



United Nations

FCCC/SBI/2017/16



Framework Convention on
Climate Change

Distr.: General
27 September 2017

Original: English

Subsidiary Body for Implementation

Forty-seventh session

Bonn, 6–15 November 2017

Item 4(b) of the provisional agenda

Reporting from Parties not included in Annex I to the Convention

**Work of the Consultative Group of Experts on National Communications
from Parties not included in Annex I to the Convention**

Updated technical report by the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention on problems, constraints, lessons learned and best practices in the preparation of national communications and biennial update reports

Summary

This report compiles and synthesizes updated information from various sources on problems and constraints, lessons learned and best practices identified in the process and preparation of national communications and biennial update reports by Parties not included in Annex I to the Convention (non-Annex I Parties). The report will inform the work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention on the identification and provision of technical assistance to address the needs of non-Annex I Parties, and serve as a source of lessons learned and best practices for those Parties.

GE.17-17002(E)



* 1 7 1 7 0 0 2 *

Please recycle 



Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Introduction	1–7	3
A. Mandate	1–2	3
B. Scope of the note	3–6	3
C. Possible action by the Subsidiary Body for Implementation	7	4
II. Summary of the steps taken to compile and synthesize the information	8–10	4
III. Results of the compilation and synthesis.....	11–86	4
A. Institutional arrangements.....	12–27	4
B. National greenhouse gas inventories	28–46	6
C. Vulnerability and adaptation assessments.....	47–61	9
D. Mitigation measures.....	62–71	10
E. Cross-cutting issues	72–86	12

I. Introduction

A. Mandate

1. The Conference of the Parties (COP), at its nineteenth session, decided to continue the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) for a period of five years, from 2014 to 2018.¹

2. COP 19 also decided that the CGE, in fulfilling its mandate, shall continue to provide technical advice and support to Parties not included in Annex I to the Convention (non-Annex I Parties) in order to improve the process and preparation of national communications (NCs) and biennial update reports (BURs). The CGE shall, among other things:

(a) Identify and provide technical assistance regarding problems and constraints that have affected the process and preparation of NCs and BURs by non-Annex I Parties;²

(b) Provide information and technical advice based on, where possible, lessons learned and best practices in the process and preparation of NCs and BURs by non-Annex I Parties, including in relation to finance and other support available.³

B. Scope of the report

3. The CGE, in response to the above mandate, agreed to update, as part of its work programme for 2017,⁴ the technical report prepared in 2014⁵ compiling and synthesizing available information on the problems and constraints, lessons learned and best practices in the process and preparation of NCs and BURs by non-Annex I Parties.

4. The CGE conducted a survey in 2014, the results of which were fed into the technical report referred to in paragraph 3 above. As a follow-up to the first survey, the CGE decided to conduct a second round of the survey in 2017 to gather more up-to-date feedback from non-Annex I Parties as well as multilateral agencies involved in the process and preparation of NCs and/or BURs, with a view to complementing the existing compiled and synthesized information.

5. Because the themes covered in NCs and BURs overlap, it is logical to assume that most, if not all, of the problems and constraints, lessons learned and best practices identified in the process and preparation of NCs will be applicable to the process and preparation of BURs. This has been substantiated by the results of the surveys referred to in paragraph 4 above, in which a number of the respondents indicated that the problems and constraints, lessons learned and best practices relating to the process and preparation of NCs are relevant to those of BURs.

6. This is an update of the technical paper referred to in paragraph 3 above. It draws on the following sources, among others:

(a) NCs and BURs submitted by non-Annex I Parties;⁶

(b) The survey conducted by the CGE in 2017 on problems and constraints, lessons learned and best practices in the process and preparation of NCs and BURs;

(c) Past survey reports of the CGE and the Global Support Programme for Preparation of National Communications and Biennial Update Reports by non-Annex I Parties (Global Support Programme).

¹ Decision 19/CP.19, paragraph 1.

² Decision 19/CP.19, annex, paragraph 2(a).

³ Decision 19/CP.19, annex, paragraph 2(g).

