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OTHER MATTERS

**THE USE OF GUIDELINES FOR THE PREPARATION OF NATIONAL
COMMUNICATIONS FROM PARTIES NOT INCLUDED IN ANNEX I
TO THE CONVENTION: REPORT OF THE WORKSHOP**

**Report of the workshop on the use of the guidelines for the preparation of national
communications from Parties not included in Annex I to the Convention**

Note by the secretariat

Summary

This document contains a report of the UNFCCC workshop on the use of the guidelines for the preparation of national communications from non-Annex I Parties, based on information provided by the UNFCCC secretariat, experts from Parties and representatives of the multilateral and bilateral activities, programmes and projects that facilitate and provide financial and technical support for the preparation of national communications. A number of important needs and concerns were identified at the workshop which would require immediate action to facilitate and enhance the preparation of national communications from non-Annex I Parties.

At the eighteenth session of the Subsidiary Body for Implementation (SBI), Parties may wish to take note of the needs and concerns identified, and recommendations thereof, with a view to providing guidance on the activities, programmes and projects that would facilitate and enhance the use of the guidelines for the preparation of national communications of non-Annex I Parties.

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I. INTRODUCTION

A. Mandate

1. The Conference of the Parties (COP), by its decision 17/CP.8, requested the secretariat to facilitate assistance to Parties not included in Annex I to the Convention (non-Annex I Parties) in the preparation of their national communications, in accordance with Article 8, paragraph 2 (c), of the Convention, and to prepare reports thereon for consideration by the Subsidiary Body for Implementation (SBI) (FCCC/CP/2002/7/Add.2).

2. Accordingly, the secretariat, in close collaboration with the Government of Mauritius, as host, organized a workshop on the use of the guidelines for the preparation of national communications from non-Annex I Parties in Le Morne, Mauritius, from 8 to 11 April 2003. The objectives of the workshop were: to launch the UNFCCC guidelines for the preparation of national communications from non-Annex I Parties, annexed to decision 17/CP.8; to inform the experts responsible for the preparation of national communications from non-Annex I Parties, and relevant multilateral and bilateral organizations, about the use of the UNFCCC guidelines; and to provide a forum for the exchange of views on the financial and technical support provided by the bilateral and multilateral activities, programmes and projects in supporting the preparation of national communications from non-Annex I Parties.

3. The workshop was attended by 54 invited experts representing 36 non-Annex I countries and four Annex I countries, and 15 by experts representing 13 multilateral, bilateral and non-governmental organizations. The expertise of participants covered the main areas of a national communication, including national greenhouse gas (GHG) inventories, vulnerability and adaptation, and mitigation. The workshop was supported with funding from the governments of Switzerland and the United States of America, and from the International Strategy for Disaster Reduction which funded one participant.

B. Scope of the report

4. In this report of the workshop, chapter II focuses on procedural matters and the opening ceremony, and chapter III summarizes the presentations, discussions and recommendations on the main elements of the national communication.

C. Possible actions by the Subsidiary Body for Implementation

5. The SBI may wish to take note of the report and recommendations contained therein, with a view to providing guidance on how to overcome the needs and concerns raised, and to facilitating the use of the guidelines for the preparation of national communications.

6. The SBI may also wish to provide further guidance on the facilitation and provision of financial and technical support for the preparation of national communications from non-Annex I Parties.

7. The SBI may further wish to provide further guidance to the secretariat, for its future work in facilitating the use of the guidelines by non-Annex I Parties referred to in paragraphs 5 and 6 above.

II. PROCEEDINGS

8. The workshop was officially opened by the Right Honourable Sir Anerood Jugnauth, the Prime Minister of Mauritius, on 9 April 2003. He was accompanied by the Minister of Environment, members of the Government of Mauritius and members of the Diplomatic Corps, as well as by the Coordinator and Manager of the Implementation Programme of the UNFCCC secretariat.

9. The Prime Minister welcomed the participants and emphasized the importance of the workshop. He indicated that Mauritius, the first country to ratify the UNFCCC, is fully committed to the implementation of the Convention and its Kyoto Protocol, as well as of Agenda 21 of the United Nations Conference on Environment and Development (UNCED), the Barbados Programme of Action, the World Summit on Sustainable Development, and the United Nations Millennium Development Goals. He further highlighted the serious threat posed by climate change to small island developing States, including Mauritius, which could face problems relating to both adequate protection of the environment, and creation of the conditions for sustainable economic growth.

10. The Minister of Environment, Honourable R. Bhagwan, expressed his appreciation for the work of the UNFCCC secretariat in facilitating the provision of financial and technical support to non-Annex I countries for the fulfilment of their commitments under the Convention. He stressed that Mauritius recognizes the importance of the UNFCCC guidelines for the preparation of national communications from non-Annex I Parties as an important tool to enhance capacities of non-Annex I countries. He urged local participants to take full advantage of this workshop to enhance their knowledge on matters relating to the UNFCCC, which would facilitate their work at the national level. He wished the workshop great success.

