



Subsidiary Body for Implementation

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National communications 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**

Progress report on the work of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention: report on the hands-on training workshop for the Africa region on vulnerability and adaptation assessment

Note by the secretariat

Summary

The Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, in collaboration with the National Communications Support Programme, conducted a hands-on training workshop for the Africa region on vulnerability and adaptation assessment in Nairobi, Kenya, from 7 to 11 November 2011. This report outlines the proceedings of the workshop and summarizes the presentations and the feedback and recommendations from the participants of the workshop.

Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Introduction	1–6	3
A. Mandate	1–5	3
B. Possible action by the Subsidiary Body for Implementation	6	3
II. Proceedings of the workshop	7–13	4
A. Opening of the workshop.....	7–11	4
B. Organization of the workshop.....	12–13	4
III. Summary of presentations	14–41	5
A. Introduction to vulnerability and adaptation assessment	14–15	5
B. Frameworks for developing and implementing adaptation strategies and measures.....	16	5
C. Vulnerability and adaptation assessment scenarios	17–21	6
D. Sectoral training sessions.....	22–30	6
E. Integration and communication	31–33	7
F. Conclusion	34–41	8

I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by decision 5/CP.15, reconstituted the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) for the period 2010–2012 in order to improve the process of the preparation of national communications from Parties not included in Annex I to the Convention (non-Annex I Parties).
2. The terms of reference of the CGE stipulate that the CGE, in fulfilling its mandate, shall provide technical assistance to non-Annex I Parties for the regular development of, inter alia, vulnerability and adaptation assessments, with a view to improving the accuracy, consistency and transparency of information in their national communications.
3. The terms of reference of the CGE are operationalized through its work programme for 2010–2012 developed at its 1st meeting, held in March 2010. The work programme was welcomed and taken note of by the Subsidiary Body for Implementation (SBI) at its thirty-second session.¹
4. In accordance with its work programme referred to in paragraph 3 above, the CGE, with the assistance of the secretariat and in collaboration with the National Communications Support Programme, held a hands-on training workshop for the Africa region on vulnerability and adaptation assessment in Nairobi, Kenya, from 7 to 11 November 2011 with a view to enhancing the capacity of national experts from the region involved in the process of the preparation of national communications.
5. By decision 5/CP.15, the COP requested the secretariat to facilitate the work of the CGE by organizing meetings and workshops and compiling reports of its meetings and workshops for consideration by the SBI.

B. Possible action by the Subsidiary Body for Implementation

6. The SBI, having considered this report, may wish:
 - (a) To note the recommendations of the workshop participants and provide further guidance to the CGE on the implementation of its mandate relating to paragraph 2(a) of its terms of reference, contained in the annex to decision 5/CP.15, on the provision of technical assistance to non-Annex I Parties for vulnerability and adaptation assessments;
 - (b) To invite Parties and/or those relevant organizations, including bilateral and multilateral organizations, in a position to do so to continue to provide financial resources to support the work of the CGE in the implementation of its mandate relating to paragraph 2(a) of its terms of reference.

¹ FCCC/SBI/2010/10, paragraph 21.

II. Proceedings of the workshop

A. Opening of the workshop

7. The hands-on training workshop for the Africa region on vulnerability and adaptation assessment, hosted by the United Nations Environment Programme (UNEP) in Nairobi, was held from 7 to 11 November 2011. The Deputy Executive Secretary of UNEP, Ms. Amina Mohamed, delivered the opening remarks and provided an outline of the role played by UNEP in supporting non-Annex I Parties in the preparation of their national communications. Ms. Sangchan Limjirakan (Thailand), Chair of the CGE, thanked UNEP for hosting the meeting, welcomed the participants and outlined the objectives of the workshop. A representative of the secretariat provided a brief overview of the organization of the workshop.

8. The objectives of the workshop were the following:

(a) To build the capacity of national experts in non-Annex I countries in the Africa region to prepare national communications by introducing them to recent developments in related scientific knowledge and the various tools and methodologies available for vulnerability and adaptation assessments, which are reported under the Convention as part of the national communications;

(b) To seek and generate feedback on the draft updated CGE training materials on vulnerability and adaptation assessments in order to improve them further;

(c) To serve as a platform for the exchange of views among Parties and with experts and prospective bilateral and multilateral donors.

9. National experts from 35 non-Annex I Parties in the Africa region,² five members of the CGE and four representatives of UNEP attended the workshop.

10. The workshop was held with financial contributions from the Government of Finland, the National Communications Support Programme and UNEP.