⁴ Available at <http://unfccc.int/2608.php>.

⁵ FCCC/SBI/2014/INF.16.

⁶ In total, 137 NCs and 24 BURs from 137 non-Annex I Parties were submitted between 1 January 2006 and 15 October 2016.

C. Possible action by the Subsidiary Body for Implementation

7. Having considered this report, the Subsidiary Body for Implementation may wish to make recommendations to the COP on the actions necessary to address the identified constraints and gaps, and to provide further guidance to the CGE, as appropriate, on the provision of technical assistance to non-Annex I Parties for the process and preparation of NCs and BURs.

II. Summary of the steps taken to compile and synthesize the information

8. Between April and June 2017, the CGE compiled and synthesized existing information on problems and constraints, lessons learned and best practices in the process and preparation of NCs and BURs by non-Annex I Parties, including the challenges and needs reported by non-Annex I Parties in their most recent NCs and BURs.

9. With a view to complementing the compiled information with more up-to-date information, the CGE conducted an online survey, from 15 June to 1 August 2017, focused on problems and constraints, lessons learned and best practices in the process and preparation of NCs and BURs by non-Annex I Parties.

10. By the closing date, a total of 92 respondents, comprising national focal points, NC and/or BUR project coordinators and national greenhouse gas (GHG) inventory coordinators, from 58 non-Annex I Parties had participated in the survey. Of the 58 non-Annex I Parties represented, 14 respondents were from the African region, 33 from the Asia-Pacific region, 20 from the Latin American and Caribbean region, and 7 from the Eastern European and Western European and other States. The number of respondents per non-Annex I Party ranged from one to three.

III. Results of the compilation and synthesis

11. This chapter contains the results of the compilation and analysis, clustered as relating to the following: institutional arrangements; national GHG inventories; mitigation measures; vulnerability and adaptation assessments; and other cross-cutting issues.

B. Institutional arrangements

12. This section presents problems and constraints, lessons learned and best practices relating to institutional arrangements for managing the process and preparation of NCs and BURs.

1. Problems and constraints⁷

13. The structure and affiliation of government institutions related to climate change are subject to frequent changes. Experts vacate their posts for different reasons, and very often the knowledge and technical capacity of their replacement is inadequate. This high turnover of climate change staff creates a capacity issue as the departing individuals are, in most cases, the lone expert in their field. Additionally, the departure of these experts usually also means a loss of already established networks for data collection.

14. Inadequate specific legislative and/or policy support for climate change initiatives usually results in an insufficient institutional basis for the preparation of NCs and BURs. Consequently, the responsible institution is unable to justify the resource commitment for the preparation and submission of national reports. Further, a lack of legislation renders data collection from the private sector extremely challenging, especially in cases where data collection and storage involve costs.

⁷ All the problems and constraints included in this report were identified by non-Annex I Parties themselves.

15. Public institutions usually have an insufficient number of qualified personnel possessing the technical knowledge required to undertake technical studies and the understanding of methodologies for the preparation of NCs and BURs. Training workshops held to address this issue are not very effective because there is insufficient time for the training and some attendees lack a suitable background to fully benefit from the knowledge delivered.

16. Consultants were, in most cases, contracted to prepare the initial NCs, with experts from responsible ministries primarily involved in facilitating and completing the work. Consequently, the staff from the responsible ministries failed to benefit from the capacity-building associated with undertaking the process of preparing and submitting the NC.

2. Lessons learned⁸

17. Through the scope of the national reports, non-Annex I Parties have realized that climate change is no longer an issue that can be delegated to one ministry or a few institutions; rather, it is a matter to be taken up by a central office of the national government (for example, by the Prime Minister or President). Further, Parties have taken note that the preparation of national reports can be facilitated when the process is acknowledged in and aligned with national development priorities.

18. Some non-Annex I Parties are revisiting and aligning their policies, strategies, plans and programmes with emerging issues, particularly in the context of sustainable development and climate change. Institutional frameworks are being established and/or strengthened and made relevant in order to readily address the risks posed by climate change for social and economic development.

