While countries have been engaging in the existing MRV arrangements under the Convention for many years, the Paris Agreement established an enhanced transparency framework (ETF) that applies common modalities, procedures and guidelines (MPGs) for all Parties with “flexibility to those developing country Parties that need it in the light of their capacities.”

Countries are at different starting points in terms of their capacities and experience in preparing for the ETF. While the existing domestic MRV systems will provide a solid basis for countries to prepare for and implement the ETF, capacity-building to developing countries will remain crucial to ensure all countries are able to engage fully and effectively in the new and enhanced processes and requirements established under the ETF.

The Consultative Group of Experts (CGE) is an expert group mandated to assist developing countries, through technical advice and support, improve their capacities to implement the existing MRV arrangements under the Convention and the ETF under Article 13 of the Paris Agreement in a timely and sustainable manner.

CGE TP 2020 DISTILLED

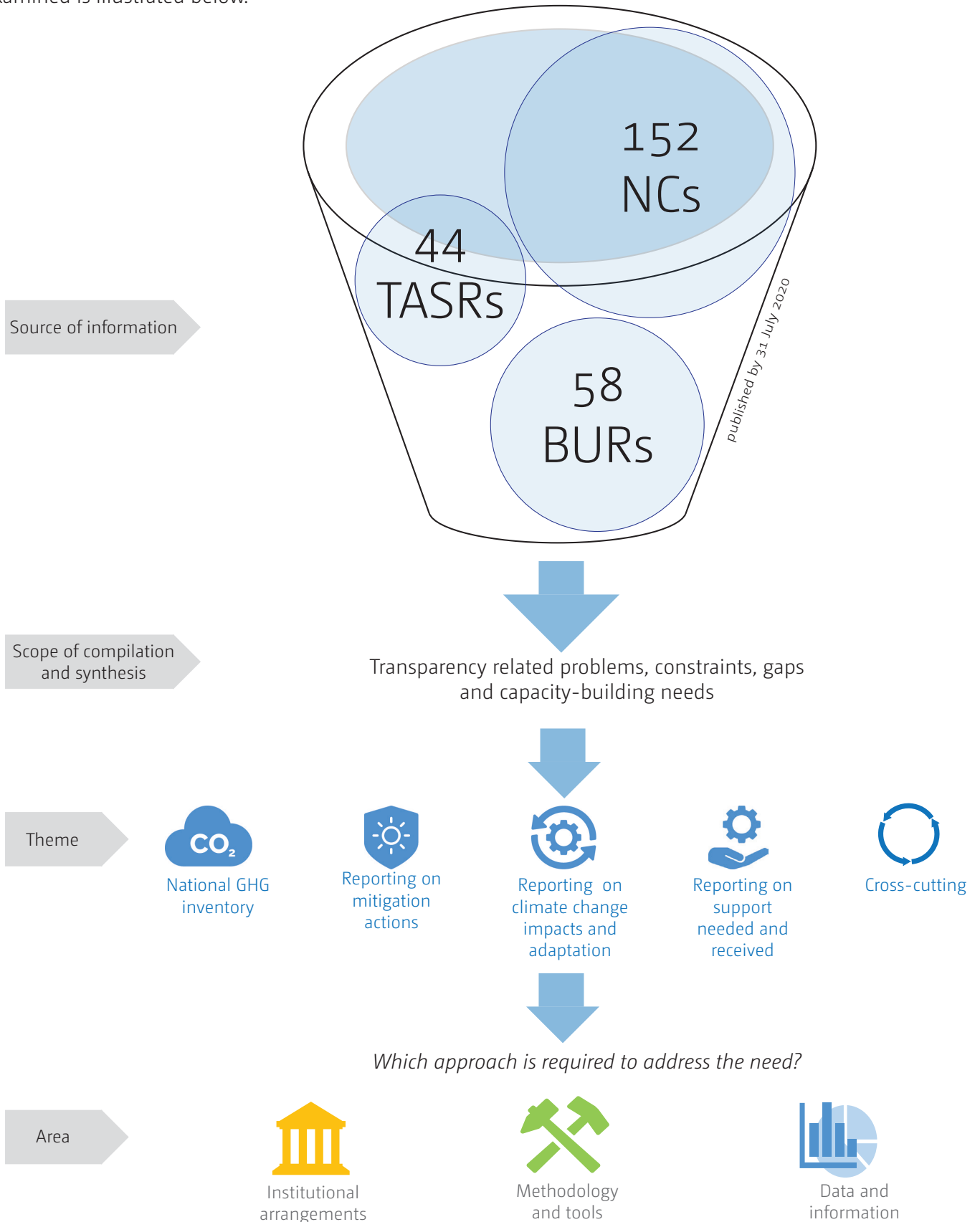
The CGE, with a view to providing technical assistance and support that responds to the needs of developing countries in a targeted and strategic manner, conducts an assessment of the existing and emerging constraints and gaps, lessons learned and capacity-building needs of developing countries in implementing the existing MRV arrangements and preparing for the ETF and prepares, annually, a technical paper containing the results.

The CGE TP Distilled series aims at conveying the information in a more user-friendly manner and reaching a broader range of support providers and MRV experts and practitioners. The CGE TP 2020 Distilled provides visual presentation of the information contained in the CGE updated technical paper published in 2020.

The information on the existing and emerging constraints and challenges, lessons learned and capacity-building needs draws on, among others, national communications (NCs) and biennial update reports (BURs) submitted by developing countries and summary reports on the technical analysis of BURs.

APPROACH TO THE COMPILATION AND SYNTHESIS

The information on problems and constraints, lessons learned and capacity-building needs identified by developing countries was compiled from various data sources. The scope and aspects of the information examined is illustrated below.



The aspects of the challenges and needs reported were examined by different groups of developing countries. The grouping of developing countries used for the compilation and synthesis is summarized below.

Developing country grouping

By geographical region:



- Africa;
- Asia-Pacific;
- Latin America and the Caribbean (LAC);
- Eastern Europe and Western Europe and other States (EE&WEO).

Taking into account special circumstances of the Least Developed Countries (LDCs) and Small Islands Developing States (SIDS):



- Group consisting of LDCs and SIDS;
- Group consisting of the other developing countries.

According to the level of engagement in the existing MRV arrangements:



- Group of developing countries that had submitted at least one BUR and participated at least once in the international consultation and analysis (ICA) process;
- Group of developing countries that had submitted NCs only.