11. Participants elected Mr. Sok Appadu, Director of Meteorological Services of Mauritius, as Chair of the workshop. Mr. David Lesolle (Botswana), Mr. Mahendra Kumar (Fiji) and Mr. Philip Acquah (Ghana) were elected as rapporteurs for the sessions on financial and technical support, vulnerability and adaptation, and GHG inventory and other information, respectively.

12. In welcoming the participants, the Chair indicated that the objective of the workshop was to improve the process of preparation of national communications by non-Annex I Parties, making particular note of the importance of the UNFCCC guidelines for the preparation of national communications which provided a useful framework for reporting of information to the COP. He also acknowledged the excellent support provided by the national government and the UNFCCC secretariat for hosting the workshop.

13. The workshop agenda was organized following the main themes of the national communication: national GHG inventories; steps taken or envisaged by Parties to implement the Convention (vulnerability and adaptation, mitigation); other information considered relevant for the achievement of the objective of the Convention (transfer of technologies, research and systematic observation, education, training and public awareness, capacity-building, information and networking); constraints and gaps, and related financial, technical and capacity needs; and the activities, programmes and projects that facilitate and provide financial and technical support for the preparation of national communications. The secretariat and invited experts/resource persons made presentations on each of these themes, covering both the methodological issues and reporting elements, and financial and technical issues.

14. The presentation sessions were followed by a general discussion of the issues, needs and concerns raised, and of a set of recommendations made to overcome these needs and concerns. The recommendations from each session were considered and adopted in a closing plenary on 11 April 2003. These recommendations are included in the following sections of the report.

15. The participants had, as background information, a copy of decision 17/CP.8 and its annex containing the guidelines for the preparation of national communications from non-Annex I Parties, and copies of other relevant decisions. Copies of the presentations and other documents were copied onto CD-ROMs and distributed to participants at the end of the workshop. The presentations, as well as the list of participants and other information, are also available on the UNFCCC web site (<http://unfccc.int/sessions/workshop/080403/index.html>).

III. MAIN THEMES

16. For each theme of the workshop, the secretariat made a presentation on the main elements of the UNFCCC guidelines for the preparation of national communications from non-Annex I Parties, relevant to that theme. The following sections summarize other presentations and the discussions following the secretariat's presentation, and present the recommendations made by the participants.

A. The UNFCCC guidelines: an introduction

17. The secretariat gave a presentation on the commitments of all Parties pertaining to the provision of information to the COP, in accordance with Article 12, paragraph 1, of the Convention, and an overview of the activities and processes that led to the consideration and adoption of the guidelines for the preparation of national communications from non-Annex I Parties. Of particular note was that the current guidelines would require the provision of more detailed information (compared to the guidelines annexed to decision 10/CP.2), on national greenhouse gas inventories, vulnerability and adaptation assessments, mitigation, research and systematic observation, transfer of technology, capacity-building, education, training and public awareness, and information and networking, making particular reference to the Marrakesh Accords, including decisions 2/CP.7 on capacity-building in non-Annex I Parties, 4/CP.7 on transfer of technology and 5/CP.7 on the implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Article 2, paragraph 3, and Article 3, paragraph 14, of the Kyoto protocol), which also have reporting elements.

18. The secretariat also noted that the financial and technical support and the number of activities, programmes and projects that facilitate and support the preparation of national communications have decreased over the past five years, and in some cases have ceased. It therefore emphasized the need to increase financial and technical support from multilateral and bilateral sources so as to enable the provision of more detailed information, and to better coordinate and identify gaps in the support (where they exist) for the preparation of national communications from non-Annex I Parties.

19. Participants acknowledged that the guidelines provide a good basis for reporting on the activities, programmes and measures to implement the Convention, and agreed on the need for more financial and technical support to non-Annex I Parties for the preparation of their national communications.

Recommendations

20. Participants made the following recommendations:

- (a) There is a need for assistance in designing project proposals for national communications;
- (b) The secretariat should develop a user manual of the guidelines, and make it available in all six official languages of the United Nations, to further facilitate their use;
- (c) The secretariat is requested to promote actions by way of a knowledge management system to enable the provision of financial and technical assistance to non-Annex I Parties in the preparation of national communications;
- (d) The Consultative Group of Experts on National Communications from non-Annex I Parties (CGE) should consider actions for the provision of technical feedback on GHG inventories, vulnerability and adaptation assessment, mitigation analysis, etc., prepared in the initial and subsequent national communications;
- (e) The financial and technical support provided for the preparation of national communications from non-Annex I Parties should be at a level that is commensurate with these Parties' needs;

(f) Existing national, and where appropriate, regional institutions for the preparation of national communication should be strengthened on a continuous basis.