19. Some non-Annex I Parties have established new entities responsible for the process and preparation of NCs and BURs. The types of institution are varied, ranging from a sectoral/technical working group, steering committee, interministerial commission, national coordination meeting mechanism, or climate change technical team, to a measurement, reporting and verification (MRV) task force. The members of such institutions are expected to be familiar with the objectives of the UNFCCC and the obligations of Parties. They are responsible for coordinating climate change initiatives within relevant ministries and helping with the facilitation of the process of preparing NCs and BURs. This approach is expected to ensure that government data sources are readily available for the preparation of national reports. Additionally, some non-Annex I Parties are establishing networks with ongoing national climate change activities, including projects for reducing emissions from deforestation and forest degradation.

20. As a way of increasing awareness of climate change and its impacts, as well as improving the ability to assess the country's vulnerability, Parties are involving experts from government institutions, research institutions, universities, the private sector, civil society organizations, women's and indigenous groups, the general public and municipalities. The involvement of these stakeholders has the potential to ensure that the preparation of NCs and BURs is a continuous process, is aligned with national priorities and enhances the sharing of data and information at the national, local, government and private sector levels. This is also perceived as a way of building capacity at all levels for the future preparation of national reports.

21. Collaboration with relevant international organizations is positively viewed by Parties as a way of improving the presentation, sequence and relevance of the information in NCs and BURs. Such collaboration is also seen as useful in evaluating the level of uncertainty of information generated by consultants and for enhancing domestic capacity for the preparation of future reports. Additionally, the assistance of the Global Support Programme, the Intergovernmental Panel on Climate Change (IPCC) and international consultants through the provision of the latest guidelines, methodologies, training and

⁸ All the lessons learned included in this report were identified by non-Annex I Parties themselves and they refer to any observation made during the process and/or preparation of NCs and/or BURs. They could have a positive, negative or neutral effect.

workshops has been very beneficial to Parties and contributed to improvements in the preparation of subsequent NCs and/or BURs.

3. Best practices⁹

22. The establishment of memorandums of understanding or other forms of formal agreement with data providers, from the public and private sectors, as well as their involvement in national reporting initiatives, has proved to be beneficial for the collection and processing of data, which in turn has contributed to improved reliability, fostered national ownership and increased national confidence in the results of NCs and BURs. Some non-Annex I Parties, in establishing memorandums of understanding, assured the private sector that information provided would not be used, for example, to increase taxes, but strictly for the purpose of preparing NCs and BURs.

23. Some non-Annex I Parties have found it beneficial to organize and implement information campaigns aimed at raising the awareness of the public and policymakers. Such campaigns have contributed to involving more stakeholders in the preparation of NCs and BURs.

24. Some non-Annex I Parties have found it beneficial to establish an expert group for each thematic area of the NC, with a coordinator who reports to the NC project manager and presents regular updates to a national steering committee. The expert group coordinator ensures that the content for the thematic area is consistent with the relevant sections of the national reporting guidelines within agreed timelines.

25. Attending training workshops has helped both consultants and government officials in the preparation of NCs and BURs by enhancing their capacity to complete the reporting process, and initiated the creation and institutionalization of the process by ensuring a sustained availability of expertise in the different sectors.

26. A few non-Annex I Parties noted the positive impacts of establishing a national inventory system, including institutional arrangements, a GHG database, reviewing processes, quality control/quality assurance and planning.

27. One non-Annex I Party found it a good practice to hire a non-governmental organization for the development of quarterly newsletters on its NC project. This was seen as a cost-effective tool that largely contributed to the effective communication of climate change issues to a wide audience. It was highly appreciated by national partners and has been referenced at various events.

C. National greenhouse gas inventories

28. This section presents problems and constraints, lessons learned and best practices relating to national GHG inventories in the process and preparation of NCs and BURs.