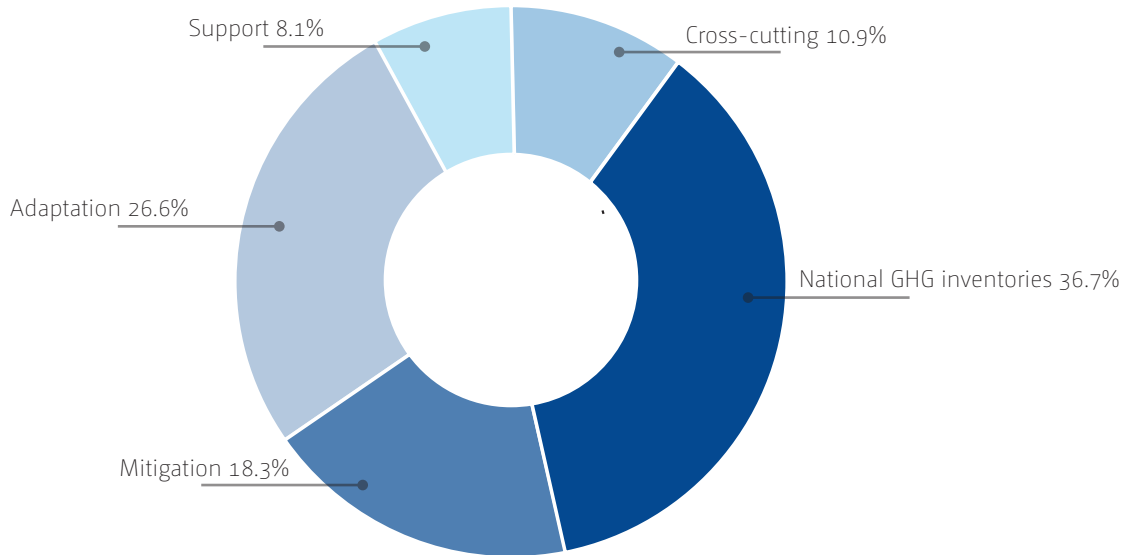


THEMATIC OVERVIEW OF THE CHALLENGES AND NEEDS

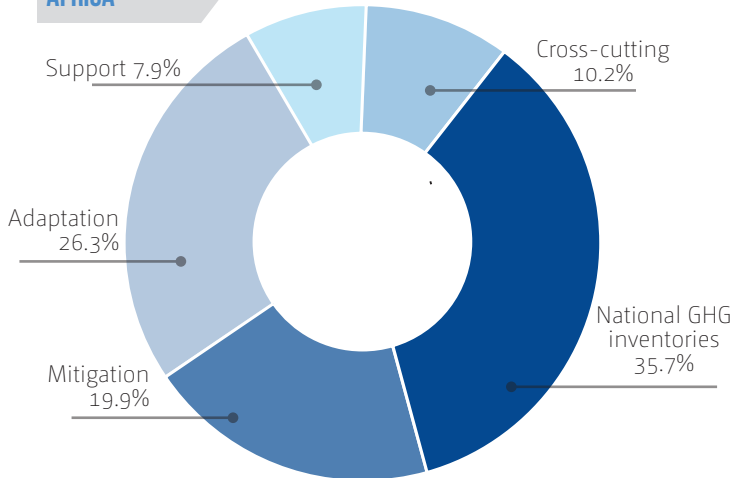
GLOBAL AND REGIONAL PICTURE

The themes under which challenges and needs were reported differed by region. The diagrams below show the thematic breakdown of the challenges and needs reported by developing countries at the regional and global level.

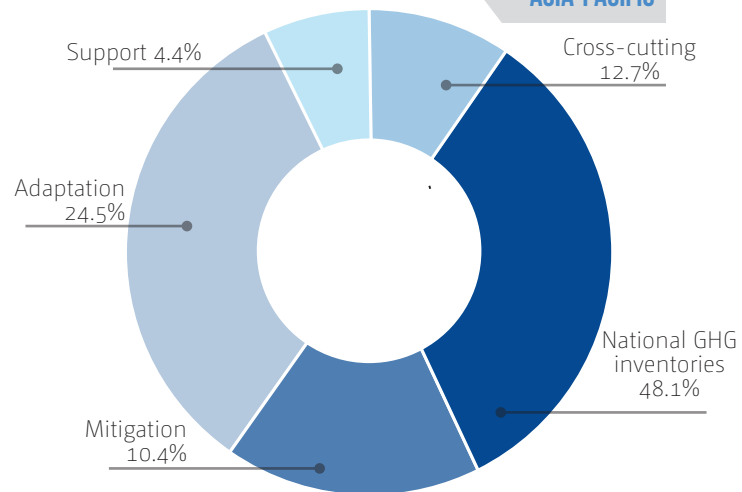
GLOBAL



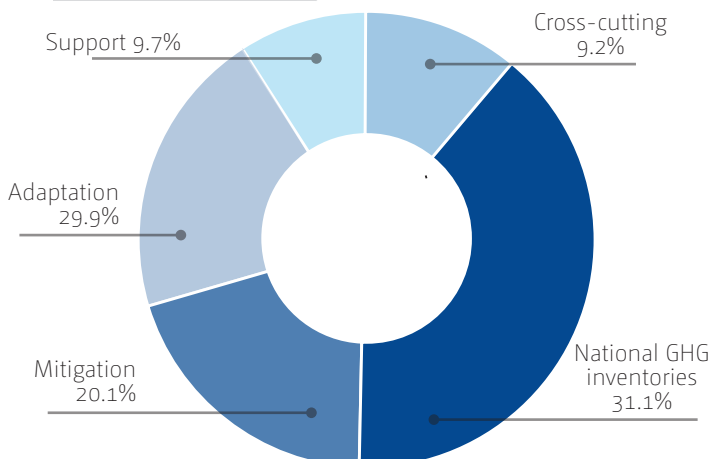
AFRICA



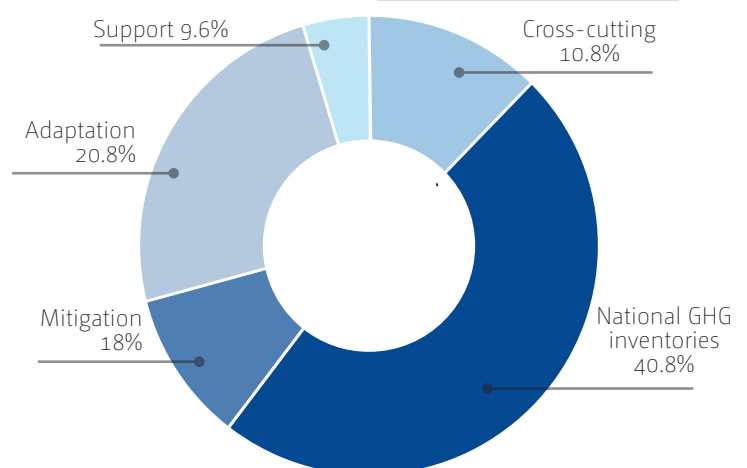
ASIA-PACIFIC



LATIN AMERICA AND THE CARIBBEAN



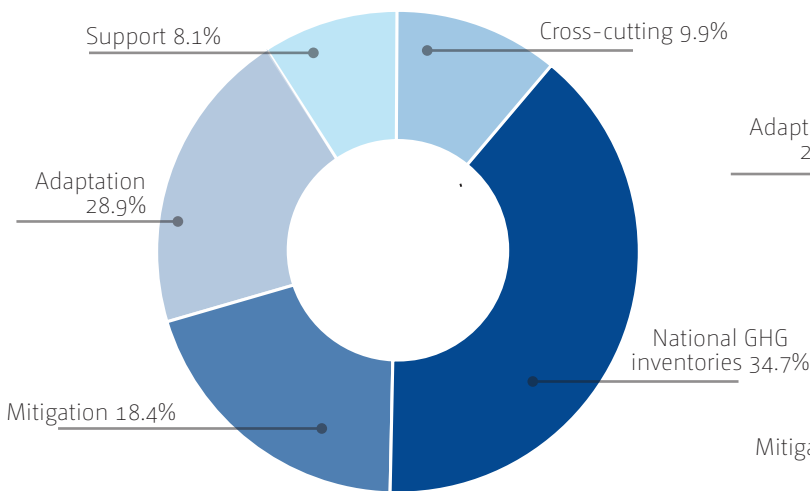
EASTERN EUROPE AND WESTERN EUROPE AND OTHER STATES



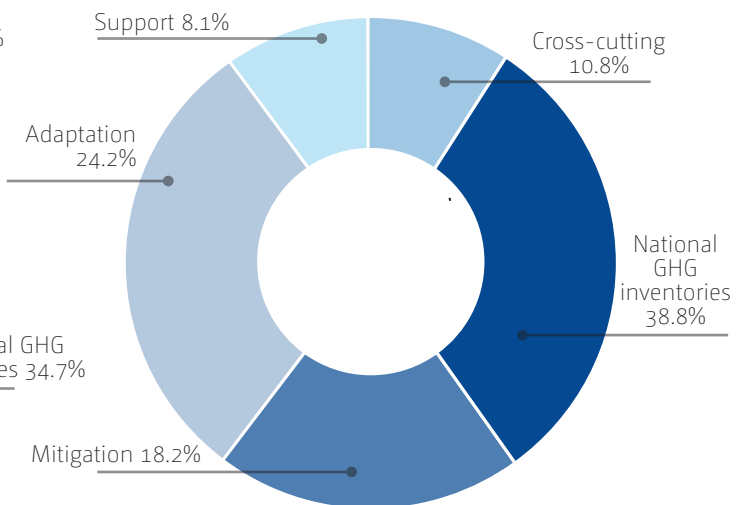
BY GROUP OF DEVELOPING COUNTRIES

The percentage breakdown by theme of reported challenges and needs differed by group of developing countries. See the diagrams below for a breakdown of the themes identified by the different groups of developing countries.