B. National circumstances

21. The secretariat highlighted the importance of reporting information on the national and regional development priorities, objectives and circumstances. It emphasized that the information on national circumstances could include a Party's ability to mitigate and adapt to the adverse effects of climate change and/or impact of the implementation of response measures. The secretariat further noted that the information on national circumstances could be presented in tabular form and encouraged the reporting of information on institutional arrangements relevant for the preparation of national communications.

Recommendation

22. The information on national circumstances should have a clear link to other information included in the national communication.

C. National greenhouse gas inventories

23. The secretariat introduced the guidelines for reporting on national GHG inventories as contained in the annex to decision 17/CP.8. The presentation covered two areas: methodologies for GHG inventories and the elements of information to be reported in the GHG inventory section of the national communication. With respect to the methodologies to be used in GHG inventories, the secretariat noted that non-Annex I Parties should use the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC Guidelines) and further encouraged non-Annex I Parties to apply the *IPCC Good Practice Guidance and Uncertainty Management in National GHG Inventories* (IPCC good practice guidance). The use of these guidelines would enable non-Annex I Parties to maintain the transparency, consistency, comparability, completeness and accuracy of inventories.

24. The secretariat indicated that current guidelines for reporting on inventories reflect the improvement in reporting of GHG inventories by non-Annex I Parties in their initial national communications and constitute a step forward in improving the quality of GHG inventories. On reporting of the elements of information, the secretariat pointed out that there is sufficient flexibility for non-Annex I Parties to provide information in accordance with the tables, as appended to the annex to decision 17/CP.8. The appended tables would enable electronic reporting of the information.

25. Mr. Kiyoto Tanabe (IPCC National Greenhouse Gas Inventory Task Force) made presentations on the IPCC Guidelines and the IPCC good practice guidance, the IPCC inventory software, and the IPCC Emission Factor Database (EFDB). Mr. Tanabe pointed out that the IPCC Guidelines contain three volumes: Volume I provides reporting instructions; Volume II provides a workbook with step-by-step instructions on how to estimate emissions, including the use of default values and the IPCC software; and Volume III, which is also known as a Reference Manual, provides scientific information on the methodologies and references for estimating emissions in energy, industrial processes, solvent and other product use, agriculture, land-use change and forestry, and waste sectors. The guidelines also provide methods for estimating emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluorides (SF₆), ozone (O₃) and aerosol precursors (volatile organic compounds), nitrogen oxides (NO_x) and sulphur dioxide (SO₂).

26. Mr. Tanabe further indicated that the IPCC good practice guidance is aimed at assisting countries to produce inventories which are transparent, complete, consistent, comparable and well-documented. The IPCC good practice guidance will also assist countries in assessing the uncertainties within their inventories, and in ensuring quality control and quality assurance, and efficient use of resources. The IPCC presentation also indicated that the report on *Good Practice*

Guidance for Land use, Land-use Change and Forestry (LULUCF) is now being developed and is due to be completed by the end of 2003, and the revision of the IPCC Guidelines will be initiated this year and will be completed by early 2006.

27. The IPCC inventory software helps users (inventory compilers) prepare national GHG inventories based on the IPCC Guidelines. The software contains worksheets from the *Workbook* (as provided in Volume 2 of the IPCC Guidelines) with built-in formulas (Tier 1/Default) that facilitate calculation of GHG emissions/removals. It also contains reporting tables from the *Reporting Instructions* (Volume 1 of the IPCC Guidelines). The software provides a tool for self-verification and/or for formatting the summary reporting tables.

28. The IPCC Emission Factor Database (EFDB) contains emission factors that could be used for national greenhouse gas inventories. The EFDB is a recognized library of GHG emission factors and other parameters with background documentation or technical references that can be used for estimating GHG emissions and removals.

29. Much of the population of the EFDB presently contains IPCC default values and CORINAIR (CORe INventory of AIR emission) data. However, it is expected that the database will be further populated with data from researchers and scientists/experts, research programmes, industry and national databases. The success of the EFDB will depend on the input from the global scientific and inventory community, its user-friendliness and reliability, its use and population and the continuous improvement on the content and functionality. This exchange of experiences and feedback on the use of EFDB will be important in this regard.