1. Problems and constraints

29. In most cases, custodians of relevant data do not engage in data collection with the preparation of national GHG inventories as the primary objective. Consequently, the format of the data might not be suitable for the purpose of the national GHG inventory or the data might be incomplete. Some of the specific data collection problems identified by non-Annex I Parties include that:

(a) Data are highly aggregated and therefore unsuitable for the preparation of a national GHG inventory that is consistent with the IPCC guidelines;

(b) Data management systems for national GHG inventories are inadequate, rendering data archiving and use challenging. In most cases, custodians of data do not have the capacity to archive them for several years and tend to lose track of data archived over a

⁹ All the best practices included in this report were identified by non-Annex I Parties themselves and they constitute any lesson learned and implemented over a period of time that resulted in an observable improvement in the process and/or product.

period of years. Also, data are archived in different formats and in multiple locations across different agencies, and, as such, obtaining and using them is challenging. This challenge often leads to a failure to retain institutional memory;

(c) Data collection lacks formal arrangements and the data are often assembled from various sources, thus uncertainty increases. In addition, the data are often without sufficient metadata. This renders the data unverifiable and inconsistent.

30. Some non-Annex I Parties have found the default emission factors and/or other emission factors contained in the IPCC emission factor database not to be applicable to their national circumstances. While the use of country-specific emission factors would reduce uncertainty and increase the accuracy of national GHG inventories, most non-Annex I Parties lack the expertise and resources to facilitate their development.

31. Parties with ineffective institutional arrangements tend to collect activity data on an on-demand basis, with no obligation on the part of data generators to periodically collect and submit complete data to the NC/BUR team or a designated national GHG emission data coordination centre. Some companies are prepared to use litigation to avoid sharing data for the preparation of national reports.

2. Lessons learned

32. Some non-Annex I Parties are taking advantage of work done in other projects related to the UNFCCC process. For example, country-specific emission factors and methodologies developed in sustainable transport, energy efficiency and biomass projects, mostly funded by the Global Environment Facility (GEF), are being used in preparing national GHG inventories.

33. Better statistical sampling and standardized measurements are perceived by non-Annex I Parties to be means of improving the quality of country-specific emission factors. Industry associations are being engaged in developing country-specific emission factors in some non-Annex I Parties. Further, work to develop methods for collecting primary data rather than relying on secondary data has been carried out in some non-Annex I Parties.

34. Updating and revising details and assumptions included in previous NCs has improved the quality of data available to some non-Annex I Parties for the preparation of their national GHG inventories. The updates and revisions are being done by consulting recently published national economic development and demographic parameters in order to develop more accurate estimates.

35. Non-Annex I Parties are developing various ways of dealing with data-related issues, including:

(a) Raising the awareness of data custodians and key stakeholders of data gaps and methods for data collection, as well as dedicating resources to exploring approaches to dealing with data gaps. For addressing smaller data gaps, and when attempting to make highly aggregated data useful, some non-Annex I Parties have used extrapolation, averages, downscaling and expert judgment. Memorandums of understanding with relevant institutions to facilitate data sharing are being established in cases of data scarcity, while other non-Annex I Parties have created and shared simple data collection spreadsheets with relevant departments. The latter approach has been accompanied by training courses for professionals working in relevant sectors, with a view to harmonizing understanding and ensuring consistency;

(b) Ensuring the continuous flow of data from national institutions to the designated entity for the preparation of NCs and BURs by establishing a national GHG inventory system to collect and organize data according to the IPCC national GHG inventory sectors and to disseminate GHG emission data. The primary components of such a system are a national registration and reporting platform, indicators and baselines for each sector, and a verification system for assessing uncertainties and quality control;

(c) Advocating for the creation of a legal instrument (by-law or regulation) that will require the disclosure, on a continuous basis, of activity data by major GHG emitters to the ministry responsible for the environment. In some cases, the establishment of new

legislation was followed by the creation of a new entity responsible for facilitating coordination with stakeholders, including the public and private sectors, while in other cases the set-up of a designated entity preceded and the entity has been working on developing a legal instrument;

(d) Documenting the steps in the data collection process and annotating collected data to help maintain institutional memory and serve as the basis for a larger data depository.