11. An average of 30 participants per day representing Parties in the Africa region participated in the workshop through videoconferencing (WebEx).

B. Organization of the workshop

12. The hands-on training workshop, which was conducted over five days, comprised seven sessions as follows:

(a) The first session consisted of an introduction focusing on the rationale for the need for vulnerability and adaptation assessments and an introduction to the building of a national framework for vulnerability and adaptation assessments as a component of a future comprehensive national arrangement for the preparation of national communications;

(b) The second session concentrated on how countries can plan for their vulnerability and adaptation assessment and select an appropriate and practical vulnerability and adaptation framework;

² Benin, Burkina Faso, Burundi, the Central African Republic, Chad, Côte d'Ivoire, Djibouti, the Democratic Republic of the Congo, Egypt, Equatorial Guinea, Ethiopia, Gabon, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritania, Mauritius, Morocco, Namibia, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, the Sudan, Swaziland, Tunisia, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe.

(c) The third session was on climate change and socio-economic scenarios, in which the participants were introduced to the available methods and tools and data requirements;

(d) The fourth and fifth sessions consisted of two sessions conducted in parallel, which included sectoral vulnerability and adaptation assessments covering water resources, human health, agriculture and coastal resources;

(e) The sixth session covered cross-sectoral and multisectoral integration and the presentation of methods and results in national communications;

(f) In the final session, feedback on the workshop was sought from the participants. During that session, the workshop participants provided recommendations on possible ways to further improve the CGE training materials and on how future regional workshops could be conducted.

13. The training, which included hands-on practical sessions, was conducted by resource persons and the CGE members using the updated CGE training materials.³

III. Summary of presentations

A. Introduction to vulnerability and adaptation assessment

14. Participants were introduced to the various key terms, concepts and purposes of vulnerability and adaptation assessments. They were informed that there are various purposes that can be taken into consideration when undertaking a vulnerability and adaptation assessment, such as raising awareness, their use as a tool for decision-making, and for in-depth understanding of the impacts of climate change in a particular sector, such as food production and water supply.

15. Participants were further introduced as to how non-Annex I Parties can effectively build up their reporting component by organizing a comprehensive national arrangement specifically targeting vulnerability and adaptation assessment. Planning of the vulnerability and adaptation assessments, including analysing data availability, and the key steps required to successfully plan for, and deliver, the vulnerability and adaptation component of the national communication, were introduced.

B. Frameworks for developing and implementing adaptation strategies and measures

16. The utility and importance of frameworks for examining the potential impacts of climate change and adaptation measures were covered in the second session. While the use of frameworks is not mandatory for vulnerability and adaptation assessments, they do provide consistency and transparency across vulnerability and adaptation sectors. Available and published vulnerability and adaptation frameworks are useful as they can serve as a basis for the development of tailored frameworks that draw on the conceptual underpinnings of a particular framework suitable for the country's specific circumstances. Outlines of some of the widely used vulnerability and adaptation frameworks were provided.

³ The current CGE training materials, available on the UNFCCC website at http://unfccc.int/national_reports/non-annex_i_natcom/training_material/methodological_documents/items/349.php, are being updated.

C. Vulnerability and adaptation assessment scenarios

17. The third session provided an overview of common models and outputs available for modelling climate change and socio-economic scenarios, and examples of those outputs and possible approaches for customizing them to suit user demand were given. Further, a delegate from Swaziland presented country experience on the use of climate change indices for vulnerability and adaptation assessments.

1. Climate change scenarios

18. The presentation on climate change scenarios covered various concepts of data and information gathering used in climate risk management and adaptation planning. This information is important for short- to medium-term weather forecasts, seasonal and inter-annual climate forecasts, climate trend analysis over decades and modelling climate change scenarios. In addition, those forecasts can provide additional information useful for short-term planning, emergency preparedness, medium-term operational planning, risk assessment and management, long-term strategic planning, infrastructure planning retrofitting, land zoning and facilitating international negotiations, which can lead to implications for national policy.

19. The segment also covered the construction of climate scenarios for impact assessment and regional climate modelling and analysis. This included literature on the definition and types of climate change scenarios, steps required to develop them and conducting impact assessments. It also included a graphic illustration of how the information on climate change scenarios is used in impact assessments. Examples included the simulation of yield changes per hectare of three grain crops, namely rice, wheat and maize.

2. Socio-economic scenarios

20. The segment on socio-economic scenarios covered the following areas: the definition of the baseline socio-economic scenarios, the utility of having those scenarios and the supporting information that is available for baseline socio-economic scenarios; and the steps for developing socio-economic scenarios, and information on the data required to develop those scenarios.