30. Ms. Bo Lim (National Communications Support Unit (NCSU) of the United Nations Development Programme (UNDP)) provided information on the training tools for the IPCC good practice guidance which are aimed at developing a national inventory strategy for improving the quality of inventory, institutionalizing the inventory process, promoting cost effectiveness, and identifying key sources. A training manual is being developed covering planning the inventory work (Phase I); focusing on key sources, choosing methods, emission factors (EF) and activity data (AD) (Phase II); and documenting and reporting (Phase III). Phase I was completed in September 2002; Phase II is currently under way. It is expected that the final draft of the training manual will be completed by June 2003 and disseminated in July 2003, in English and in Spanish, French and Russian translations.

31. The NCSU is also providing technical assistance in developing regional strategies to improve inventory quality in Eastern Europe/Commonwealth of newly Independent States (CIS) and West and francophone Central Africa regions through two regional projects funded by the Global Environment Facility (GEF). The projects are aimed at building capacity to improve the quality of GHG inventories in 26 participating countries. The other main outputs envisaged are strengthened institutional framework, and developed long-term inventory improvement strategies. To support these outputs, the NCSU will create a regional information exchange network, prepare national procedures manuals, and train two experts per country. The focus of the Eastern Europe/CIS project will be fugitive emissions from oil and gas, solid waste treatment and mobile combustion; the focus for West and francophone Central Africa will be forest and grassland conversion and enteric fermentation. These projects are likely to start in June 2003.

32. To illustrate some of the needs and concerns of non-Annex I Parties in conducting their national GHG inventories, Mr. José Domingo Miguez (Brazil) made a presentation on the experience of Brazil in the preparation of its initial national communication and, in particular its national GHG inventory. He highlighted the lack of activity data and emission factors, the lack of human and institutional capacity and the inadequacy of financial resources and technical support as major constraints. He also stressed that lack of financial and technical support, as well as the coordination of a large group of stakeholders and a large bureaucracy in the preparation of the national communication and GHG inventory over a large country, meant that it was difficult to complete the

project on time, and within budget, and produce a good quality inventory. However, the preparation of the national communication had enabled the establishment of multi-institutional and multi-stakeholder teams involving 100 institutions and 500 professionals with a range of expertise in the preparation of the national communication; Brazil expects to submit its initial national communication to the UNFCCC secretariat this year.

Recommendations

33. Participants made the following recommendations:

(a) Funding proposals for the preparation of national communication should include support to facilitate:

(i) The collation of activity data of adequate quality, giving priority to key sources, for the preparation of GHG inventories;

(ii) The work of the inventory teams that prepare the national inventory;

(b) There is a need to extend to all regions the project for the development of regional emission factors¹ giving priority to key source categories including the training on the IPCC good practice guidance and the IPCC inventory software. In developing these projects, priority should be given to the use of experienced regional experts and institutions as trainers and resources, respectively;

(c) The CGE and the UNFCCC secretariat are requested to promote actions that facilitate information sharing relating to the preparation of GHG inventories, including comparison of inventory data and methodologies, among inventory experts in non-Annex I Parties;

(d) The UNFCCC secretariat is requested to modify the current IPCC inventory software in order to automatically generate tables 1 and 2 of the UNFCCC guidelines to facilitate the reporting of inventories by non-Annex I Parties;

(e) Parties are requested to make use of the electronic reporting of the tables of the UNFCCC guidelines and IPCC worksheets, to facilitate the information sharing of inventory data among experts and the provision of technical feedback;

(f) The IPCC is encouraged to promote the involvement of inventory experts from non-Annex I countries in the revision of the IPCC Guidelines and in the development of the IPCC emission factor database;

(g) Contributions to the IPCC emission factor database are requested from non-Annex I Parties, experts and institutions;

(h) Non-Annex I Parties are encouraged to use the information contained in the IPCC emission factor database in preparing their national GHG inventories.

D. Steps taken or envisaged to implement the Convention

1. Programmes containing measures to facilitate adequate adaptation to climate change

34. The secretariat drew attention to other reporting obligations under the Marrakesh Accords, namely decisions 2/CP.7, 4/CP.7 and 5/CP.7. These decisions invite or encourage non-Annex I Parties to provide information through national communications or other reports on capacity-building efforts, technology needs and needs assessments, specific needs and concerns arising from adverse effects of climate change, and the impact of the implementation of response measures.

¹ Currently ongoing in West and francophone Central Africa and Eastern Europe.

35. Ms. Isabelle Niang-Diop (Senegal) indicated that there were many difficulties in applying the IPCC Guidelines in the preparation of vulnerability and adaptation assessment in the initial national communications. These difficulties were mainly related to suitability of methods and tools, lack of national capacities to apply them, lack of data, lack of institutional frameworks, financial resources and limitations of climate change scenarios (spatial resolution problems). There was also insufficient consideration for socio-economic and environmental scenarios, lack of impacts models in health, human settlements, terrestrial ecosystems, and tourism, specific adaptation strategies identified were not adequately evaluated (i.e. no costing and prioritization), and consideration of traditional adaptation options was limited. The current reporting guidelines would allow Parties more flexibility in using various methods and approaches in vulnerability and adaptation assessments that would include identification, evaluation and prioritization of adaptation strategies and measures.