36. Some non-Annex I Parties are using intra-team peer review for quality assurance. For example, the agriculture team's contribution is reviewed by the energy team, and the land use, land-use change and forestry team's by the agriculture team, whose results are in turn reviewed by the waste team, and so on. These intra-team reviews are included as a task in each team member's terms of reference.

37. Some non-Annex I Parties recommend a system with a minimum of two experts per sector, one responsible for entering the GHG data while the other(s) check(s) and either validate(s) or trigger(s) a recalculation. The recalculation, when triggered, is performed by both/all experts to ensure that the final results truly reflect the national GHG inventory for that sector.

38. Some non-Annex I Parties are working on tailoring the relevant IPCC guidelines and guidance documents to their specific national circumstances, and on training national experts across sectors in using these tailored guidelines and guidance documents in order to meet reporting requirements.

3. Best practices

39. Regional capacity-building GHG inventory workshops on improved reporting tools conducted by the UNFCCC have reportedly enhanced the capacity of existing national experts and increased the pool of experts within a range of national institutions, as well as provided a platform for sharing experience and lessons learned. The workshops have reportedly contributed to the value clarification of national emission factors, the refinement of activity data and the analysis of GHG inventory categories.

40. To address gaps in activity data, some non-Annex I Parties have prepared a summary report that identifies the gaps, and a template to guide national institutions with the collection of data, which have proven to be effective. By sharing these documents with the institutions concerned, some NC teams have obtained good-quality data that is complete and with sufficient detail to enable the application of an IPCC tier 2 estimation methodology for some subsectors. This has yielded good results in cases where industry actors have the needed activity data but do not want to share them because they are not required to do so.

41. A few non-Annex I Parties have established sectoral focal points in key ministries for data management and created avenues for improving data sharing among institutions. The sectoral focal points are also responsible for regularly monitoring and performing consistency checks on collected data, which are expected to reduce inconsistency in data sets, reviewing methodological suitability, making suggestions to revise/update the spreadsheets and performing quality control.

42. A few non-Annex I Parties have found it a good practice to use the Monte Carlo simulation (a tier 2 methodology) for the uncertainty assessment for key categories.

43. To deal with highly aggregated activity data, some non-Annex I Parties have filtered one kind of information out of another and/or created coefficients (based on expert experience) that can be used to split aggregated information into different values, and reported positive results. Though time-consuming and labour-intensive, teams that have factored in time for such work during the planning phase have found it rewarding.

44. Some non-Annex I Parties have found organizing sectoral meetings on the topic of collection of information, in which activity data and emission factors are regularly discussed, to be valuable. It is recommended to accompany these activities by a centralized

information system for all relevant data generated during the inventory process so as to allow a constant comparative assessment.

45. National stakeholder workshops focusing on providing a general introduction to the national reporting process, rather than technical meetings, have also been beneficial. As a kick-off meeting, the workshops have brought in a wide range of stakeholders, and, by introducing how the process and preparation of NCs and BURs is linked to their daily work, they have effectively encouraged the participation of stakeholders. The workshops could also provide a platform for discussing national circumstances and ways to enhance the data collection and management process.

46. For a better understanding of national GHG inventory results, some non-Annex I Parties suggest providing documentation on, among other things, activity data and underlying assumptions used and their justification. They also recommend providing information on the methodological approaches used and steps taken, as well as the sources of information on which the analysis is based, in the national GHG inventory report.

D. Vulnerability and adaptation assessments

47. This section presents problems and constraints, lessons learned and best practices in conducting vulnerability and adaptation assessments.

1. Problems and constraints

48. In most cases, non-Annex I Parties are faced with a lack of standardized methodologies and tools to develop baseline and climate change scenarios. Consequently, sectoral assessments are often incomplete or inconsistent. Parties with incomplete data systems have found climate change scenario development challenging due to inconsistencies between available data sources such as historical observational data, meteorological data and global and regional climate model outputs. Further, some non-Annex I Parties have found the downscaling of models challenging, where it is needed for certain geographical areas such as coastal or mountain areas or small islands.