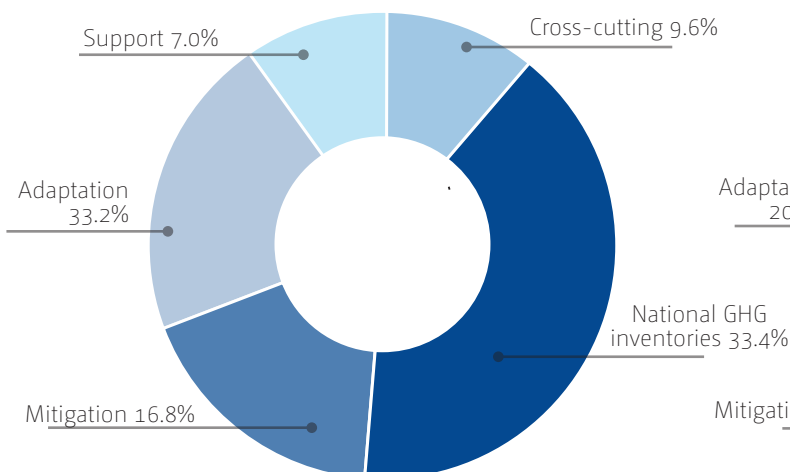
LDCs AND SIDS



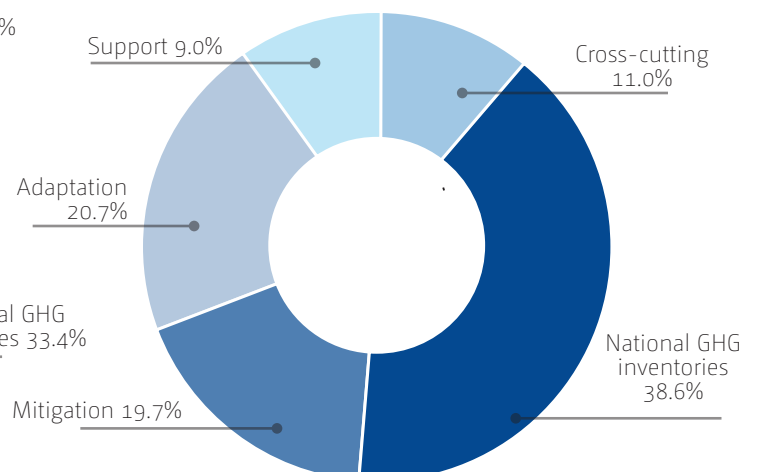
THE OTHER DEVELOPING COUNTRIES



NCs ONLY



BURs AND SUMMARY REPORTS AVAILABLE

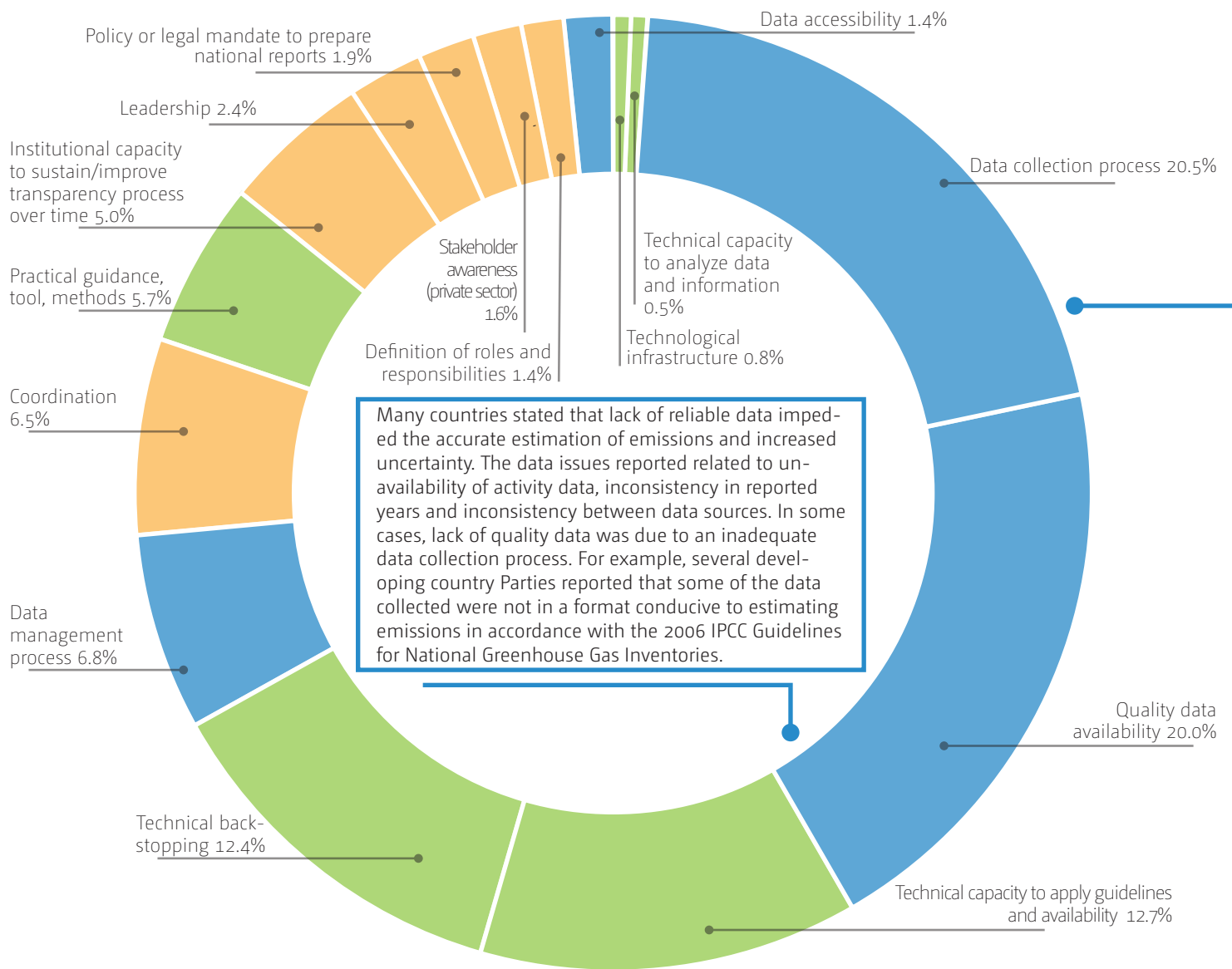




NATIONAL GREENHOUSE GAS INVENTORIES

GLOBAL PICTURE

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). Among 15 categories of issues identified, challenges due to lack of an adequate data collection process were most frequently reported, followed by issues pertaining to lack of availability of quality data and lack of technical capacity to apply existing guidelines, guidance, tools and methods. See the boxes for examples from the categories with the three highest shares of the identified issues.