36. There is a need for assistance in disaster preparedness and development of new tools for integrated assessment, policy development, decision support analysis and greater participation of different stakeholders, and a need for specific training and support for national coordinators responsible for coordinating vulnerability and adaptation assessments. She stressed the need for development of new methods and tools to facilitate integrated vulnerability and adaptation assessments compatible with the national circumstances of non-Annex I countries, as well as methodologies and models for impacts studies on human health, human settlements, terrestrial ecosystems and tourism.

37. Mr. Neil Leary (START/UNEP) made a presentation on the findings of the IPCC Working Group II Third Assessment Report. The impacts of climate change are manifest in the latitudinal or altitudinal shifts in the ranges of animals and plants, making natural systems more vulnerable to climate change; some will be irreversibly damaged. Some human systems have been affected by increases in floods and droughts. Better understanding of the vulnerabilities is important in order to develop effective adaptation and response strategies.

38. The IPCC/UNEP project on "Assessment of impacts of, and adaptation to, climate change in multiple regions or sectors" (AIACC) has been initiated to build capacity in developing countries for research in support of climate change adaptation and to advance scientific understanding of climate change impacts, adaptations and vulnerabilities, and to link the research community with the policy community to support national communications and adaptation planning (including evaluation of adaptation options which could lead to funding of pilot/demonstration adaptation projects). AIACC studies are active in 46 developing countries, each having a team of scientists from multiple disciplines; altogether more than 235 scientists from developing countries participate as investigators, together with more than over 60 graduate and undergraduate students, and more than 40 scientists from developed countries.

39. AIACC also aims to engage developing country researchers in global change research and assessment activities, such as the IPCC, International Geosphere-Biosphere Programme (IGBP), International Human Dimensions Programme (IHDP), World Climate Research Programme (WCRP), DIVERSITAS and Millennium Assessment, and also to encourage publication of scientific papers in peer-reviewed journals that expand literature on developing countries and the use of AIACC findings in the IPCC, Millennium Assessment reports and national communications.

40. Mr. Richard Jones (Hadley Centre, United Kingdom) described a regional climate modelling system known as "PRECIS" (Providing Regional Climates for Impact Studies). The development of PRECIS was motivated by the UNFCCC requirement to assess national vulnerability and adaptation to climate change in the preparation of national communications and the need for detailed scenarios of future climate. PRECIS is developed for use by government scientists from developing countries involved in vulnerability and adaptation studies individually or collectively, given that a regional domain of the model usually encompasses several countries which could encourage collaboration among the neighboring countries to produce ensembles, drawing on local resources and expertise.

41. PRECIS is a comprehensive physical high resolution climate model, developed by Hadley Centre, that covers a limited area of the globe, usually including the atmosphere and land surface components of the climate system, and contains representations of the important processes within the climate system (e.g. cloud, radiation, rainfall, soil hydrology). The limited area models are driven at the boundaries by GCM observed boundary data, with a resolution of 50 kilometers. Hadley Centre provides training on PRECIS that focuses on background science including uncertainties, interpretation of PRECIS results, construction of regional climate change scenarios, in countries/regions using PRECIS. PRECIS will be supplied with a workbook covering the background science, system description and the uses and limitations of PRECIS with a technical manual explaining technical details about the system, its installation and use.

42. Mr. Charles Heaps (Stockholm Environment Institute (SEI), Boston, USA) described the WEAP model (Water Evaluation and Planning) model, a GIS-based, graphical drag and drop interface which physically simulates water demands and supplies and allows for additional simulation modelling by using user-created variables. WEAP can facilitate high level planning and strategic analysis at local, national and regional scales, for demand management and water allocation, but it cannot be used for daily operations and for least-cost optimization of supply and demand. Some examples of analyses using WEAP were highlighted which included sectoral demand analyses, water conservation, water rights and allocation priorities, groundwater and streamflow simulations, reservoir operations, hydropower generation, pollution tracking and ecosystem requirements.

43. The WEAP model also has capabilities for developing alternative baseline policy scenarios which can examine vulnerability of water supplies to different demographic, technological, and climatological/hydrological futures. It can also help develop alternative policy scenarios which can explore demand and supply management options for adapting to future vulnerability, with implications for the multiple and competing demands on water systems and implications of policies that can be evaluated such as the ability to meet water needs, hydropower availability, pollution loadings, and costs.