49. Non-Annex I Parties are faced, when sets of global socioeconomic indicators are not applicable to the country context, with the challenge of developing country-specific socioeconomic indicators to carry out vulnerability and adaptation assessments. Lack of experience and models for cost–benefit analysis is also recognized as a major constraint by some non-Annex I Parties.

50. Some non-Annex I Parties have acknowledged having insufficient funds for and national experts capable of applying climate science and carrying out technical studies to address all prioritized socioeconomic sectors. Further, Parties have raised concerns about carrying out vulnerability assessment, as it is challenging to conduct in-depth analysis of impacts attributed to climate change aside from other natural phenomena.

2. Lessons learned

51. Some governments have developed a policy to provide the basis for nationally led adaptation planning initiatives and recognized the need to mainstream adaptation into national planning processes. The institutions involved and their work are being used for the completion of the vulnerability and adaptation section of the NC.

52. Some non-Annex I Parties have acknowledged that vulnerability and adaptation assessments conducted in the preparation of NCs have been beneficial for the development of national adaptation strategies. The integration of vulnerability and adaptation assessment for key sectors has proved useful for informing relevant social and environmental policies and strategies.

53. Some non-Annex I Parties are including case studies of sectors of interest to the nation's economy in the vulnerability and adaptation section of their NCs, mostly including health, water resources, agriculture and coastal zones. Some non-Annex I Parties are also exploring the possibility of using the preparation of NCs as an opportunity for the

integration of climate change responses into water, energy, agriculture, health, education, social and environmental policies.

54. Some non-Annex I Parties are prioritizing areas with a history of natural disasters, especially those with high population density and tourism activity, for a more detailed analysis, and are including this as an additional feature of the vulnerability and adaptation section of the NC. Some non-Annex I Parties have elaborated vulnerability and adaptation assessments in the health sector, including an analysis of the correlation between natural phenomena and the occurrence of disease, in the hope that this will ultimately help inform future plans to combat disease.

55. As a solution to data scarcity issues, for example in the residential subsector, which is relevant to complementing vulnerability and adaptation assessment information, some national teams are using first-hand information gathered from communities through face-to-face interviews with residents as well as surveys to close data gaps.

56. Models and estimates used for previous NCs are being relied upon and simply supplemented for later NCs by some countries.

3. Best practices

57. A few non-Annex I Parties have tailored the selected methodological framework for the purpose of vulnerability and adaptation assessments and ensured that it is suited to the technical capacity and available data, time and resources.

58. Some non-Annex I Parties are using the PRECIS¹⁰ system, a regional climate model, to improve projections of climate change scenarios, paying particular attention to seasons with more frequent disaster occurrence. The process was found to improve institutional capacities for informed decision-making. Such non-Annex I Parties recognize that when improved quality and more detailed information is used in these models, better recommendations have been provided for adaptation options.

59. A few non-Annex I Parties have established a database where information on adaptation-related projects, both planned and implemented in the country, is archived. The database system has been beneficial for the identification and reporting of adaptation measures. An update of the system on a regular basis is being discussed or initiated in some Parties. Further, a cross-country network of institutions, civil society organizations, youth and women's communities and academia has facilitated the participatory process to identify adaptation options in some non-Annex I Parties.

60. Engagement with the national scientific community and academia, through for example the national scientific network on climate change affiliated with the ministry in charge of science and technology, has reportedly contributed to the generation and dissemination of the scientific knowledge necessary for the elaboration of sectoral vulnerability and adaptation assessments.

61. Parties acknowledge that national workshops have been useful for sensitizing and raising the awareness of government officials as well as for facilitating vulnerability and adaptation assessments and reporting in NCs. In most cases, such workshops were facilitated by international experts and they have reportedly functioned as a platform for potential data providers, key ministries and technical experts to discuss their national circumstances.

E. Mitigation measures

62. This section presents problems and constraints, lessons learned and best practices in conducting and reporting mitigation assessments.

¹⁰ Providing Regional Climates for Impacts Studies.