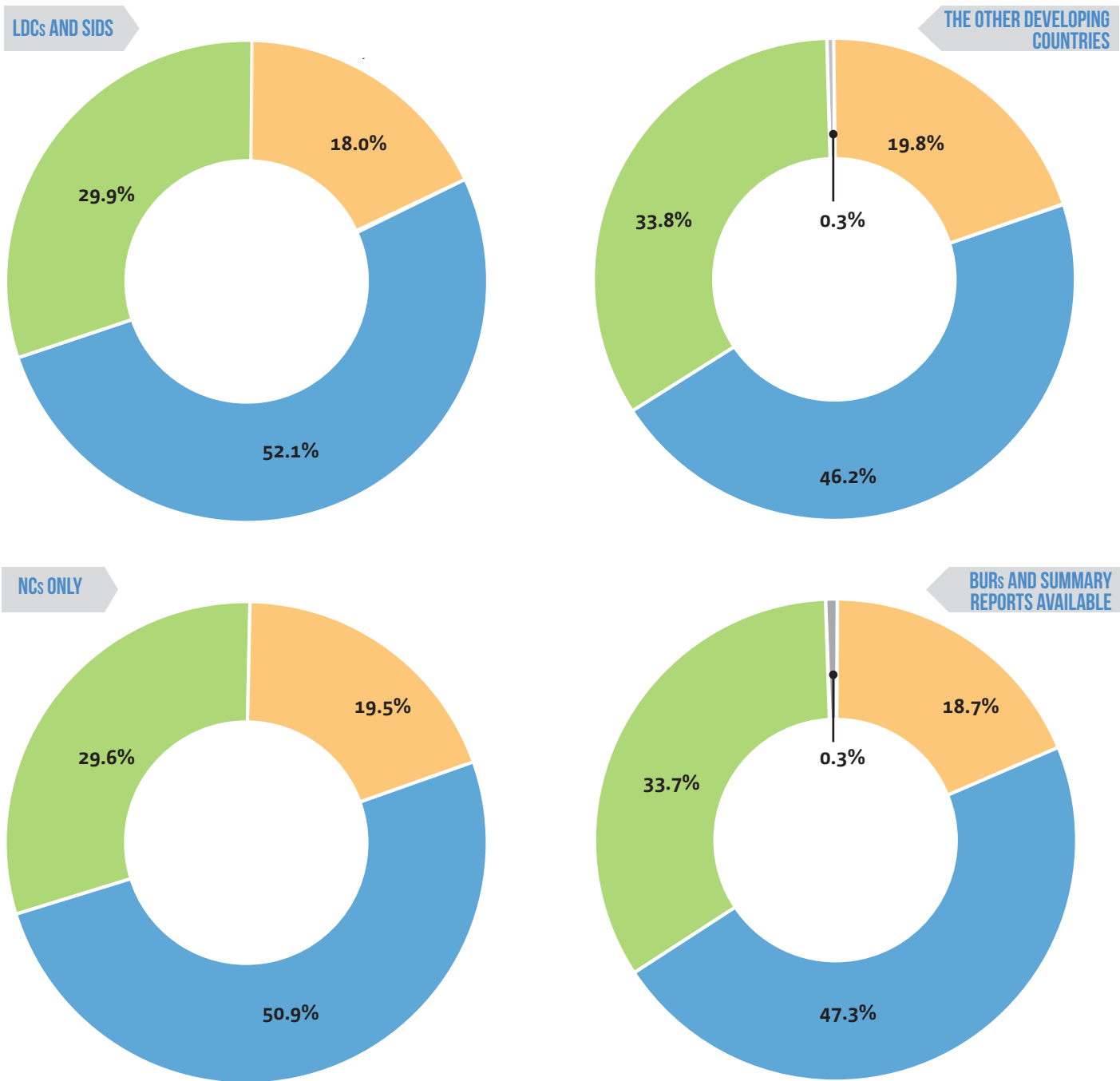
Many countries stated that lack of reliable data impeded the accurate estimation of emissions and increased uncertainty. The data issues reported related to unavailability of activity data, inconsistency in reported years and inconsistency between data sources. In some cases, lack of quality data was 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.


Many countries 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.

For many developing countries, 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.

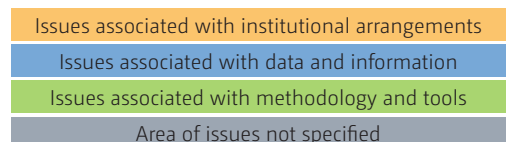
BY GROUP OF DEVELOPING COUNTRIES

The percentage breakdown by area of reported challenges and needs related to preparing national GHG inventories differed by group of developing countries, although there were similar patterns in the order by frequency of the reporting of challenges and needs in those areas. See the diagrams below for a breakdown of the areas identified by the different groups of developing countries.



 The number indicates the percentage of total reported issues under the theme.

The percentages may not total 100 due to rounding

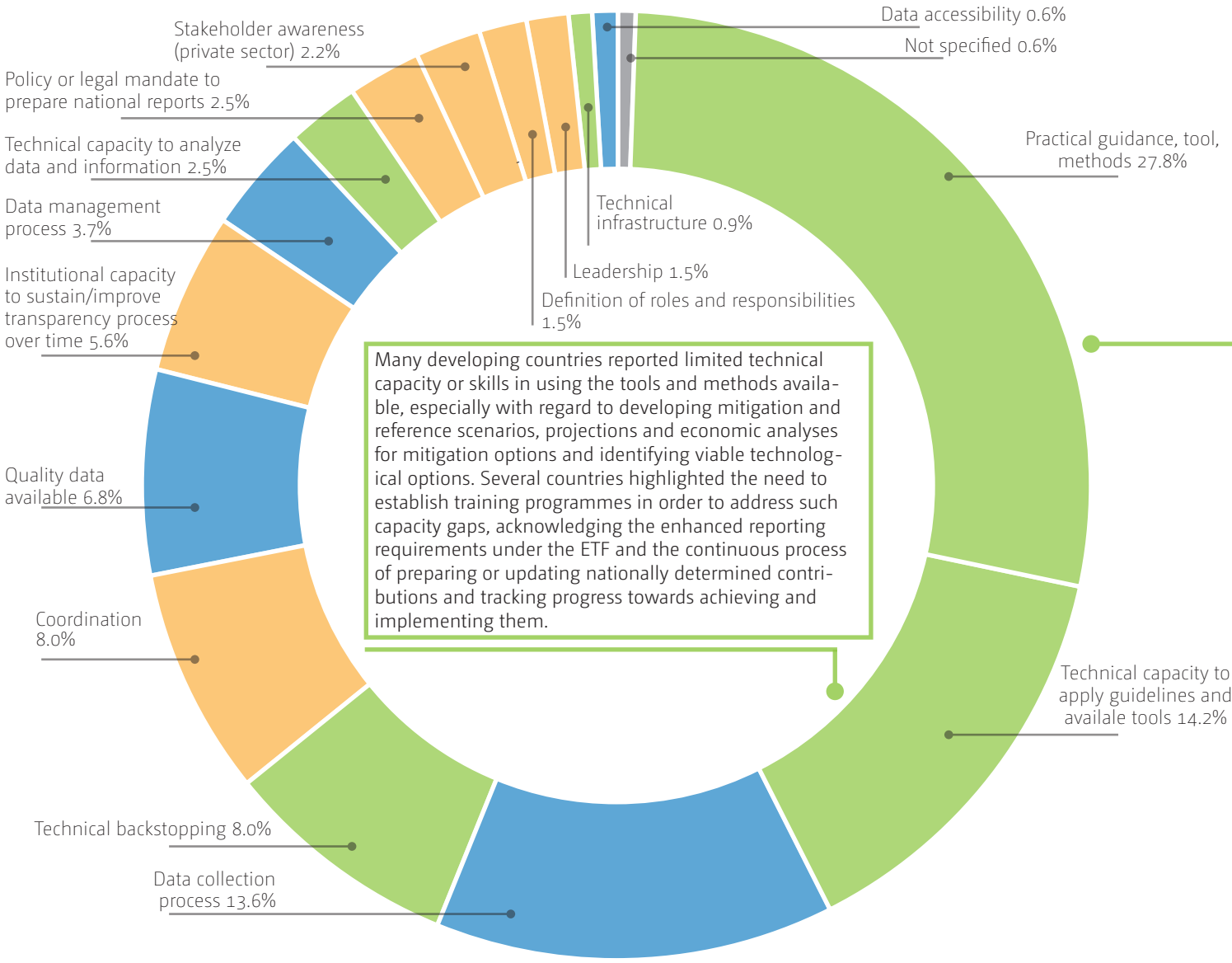




REPORTING ON MITIGATION ACTIONS

GLOBAL PICTURE

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). Among 15 categories of issues identified, challenges due to lack of practical guidance, tools and methods were most frequently reported, followed by issues pertaining to lack of technical capacity to apply existing guidelines, guidance, tools and methods and data collection process issues. See the boxes for examples from the categories with the three highest shares of the identified issues.