44. Ms. Bo Lim (NCSU, UNDP) presented information on the Adaptation Policy Framework (APF) which is focused on strategic policy-making. The content of the APF includes technical papers on project scope and design, stakeholders, vulnerability assessment, current climate risks, future climate risks, socio-economic conditions, adaptive capacity, formulation of adaptation strategy, and evaluation, monitoring and review. The APF can be used to develop strategies that improve national sustainable development goals with poverty reduction programmes, and develop a portfolio of adaptations in national and local planning, strategies to overcome barriers to adaptation, enhance adaptive capacity, and develop alternative investment plans. The APF will be used as a pilot in the GEF-funded project on capacity-building for adaptation in Central America, Mexico and Cuba and it is hoped that such a project will be replicated in other developing regions.

45. Mr. Shardul Agrawala (Organisation for Economic Co-operation and Development, OECD) made a presentation on the OECD project on "Development and Climate Change", whose primary objective is to integrate responses to climate change in development planning and assistance (www.oecd.org/env/cc). The project is being advanced through case studies in Bangladesh, Egypt, Fiji, Nepal, the United Republic of Tanzania, Uruguay and Vietnam, including a comparative analysis of national level GCM scenarios from 17 recent climate models to assess the degree of agreement in climate projections across the various models; multi-criteria ranking of critical impacts based upon degree of certainty, urgency, magnitude of the impact, and the significance of the resource that can help prioritize adaptation responses; and a framework for assessing the exposure of ongoing development projects and assistance portfolios to climate change risks. The analytical framework and background papers from the OECD project are available on the project web site, and country case studies from the OECD project are expected to become available on the web site from mid-2003.

46. Ms. Isabelle Niang-Diop (Senegal) made a presentation on the process of the national adaptation programmes of action (NAPAs), which serve as a simplified and direct channels of communication for information relating to the urgent and immediate adaptation needs of the least developed countries (LDCs). The NAPA process involves building multidisciplinary NAPA teams, defining goals and criteria, reviewing existing policies and identifying synergies, synthesizing available information, conducting a participatory assessment to identify urgent adaptation options, selecting priority adaptation needs, ranking projects and activities, developing project profiles, and integrating them into national policy frameworks. It is envisaged that NAPAs could form a basis for the second national communications of the LDCs.

47. Mr. Ravi Sharma (UNEP) described how vulnerability indices could be used by non-Annex I Parties in developing their vulnerability and adaptation needs and concerns. At the global level the composite vulnerability index could be used to determine which activities or areas could be eligible for funding; at local scales sectoral indices could be used in designing and targeting projects, and as aid in planning adaptation strategies.

48. Mr. Avani Vaish (GEF) provided background information on the GEF's adaptation strategy, which defines adaptation to climate change as any actions and policy measures undertaken to adjust to or ease the impacts of climate change. Guidance from the COP on adaptation was implemented through its enabling activities for the preparation of initial national communications in 133 countries. Stage I adaptation is not yet complete, and the GEF is currently funding some Stage II adaptation activities such as AIACC, Capacity-Building for Stage II Adaptation in Central America, Mainstreaming Adaptation to Climate Change in the Caribbean, Capacity-Building for Global Observation Systems for Climate Change, Climate change impacts on and adaptation in Agro-Ecological Systems in Africa. The GEF has prepared an action plan intended as a communication document on GEF operational policy on adaptation for the May 2003 GEF Council Meeting. The operational policy reflects the evolution of adaptation guidance and explains how the GEF will respond to this new COP guidance within its mandate.

49. In the ensuing discussions, participants identified a number of needs and concerns that would have to be overcome in order to facilitate reporting on vulnerability and adaptation in the national communications, including the provision and availability of increased financial and technical resources, promotion of information exchange among vulnerability and adaptation communities, increased geographical coverage of existing vulnerability and adaptation studies, training in the use of vulnerability and adaptation models and tools and the need for development of new methods and tools for vulnerability and adaptation work in developing countries.

Recommendations

50. Participants made the following recommendations:

(a) Additional resources and funding will be required to enable the provision of detailed information and the integrated analysis of vulnerability, as contained in the new guidelines, and to support concrete adaptation measures;

(b) Experts of non-Annex I Parties should collaborate and exchange information on vulnerability and adaptation;

(c) Ongoing programmes on methodological approaches, such as those undertaken in AIACC project, should be encouraged to develop new tools for vulnerability and adaptation assessments and expanded to include other regions and countries;

(d) Training should be provided on the use of the methods/tools and on data input requirements in order to improve the understanding of the tools for vulnerability and adaptation

assessment (WEAP, PRECIS, APF, MAGICC-SCENGEN,² etc.) that are currently available, and their application and use, based on national circumstances.

(e) Information on existing national and regional programmes on vulnerability and adaptation should be made available to non-Annex I Parties.