1. Problems and constraints

63. Conducting mitigation assessments requires quality baseline information, which serves as a reference for progress made from the implementation of resulting actions, and scenario development. Current data challenges and high uncertainties associated with national GHG inventories as well as difficulty in the use of models (e.g. LEAP¹¹ and GACMO¹²) in some non-Annex I Parties pose constraints on conducting ex ante and ex post assessments (i.e. assessing the effectiveness of implemented actions) of mitigation measures.

64. Non-Annex I Parties are faced with technical constraints on the identification and development of mitigation options. They often lack a systematic process to identify mitigation actions across sectors and at different levels (i.e. the national, subnational, local and provincial levels) and have found it difficult to quantify mitigation actions and assess the cost and emission reduction potential of individual actions.

65. Mitigation options can sometimes be politically sensitive and might conflict with immediate government priorities in some developing countries. Meanwhile, a change in political priority and policy direction might attenuate efforts to implement mitigation measures.

2. Lessons learned

66. Some non-Annex I Parties are strengthening coordination activities with relevant ministries and other stakeholders at different levels to facilitate the two-way flow of information. Such activities have facilitated the participatory process of abatement analysis and identification of current and future mitigation options, as well as ensured that relevant policies and measures of each ministry are incorporated into the mitigation section of the national reports.

67. Some non-Annex I Parties are taking advantage of work done in other projects relevant to the MRV process, including the preparation of intended nationally determined contributions, low-carbon development strategies, nationally appropriate mitigation actions, clean development mechanism projects and other projects financed by the GEF, the Global Support Programme, the Asian Development Bank, the World Bank and the Food and Agriculture Organization of the United Nations, to name but a few.

68. Some non-Annex I Parties have explored the linkages between avoided emissions, economic diversification and adaptation as co-benefits of mitigation actions, which has informed policy formulation and implementation. It has enabled the mainstreaming of mitigation actions throughout many aspects of the economy, as such synergy or collateral benefits can readily attract the buy-in of policymakers and stakeholder groups.

69. Some non-Annex I Parties are formulating, implementing, publicizing and regularly updating national and, where appropriate, regional programmes containing measures to reduce GHG emissions. Others are focusing abatement analysis on the identification of current and future mitigation options.

70. Non-Annex I Parties are allocating time to regularly reviewing and updating proposed abatement options for each sector to reflect new developments and needs. When considering new mitigation technologies and options, some non-Annex I Parties are focusing on key emission sources identified through the key category analysis and updated in the national GHG inventory exercise.

3. Best practices

71. Some non-Annex I Parties have found the outcomes of mitigation assessments to be more comprehensive when they include:

¹¹ Long-range Energy Alternatives Planning System.

¹² Greenhouse Gas Abatement Cost Model.

(a) Information on the sector; cost of implementation; description of the action; economic, social and environmental benefits; and any perceived constraints. Some non-Annex I Parties have implemented mitigation measures not only as a means of reducing GHG emissions, but also as a way to take advantage of other development benefits, often referred to as co-benefits. The politically sensitive nature of some mitigation measures requires innovative approaches that promise benefits beyond reducing GHG emissions for them to be more appealing to policymakers. Sectors with the highest mitigation potential should be prioritized when presenting the information in national reports;

(b) Specific recommendations for mitigation programmes. Parties recommend providing detailed information on the expected GHG emission reductions estimated against the baseline GHG emissions. Further, adopting approaches that could attract investment under the clean development mechanism has reportedly been beneficial.

F. Cross-cutting issues

72. This section presents problems and constraints, lessons learned and best practices relating to elements that are relevant to most or all of the themes covered in the previous four sections, including financial, technical and capacity-building support received and needed.

1. Problems and constraints

73. Maintaining the quality of the technical processes involved and the information generated is a primary concern for non-Annex I Parties preparing their NCs and BURs. For some non-Annex I Parties, preparing NCs has meant conducting for the first time a comprehensive stocktaking of climate change relevant information at the national level, and this generates a large amount of information. Aside from information that is directly required for national reports, elements such as national GHG inventories, and vulnerability and adaptation and mitigation assessments, there is also a need for reliable socioeconomic information, particularly for the establishment of scenarios for vulnerability and adaptation and mitigation assessments. While this is viewed by most non-Annex I Parties as a positive exercise, structuring and analysing this information into the main technical components of NCs and BURs is, in most cases, a challenging task.