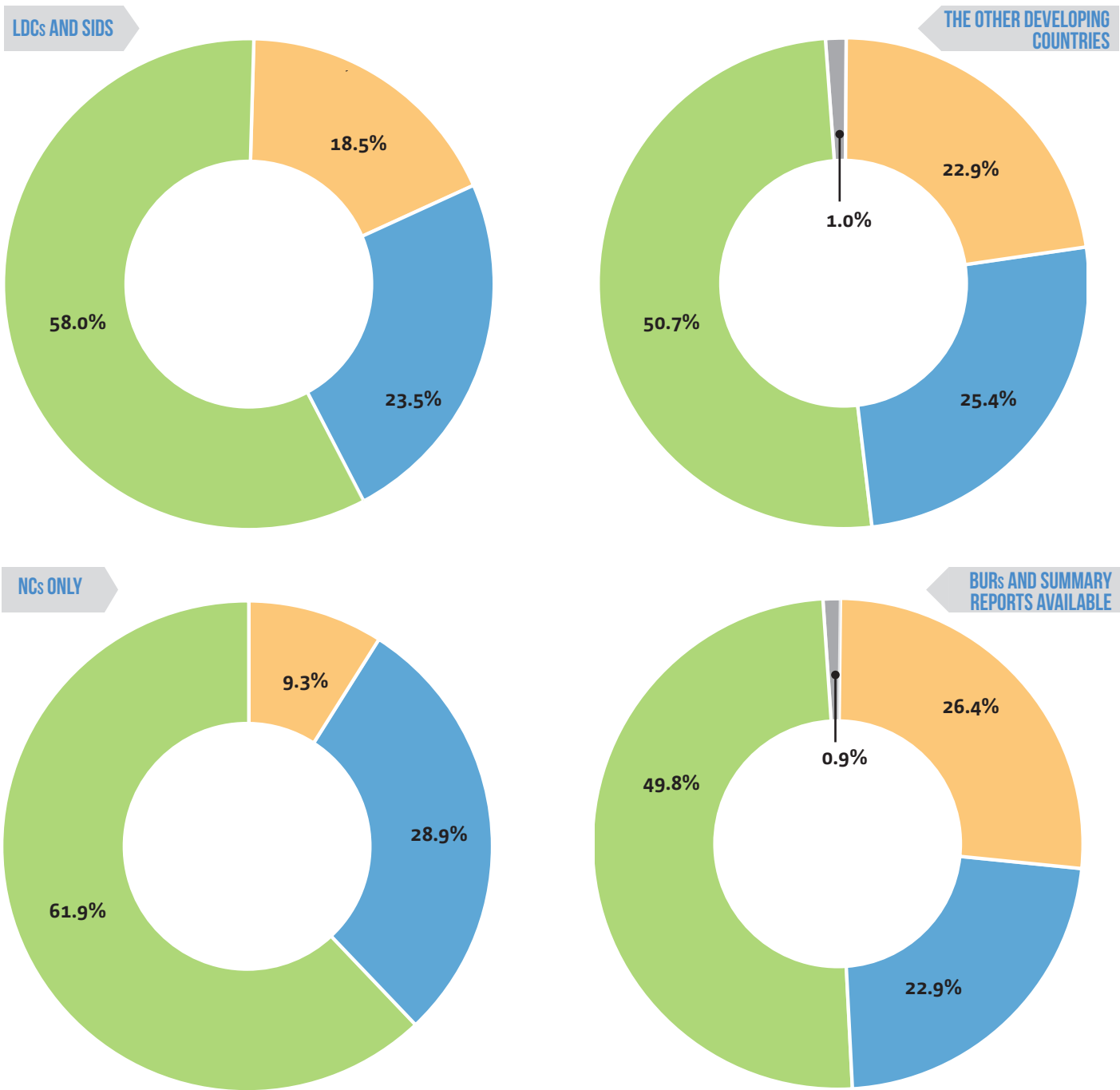
Many developing countries reported limited technical capacity or skills in using the tools and methods available, especially with regard to developing mitigation and reference scenarios, projections and economic analyses for mitigation options and identifying viable technological options. Several countries 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.


In some developing countries, 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 countries 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, countries 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.

Many developing countries 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 countries 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.

BY GROUP OF DEVELOPING COUNTRIES

The percentage breakdown by area of reported challenges and needs related to reporting on mitigation actions differed by group of developing countries, although there were similar patterns in the order by frequency of the reporting of challenges and needs in those areas. See the diagrams below for a breakdown of the areas identified by the different groups of developing countries.



 The number indicates the percentage of total reported issues under the theme.

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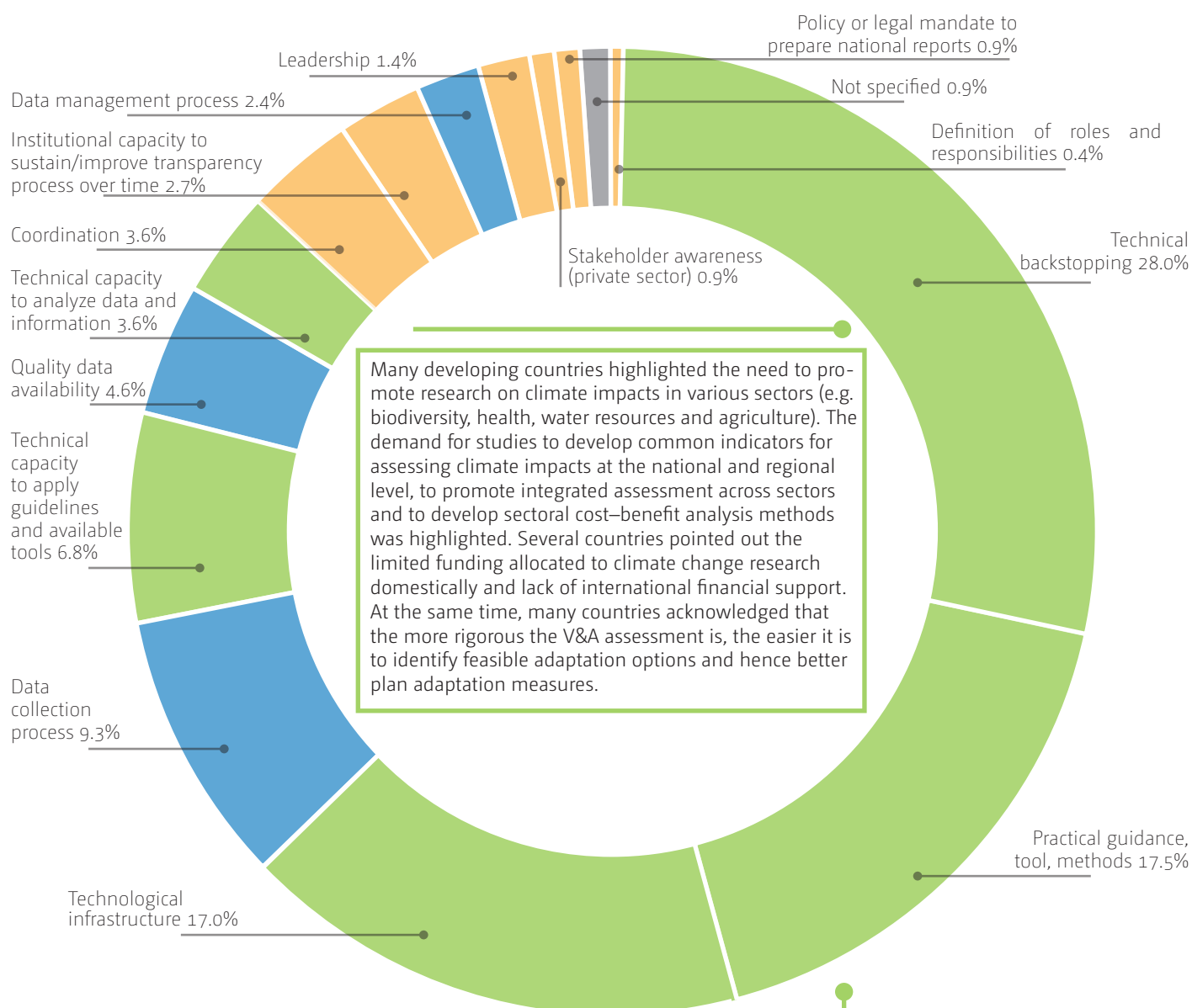
Issues associated with institutional arrangements
Issues associated with data and information
Issues associated with methodology and tools
Area of issues not specified



GLOBAL PICTURE

REPORTING ON CLIMATE CHANGE IMPACTS AND ADAPTATION

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). Among 14 categories of issues identified, the need for technical backstopping, including scientific research and studies, was most frequently reported, followed by challenges due to lack of practical guidance, tools and methods and the need to establish or maintain technological infrastructure. See the boxes for examples from the categories with the three highest shares of the identified issues.



Many developing countries highlighted the need to promote research on climate impacts in various sectors (e.g. biodiversity, health, water resources and agriculture). The demand for studies to develop common indicators for assessing climate impacts at the national and regional level, to promote integrated assessment across sectors and to develop sectoral cost-benefit analysis methods was highlighted. Several countries pointed out the limited funding allocated to climate change research domestically and lack of international financial support. At the same time, many countries acknowledged that the more rigorous the V&A assessment is, the easier it is to identify feasible adaptation options and hence better plan adaptation measures.