2. Programmes containing measures to mitigate climate change

51. The secretariat noted that non-Annex I Parties are encouraged to use whatever methods are available and appropriate in order to formulate and prioritize programmes containing measures to mitigate climate change, emphasizing that this should be done within the framework of sustainable development objectives.

52. Mr. Charles Heaps (SEI, Boston) described the use of the Long-range Energy Alternatives Planning System (LEAP) to assess mitigation options. LEAP is an integrated energy-environment, scenario-based modelling system which contains user-friendly data entry, scenario management and reporting tools that can cover energy demand, supply, resources, environmental loadings (emissions), cost-benefit analysis, and non-energy sector emissions. LEAP can also facilitate energy outlooks (forecasting), energy balances and environmental inventories, integrated resource planning, greenhouse gas mitigation analysis and strategic analyses of sustainable energy futures. Many non-Annex I Parties have used it in analysing and identifying their mitigation options in the preparation of their initial national communications.

53. Mr. Ravi Sharma (UNEP) described UNEP's work on mitigation analysis in developing countries. UNEP had assisted in developing and testing the guidelines for National Climate Change Mitigation Analysis and in enhancing local capacity for mitigation analysis through cooperation and training in the preparation of national communications in eight participating countries. He indicated that UNEP contributes to methodological guidance and national experiences and the GEF Enabling Activities processes and facilitates the provision of technical assistance by disseminating the guidelines and experiences to other programmes and projects. Such guidelines and experiences include national and regional reports, technical guidelines, handbooks, extended cost assessment framework, sectoral assessment, workshop reports and reports of case-studies (such as those of Mauritius and Hungary).

54. Mr. Moussa Cisse (Environment and Development Action, ENDA) discussed several case studies of mitigation in Africa to illustrate the use of methodologies and tools available for mitigation analysis and to highlight capacity-building needs for mitigation analysis in developing countries. In the case-study examples, he noted the use of a number of technical resources,³ some of which could be used by non-Annex I Parties in developing their mitigation assessments. Capacity-building issues in Africa relating to climate change issue in general, and mitigation analysis in particular, include the lack of specific policies on climate change, lack of integration of climate change issues in the mandates of regional and national institutions, lack of technical and sectoral capacities, high turn-over of skilled human resources, limited research capacity and weak institutional collaboration and networking. To overcome these problems a number of capacity-building initiatives have been developed including enhancing the participation in the UNFCCC processes (negotiation, subsidiary

² MAGICC-Model for the assessment of greenhouse gas-induced climate change; SCENGEN is a global and regional climate change scenario generator (MAGICC-SCENGEN).

³ Such as *Technologies, Policies and Measures for Mitigating Climate Change (IPCC Technical Paper I)*; *Economics of GHG limitations UNEP/Riso*; *GHG Mitigation assessment: A Guidebook*; *GHG Mitigation Assessment: A Guidebook by US Country Studies Program and models such as LEAP: Long range Energy Alternatives Planning system (Energy sector)*; *COMAP: Comprehensive Mitigation Assessment Process (Land-use change and Forestry)*, *Statistical tools (other sectors)*.

bodies, review process), learning-by-doing and information process, increased involvement in thematic seminars, conferences, workshops (UNFCCC and other organizations at international or bilateral level), encouraging collaborative research with Annex I Party institutions, universities, or United Nations collaborative centres, and participation in specific projects for capacity-building and in enabling activities for the preparation of national communications.

55. Discussions that followed the presentations were mainly centered on the lack of capacity-building for mitigation studies and assessment in developing countries.

Recommendations

56. Participants made the following recommendations:

(a) Non-Annex I Parties should explore capacity-building for mitigation analysis in key sectors and exploit opportunities for financial and technical assistance;

(b) Actions relating to capacity-building activities in non-Annex I Parties should include strengthening of competent and permanent institutions responsible for climate change activities and capacity-building relating to mitigation studies, assessments and their integration into sustainable development programmes.

E. Other information considered relevant to the achievement of the objective of the Convention

57. The secretariat emphasized that the guidelines also require non-Annex I Parties to report on any other information they consider relevant to the achievement of the objective of the Convention, for example on technology transfer, research and systematic observation, capacity-building, education, training and public awareness, and information and networking .

58. Mr. Mahendra Kumar (Fiji), noted that non-Annex I Parties could use the tables provided in the guidelines for Annex I Parties to facilitate reporting on technology transfer and research and systematic observation.

59. A presentation on education, training and public awareness suggested that Parties could also provide information on assessment of their capacity and needs for research and training of national experts on climate change issues such as national GHG inventories, vulnerability and adaptation assessments and GHG mitigation analysis.