21. Although structured examples from Thailand and Kenya were presented, it was clear from the presentation and from the subsequent discussions that limited work has been done at the national level on this matter, and hence there is limited availability of practical examples or experiences. This was also reflected in the feedback provided by the participants.

D. Sectoral training sessions

22. The trainers held demonstrations and conducted hands-on exercises using tools such as Water Evaluation and Planning (WEAP), which is used in water modelling, and the Decision Support System for Agro-technology Transfer (DSSAT), used for modelling the agriculture sector. The participants were presented with an overview of drivers, potential climate change impacts and adaptation measures. Various sector-specific methods, tools and data requirements were covered.

1. Health sector

23. The segment on the health sector covered a number of topics, including the following: an overview of the potential pathways and health impacts of climate variability

and climate change; predictive tools for the future for assessing human health vulnerability to climate change; methods for determining a health adaptation baseline; and health data to determine the current burden of climate-sensitive diseases.

24. The participants engaged in an interactive group exercise to identify the key climate change impact factors on health, to understand the impact of health on population dynamics and to determine health impacts and understand coping capacity.

2. Water resources

25. The segment on water resources covered the potential impacts of climate change on the water sector and how to assess those impacts. It also included understanding stakeholders and their potential influence on the water sector, water planning and formulating an assessment case study using a hypothetical river basin.

26. Participant gained first-hand experience of setting up and running the WEAP model by undertaking a case study on the hypothetical river basin. The model takes into account critical factors such as the biophysical, socio-economic and institutional and policy factors that influence the quantity and quality of, and demand for, water, the key stakeholders and the nature and extent of water vulnerability.

3. Coastal resources

27. The presentation on coastal resources covered the drivers and potential impacts of climate change on coastal zones and an overview of the methodological approach to impact assessment of climate change on such zones. Participants were informed of the various drivers that affect coastal resources, such as sea level rise, higher sea temperatures, changes in precipitation patterns and coastal run-off.

28. Participants engaged in a group exercise on coastal vulnerability and risk, focusing mostly on the screening assessment, and a demonstration of a freely available tool called Sea Level Rise Explorer.⁴

4. Agriculture

29. The key objectives of this sectoral training were the following: to introduce the participants to climate change impacts on agriculture and food security, including the main reasons for concern; tools, models and the processes available and used commonly for impact assessment in the agriculture sector; and introduction to process-based models and their practical applications, including hands-on training for DSSAT. The model can be used with various crops, such as maize and wheat, to assist various stakeholders, including researchers and farmers, in conducting sensitivity analyses, developing seasonal strategies and understanding crop rotation. Participants were also introduced to some commonly used statistical models based on the estimation of statistical functions of yield response.

30. The participants engaged in a practical application of DSSAT to estimate the statistical functions of yield response for some crops in their countries in order to evaluate climate change effects on the crops and determine the adaptation scenarios, such as changes in management to improve yield under various climate change scenarios.

E. Integration and communication

31. The sixth session focused on the reporting requirements for national communications from non-Annex I Parties under the Convention and the way in which

⁴ <<http://www.globalwarmingart.com/wiki/Special:SeaLevel>>.

information related to vulnerability and adaptation assessments could be effectively communicated in national communications. Participants were informed about various ways in which information can be sourced from various sectors and integrated in the vulnerability and adaptation assessment. An interactive, facilitated discussion to exchange views among participants, and the sharing of experiences with resource persons, followed the presentation.

1. Integration

32. The presentation on integration highlighted the importance of integration both across, and with the sectors in, the framework of the vulnerability and adaptation assessment, as impacts do not occur in isolation. Impacts in one sector can adversely or positively affect another sector. Cross-sectoral and multisectoral integration is important in linking related sectors and various multi-economic sectors. The presentation also focused on setting priorities, mainstreaming climate change, and monitoring and evaluation for successful integration. It included methods and examples of ranking vulnerabilities and adaptation across a sector, which is an essential element in prioritizing the adaptation options.

2. Communication

33. The presentation on communication provided an overview of the relevant provision under the Convention on reporting information on vulnerability and adaptation from non-Annex I Parties as a part of their national communications. The segment also addressed general guidance, including some examples, on how to effectively present the results of the vulnerability and adaptation assessment taking into account the target and audience of the report.

F. Conclusion

34. During the final session, participants identified a number of key points that they had learned at the workshop.

1. Participants' feedback

35. An online survey was undertaken after the workshop to gather general feedback from workshop participants, including those who participated remotely. Sixty-five participants provided responses to the online questionnaire.