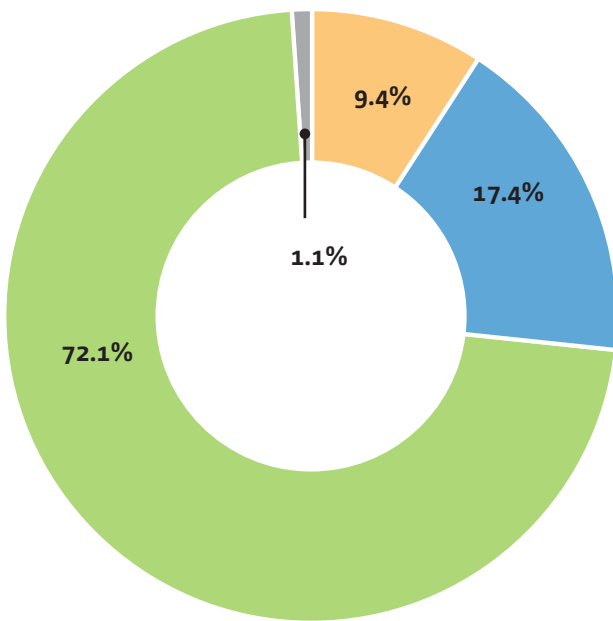
Many developing countries reported the need to establish, improve or maintain technological infrastructure with a view to improving data quality and addressing data gaps. Such infrastructure includes weather forecasting centres, hydrological stations, meteorological stations and climatological observation networks. Several countries 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.

Some developing countries 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.

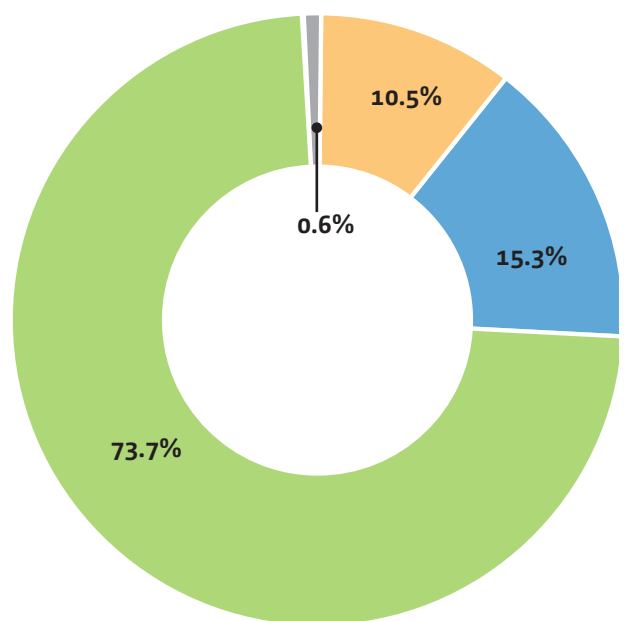
BY GROUP OF DEVELOPING COUNTRIES

The percentage breakdown by area of reported 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 countries. It is notable that the group of other developing countries 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 countries that had submitted NCs only, respectively. See the diagrams below for a breakdown of the areas identified by the different groups of developing countries.

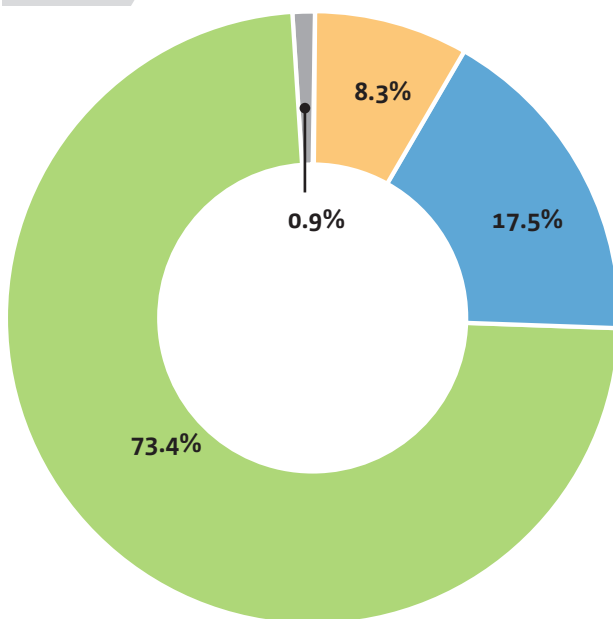
LDCs AND SIDS



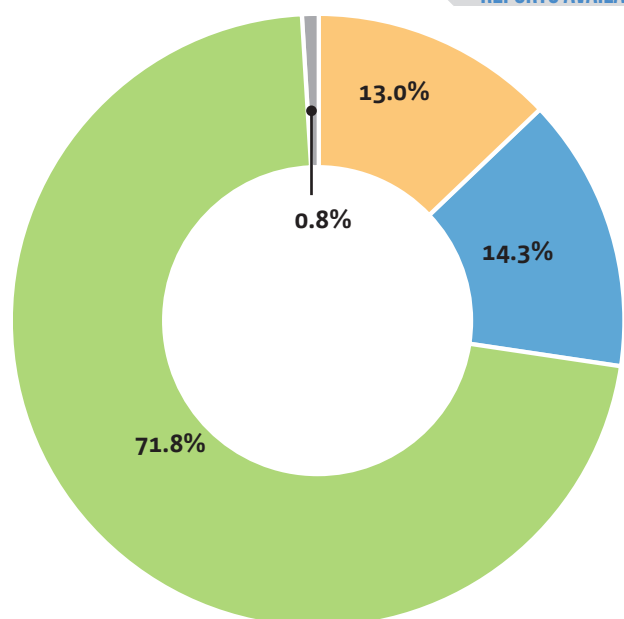
THE OTHER DEVELOPING COUNTRIES



NCs ONLY



BURs AND SUMMARY REPORTS AVAILABLE



 The number indicates the percentage of total reported issues under the theme.

The percentages may not total 100 due to rounding

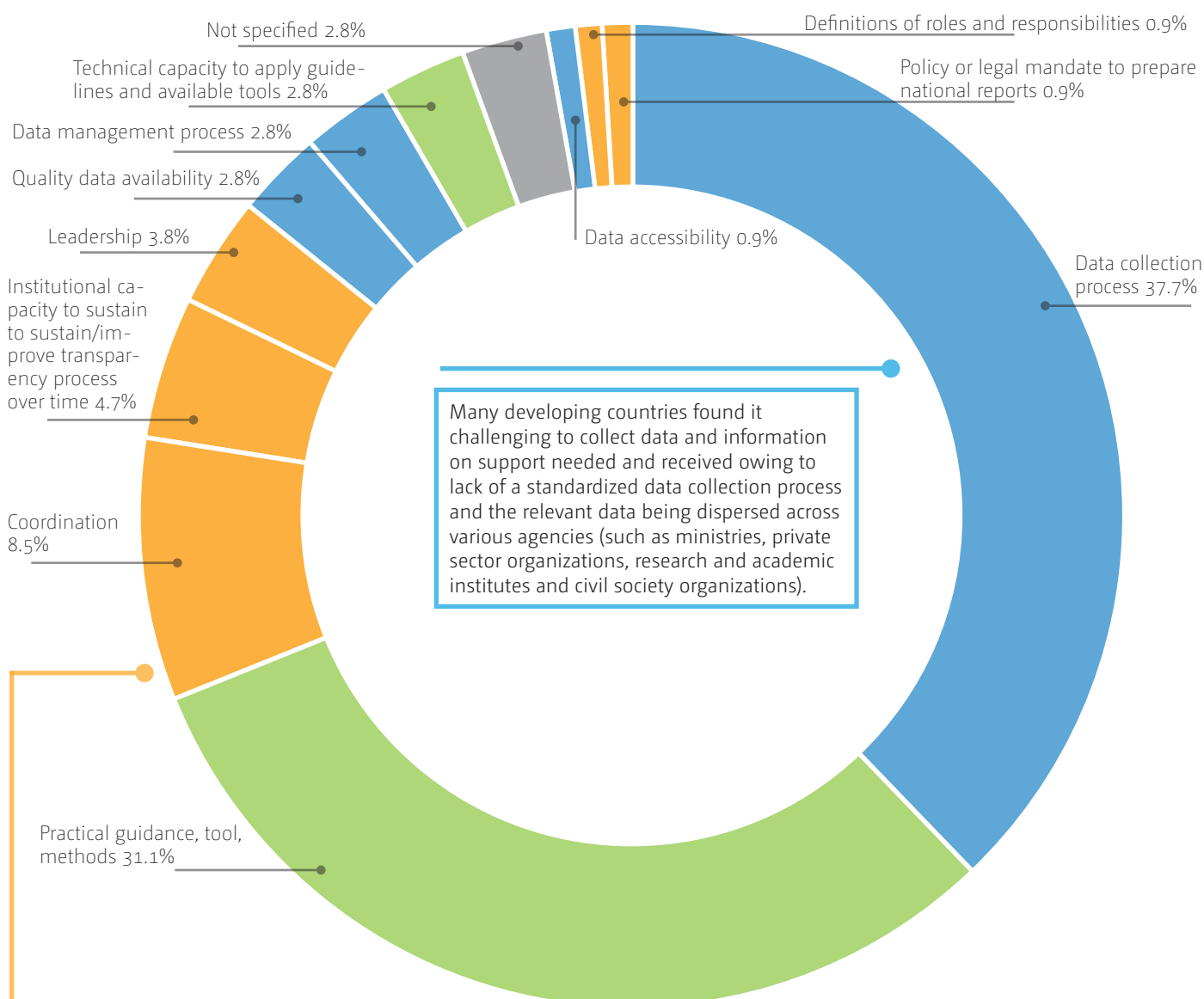
Issues associated with institutional arrangements
Issues associated with data and information
Issues associated with methodology and tools
Area of issues not specified