74. When global models are used, for example for the construction of scenarios, procedures for downscaling to appropriate levels require expertise that is often not available. In cases where the experts do exist, they are often few and involved in several task forces and stakeholder groups.

75. In most cases, financial and technical assistance is channelled through various agencies, not only governments but also the private sector and non-governmental organizations, and deals with environmental issues in general. Consequently, non-Annex I Parties are faced with the challenge of tracking and measuring financial and technical support received for climate actions. Parties have addressed their lack of a clear understanding of which and to what extent information is to be provided in the relevant section of the report as per the reporting guidelines.

2. Lessons learned

76. Increasingly, non-Annex I Parties are recognizing that the benefits of conducting national GHG inventories and vulnerability and adaptation and mitigation assessments go beyond fulfilling the reporting requirements under the UNFCCC. The information prepared for NCs and BURs has been used for national planning, international climate negotiations and the mobilization of financing for climate change and development activities.

77. Non-Annex I Parties are finding that meeting national climate change reporting requirements can be a challenge for governmental and non-governmental institutions. It requires a large amount of interdisciplinary knowledge and communication between institutions, something not always easily attained in the classic set-up of ministries as they are usually responsible for specific sectors. Increasingly, non-Annex I Parties are beginning to see that the issue of climate change presents an opportunity to work in a more integrated

way and that institutional capacity can be improved through active involvement in the MRV process.

78. Some non-Annex I Parties are performing a short assessment at the beginning of the process of preparing national reports to help them prioritize training activities and focus resources where they are most needed.

79. Some non-Annex I Parties are using the impacts of climate change on health and the national economy to persuade data holders to release data for national reporting activities. Additionally, some have accompanied this with ongoing national campaigns to emphasize the usefulness of data collection in the right format.

80. Some non-Annex I Parties are performing thematic studies of cross-cutting issues relevant to the MRV process. Currently they are carried out individually by consultants from various institutions, but they will gradually be done as part of streamlined activities, once the institutional set-up has been completed.

81. Some non-Annex I Parties have addressed the importance of documentation and archiving of data in order to retain institutional memory and transfer experience and knowledge to future national teams. Creating toolkits or a manual was recommended to provide information on how to approach the various tasks involved in preparing national reports.

3. Best practices

82. Non-Annex I Parties have reported that language-related issues constitute an important part of the UNFCCC process, affecting, among other things, training workshops, guidance materials and overall communication with support initiatives. To address these, some have:

(a) Invested, where possible, in making technical resources available in national languages to facilitate the process;

(b) Established working relationships with Parties with the same official language, through North–South and South–South cooperation, resulting in the provision of training, peer reviews, peer assistance, sharing data where possible, exchanging information on best practices and conducting joint training workshops;

(c) Developed a regional approach to using the PRECIS modelling system, which consists of an agreement to conduct various experiments and share the results with the other countries involved.

83. Non-Annex I Parties have underlined the importance of incorporating quality control and assurance activities from the start in order to ensure that quality issues are identified early and resolved. Most non-Annex I Parties have established a process to review and improve on the quality of their national reports prior to submission, including using both international and domestic third-party reviewers.

84. Some non-Annex I Parties have a system to ensure that NC results are communicated back to the relevant agencies and that completed national reports are accompanied by policy papers for high-level decision makers.

85. National experts have benefited from working with regional experts, especially when they speak the same language. Non-Annex I Parties have found the quality of NCs and/or BURs to be enhanced as the group draws from the experience of the regional experts, who may have encountered and resolved similar issues when working in other countries in the region.

86. To deal with limited capacity at the national level, in addition to workshops and training seminars, non-Annex I Parties are establishing national professional networks, as well as with experts from other countries, to facilitate the exchange of information and data needed for the various sections of the national reports. Further, some non-Annex I Parties are establishing partnerships with regional expert groups in a position to provide the required technical expertise, which in most cases is more cost-efficient.