36. The participants welcomed the diversified nature of the workshop and highlighted the following as some of the most useful aspects of the training:

(a) The opportunity for participatory interaction with the resource persons, other participants and multilateral and bilateral donors;

(b) The introduction to vulnerability and adaptation assessments, particularly the overview on key climate change drivers, potential impacts of climate change and adaptation methods illustrated with various regional examples;

(c) The application of various climate change models to generate climate change scenarios, depending on the data availability, including demonstrations of downscaling scenarios from the global level to the regional level;

(d) The relationship between socio-economic scenarios and national development planning, including when and how to develop them, and the associated problems in developing socio-economic scenarios;

(e) The use of web-based information generating tools and platforms to source information on climate change mapping and impact evaluation;

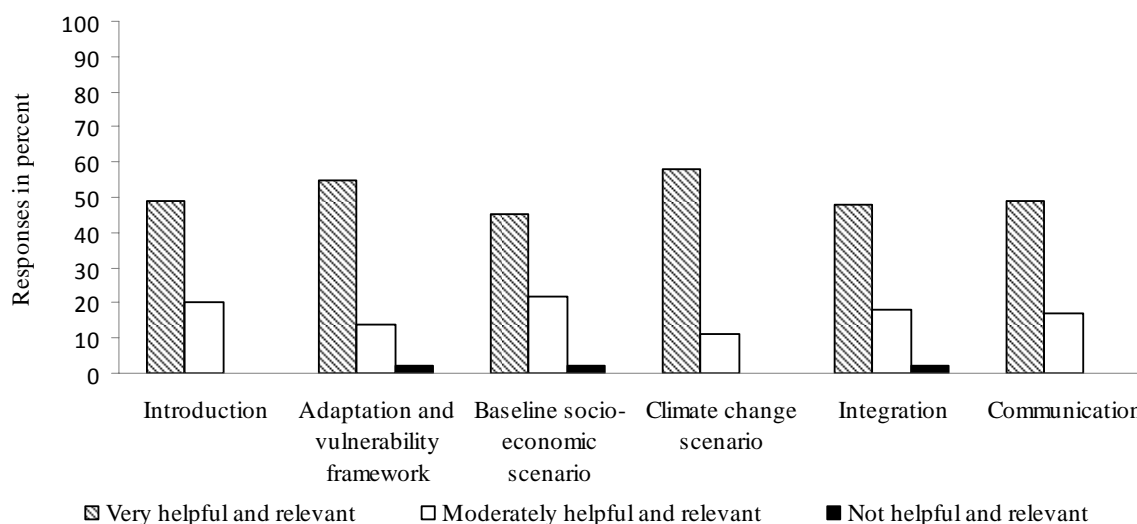
(f) The CGE training materials.

37. The participants also appreciated the hands-on exercises, which provided them with an opportunity to experience, first-hand, the use of various tools and models, including Sea Level Rise Explorer, DSSAT, WEAP and worksheets on human health training and health risk assessment.

38. Most participants found the overall approach and content of the hands-on training workshop to be useful and relevant to their work or practice, as is evident from the results of the survey (see the figure below).

Compilation of evaluation responses provided by participants of the workshop on vulnerability and adaptation assessments for the Africa region

How helpful and relevant was the content in these modules to your work or practice?



39. The participants also highlighted the institutional, technical and financial difficulties that they continue to face in preparing their national communications and recommended such training workshops be made available to them on a more frequent, periodic basis. Participants also requested that the secretariat and the CGE explore options and means of providing in-country technical assistance, such as in the form of hands-on training workshops.

40. The participants made the following recommendations for future hands-on training workshops on vulnerability and adaptation assessment:

(a) Enrich the training material with more practical work, case studies and examples of regional models used for vulnerability and adaptation assessment, and give in-depth demonstrations of downscaling techniques;

(b) The practical sessions on the use of models would have added value if the participants brought and used their national data. Hence, participants noted that for such training workshops in the future the participants could be encouraged to bring their own data and other information relating to the methodologies and tools planned to be used;

(c) Since there is a time constraint, participants recommended reducing the time allocated for theoretical presentations and increasing the time for the hands-on exercise sessions.

2. Conclusion

41. The participants were appreciative of the training course and thanked the CGE and the secretariat for organizing the workshop, the Government of Kenya and the people of Kenya for the warm welcome accorded to them and UNEP for hosting the workshop and providing the excellent facilities. The participants also thanked those Parties and organizations that funded the workshop.