GLOBAL PICTURE

REPORTING ON SUPPORT NEEDED AND RECEIVED

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). Among 11 categories of issues identified, challenges due to lack of an adequate data collection process were most frequently reported, followed by issues pertaining to lack of practical guidance, tools and methods and lack of or insufficient coordination across sectors and institutions. See the boxes for examples from the categories with the three highest shares of the identified issues.



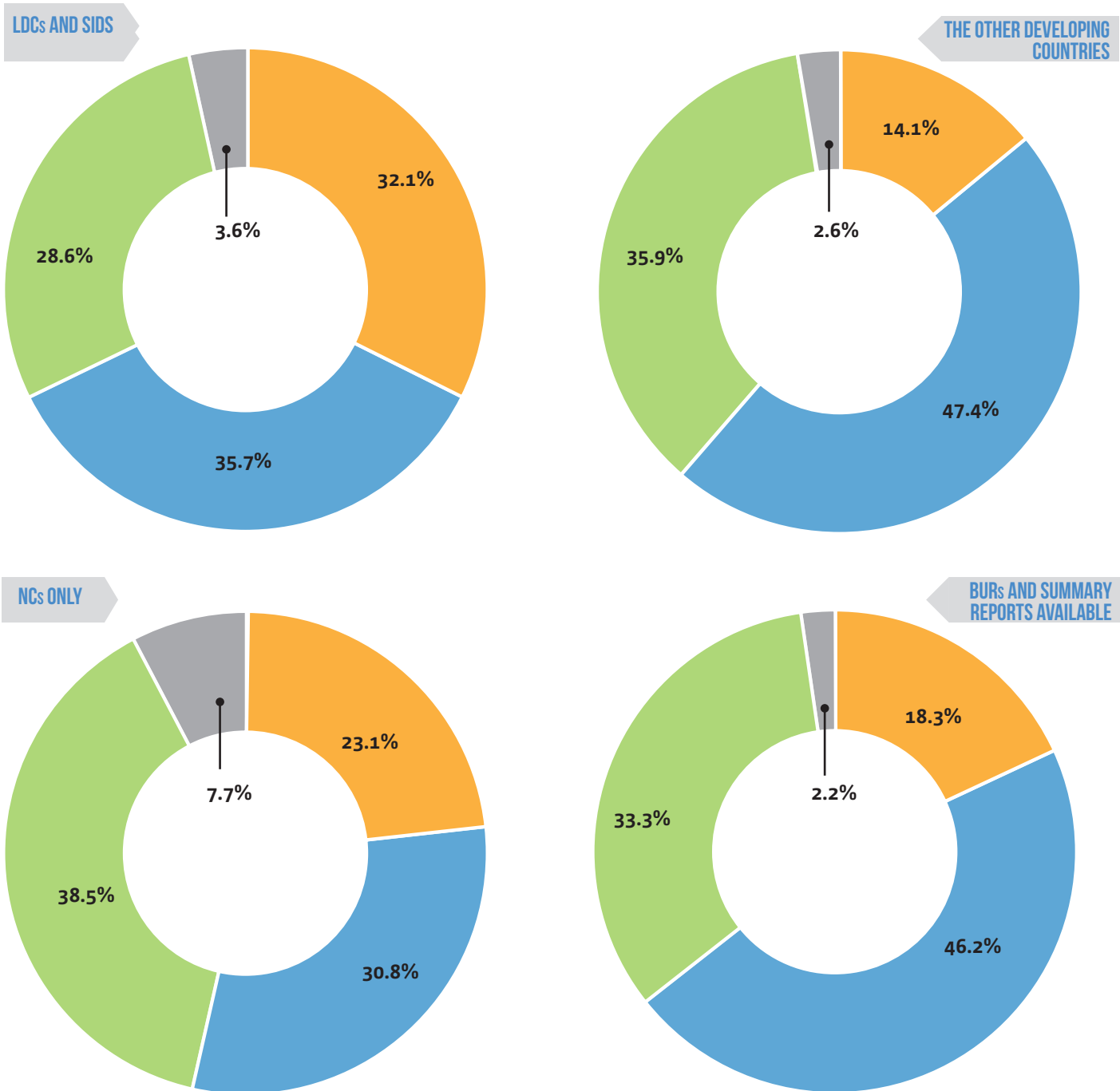
Many developing countries found it challenging to collect data and information on support needed and received owing to lack of a standardized data collection process and the relevant data being dispersed across various agencies (such as ministries, private sector organizations, research and academic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


Noting that data and information on support needed and received are dispersed across different agencies, many developing countries 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.

Several developing countries 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 countries 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.

BY GROUP OF DEVELOPING COUNTRIES

The percentage breakdown by area of reported challenges and needs related to reporting on support needed and received differed by group of developing countries. It is notable that the group of other developing countries and the group of those that had submitted at least one BUR and participated at least once in the ICA process reported a lower share of issues relating to institutional arrangements compared with the group of the LDCs and SIDS and the group of developing countries that had submitted NCs only, respectively. See the diagrams below for a breakdown of the areas identified by the different groups of developing countries.



 The number indicates the percentage of total reported issues under the theme.

The percentages may not total 100 due to rounding

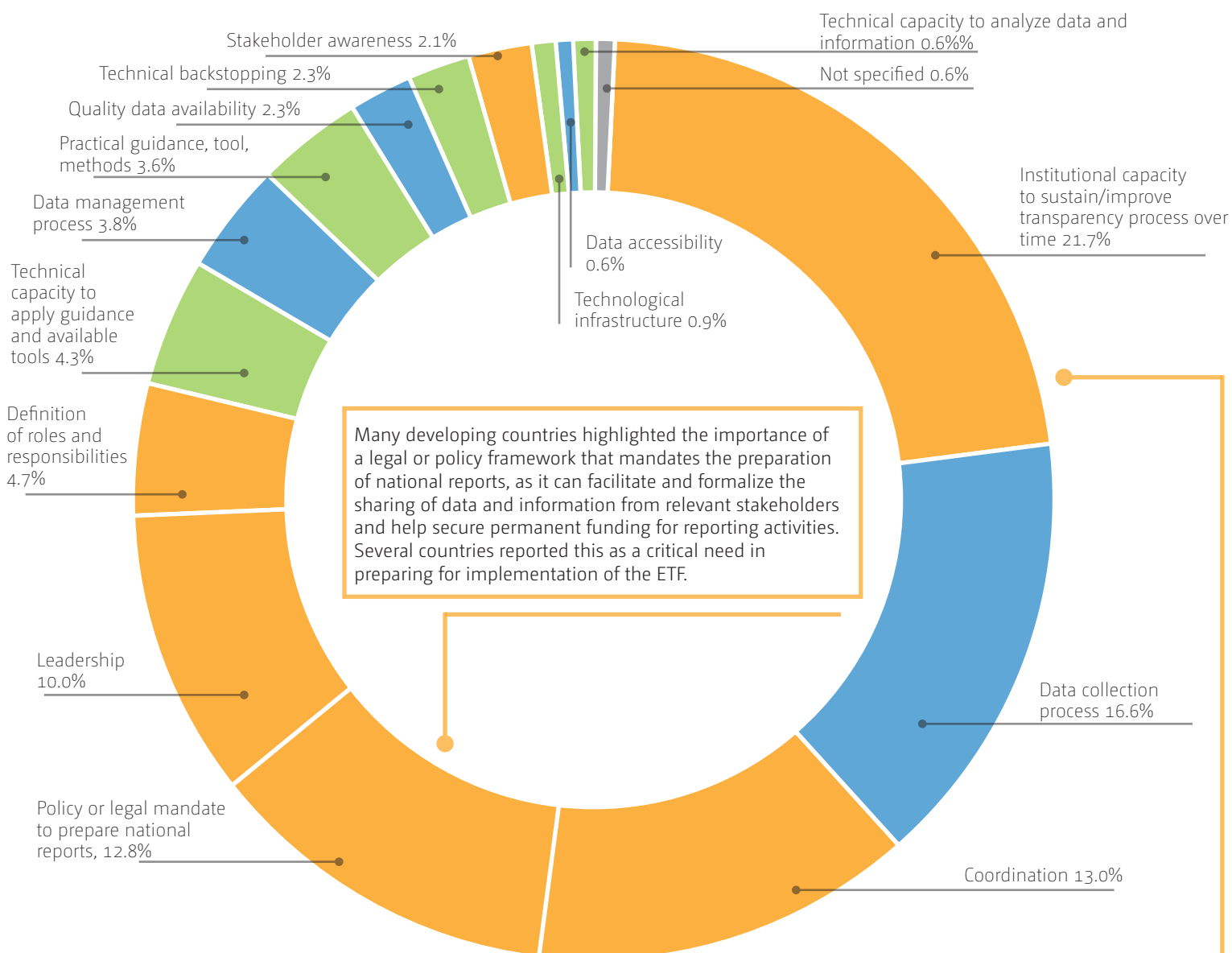
Issues associated with institutional arrangements
Issues associated with data and information
Issues associated with methodology and tools
Area of issues not specified



CROSS-CUTTING ISSUES

GLOBAL PICTURE

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). Among 15 categories of issues identified, challenges and needs pertaining to enhancing institutional capacity to sustain and improve transparency process over time were most frequently reported, followed by lack of an adequate data collection process and lack of coordination across sectors and institutions to collect and share data. See the boxes for examples from the categories of identified cross-cutting issues.



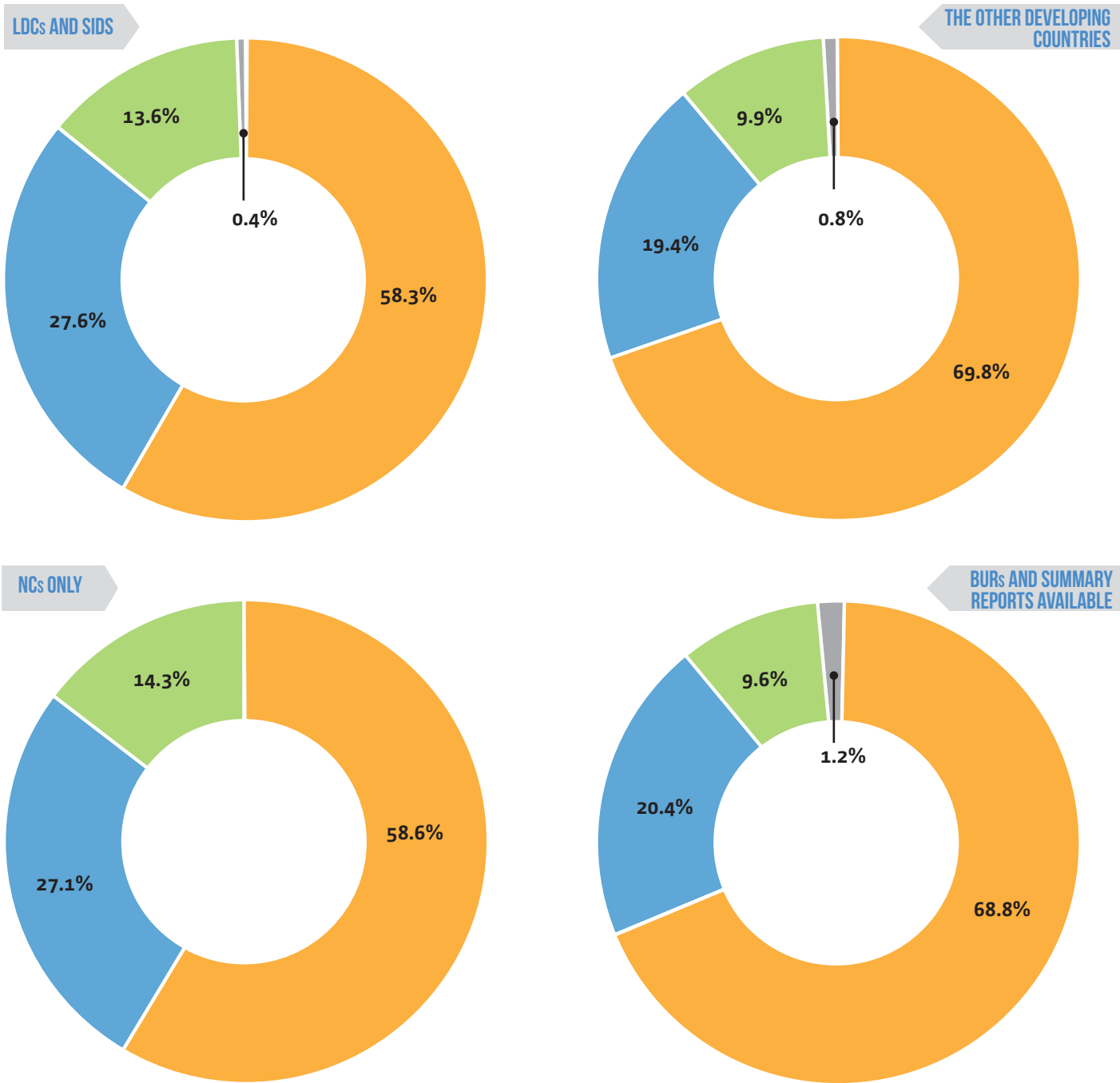
Many developing countries highlighted the importance of a legal or policy framework that mandates the preparation of national reports, as it can facilitate and formalize the sharing of data and information from relevant stakeholders and help secure permanent funding for reporting activities. Several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


Many developing countries 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 countries 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 countries identified the need to improve institutional coordination structures at both the cross-ministerial level (horizontal) and between national and subnational authorities (vertical).

In many countries, national reports were prepared on an ad-hoc basis. Recognizing the enhanced reporting requirements under the ETF, they 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. Further, a high staff turnover rate in government agencies was considered to have a key impact on longer-term MRV activities, hence the need to establish or maintain a permanent team of experts was highlighted, along with the need to continue capacity-building efforts. Countries reported the need to develop a dynamic training plan for existing, new and incoming technical experts and to ensure that technical capacity for different sectoral reporting is retained over time, while ensuring an adequate level of financial resources.

BY GROUP OF DEVELOPING COUNTRIES

The percentage breakdown by area of reported challenges and needs reported under this theme differed by group of developing countries, although there were similar patterns in the order by frequency of the reporting of challenges and needs in the areas. See the diagrams below for a breakdown of the areas identified by the different groups of developing countries.



 The number indicates the percentage of total reported issues under the theme.

The percentages may not total 100 due to rounding

Issues associated with institutional arrangements
Issues associated with data and information
Issues associated with methodology and tools
Area of issues not specified