60. A presentation on information and networking suggested that the provision of information in the national communication could help facilitate the development of a stronger information and networking support programmes such as: the nature and extent of participation by their experts in regional and international climate change-related processes, as well as barriers to this participation; existence and identity of centres/organizations/institutions of technical and scientific expertise relating to climate change and the extent to which these “sources” of expertise are able to effectively and efficiently access the internet, as well as barriers to this access; and examples of how the internet is being used to achieve information exchange and effective collaboration on matters relating to climate change, such as inventory development and technology transfer.

61. Discussion on other information to be reported by Parties indicated that information sharing, networking and effective participation in global research and systematic observation networks are often hampered by limited observation capabilities and poor maintenance of observation networks in developing countries. Effective participation by developing countries would help facilitate the enhancement of expertise in research and systematic observations and promotion of the UNFCCC processes.

Recommendations

62. Participants made the following recommendations:

(a) An effort should be made to integrate information sharing and knowledge transfer in the UNFCCC programmes and promote information and networking in order to avoid duplication, and facilitate replication of projects across regions;

(b) Non-Annex I Parties should be encouraged to contribute to and participate in global research and observing systems;

(c) The process of the preparation of national communication and vulnerability and adaptation assessment could benefit from collaboration with global research programmes such as IGBP and IHDP, and with other agencies such as the International Strategy for Disaster Reduction (ISDR) and the World Health Organization (WHO).

F. Constraints and gaps, and related financial, technical and capacity needs

63. The secretariat highlighted the importance of providing information on constraints and gaps, and related financial, technical and capacity needs, as well as proposed and/or implemented activities for overcoming the gaps and constraints, associated with the implementation of activities, measures and programmes envisaged under the Convention and with the preparation and improvement of national communications on a continuous basis. Non-Annex I Parties are also required to provide information on financial resources and technical support for the preparation of their national communications provided by themselves, as well as those received from the GEF, Annex II Parties or bilateral and multilateral institutions activities relating to climate change.

64. The secretariat indicated that the guidelines also encourage Parties to provide in their national communications a list of projects proposed for financing. Additionally, they may also include information on opportunities for the implementation of adaptation measures, including pilot and/or demonstration adaptation projects, being undertaken or proposed and on how support programmes from Parties included in Annex II to the Convention are meeting their specific needs and concerns relating to vulnerability and adaptation to climate change.

65. The guidelines also encourage non-Annex I Parties to provide information on country-specific technology needs and assistance received from developed country Parties and the financial mechanism of the Convention and, as appropriate, on how they have utilized this assistance in support of the development and enhancement of endogenous capacities, technologies and know-how.

66. In discussing the issue of reporting on the constraints and gaps, and related financial technical and capacity needs, the participants stressed that there was a need for immediate steps to be taken for funding and implementing pilot and/or demonstration projects.

Recommendation

67. Participants recommended that pilot and/or demonstration projects for adaptation should be funded and implemented immediately in order to provide further insights into the implementation of adaptation projects in non-Annex I Parties.

G. Multilateral and bilateral activities, programmes and projects that facilitate and provide financial and technical support for the preparation of national communications

68. Several multilateral and bilateral programmes and agencies on how they could assist non-Annex I Parties through the provision of financial and technical assistance in the preparation of their national communications. The multilateral organizations included the GEF, UNDP, UNEP, ISDR, and the Inter-American Institute for Global Change Research (IAI). Information provided by UNDP and UNEP is summarized in section III.D of the present report. The bilateral programmes and

organizations included the Canadian Climate Change Development Fund (CCCDF), the Japan Ministry of the Environment, the Netherlands Climate Change Studies Assistance Programme (NCCSAP) and the Swiss Bilateral Fund.

69. Mr. Avani Vaish (GEF) outlined the process for developing the operational guidelines for the preparation of second national communications. He indicated that at the GEF Council meeting in May 2003, the Secretariat of the GEF is expected to obtain authority for expedited support, upon which the operational guidelines will be developed for funding of second national communications.

70. Ms. Bo Lim (UNDP) provided information on the types of support that UNDP provides to non-Annex I Parties in the preparation of their national communications. She also indicated that the UNDP, through the NCSU, provided technical support to 130 non-Annex I Parties for the preparation of national communications from 1998 to 2002 by holding thematic and regional workshops, providing technical materials, disseminating information through newsletters, web site and list server, providing on-line assistance, and reviewing draft national communications. It also provided training on vulnerability and adaptation assessments, preparation of NAPAs, GHG inventories, technology needs assessments and global climate observing systems⁴. Currently, the UNDP, through its NCSU, continues to provide technical support to non-Annex I Parties for the preparation of national communications. The NCSU plans to develop a Knowledge Network to establish thematic discussions on climate change issues involving stakeholders at all levels (e.g. project coordinators, national experts, institutions, etc.) and a web page to provide technical assistance, facilitate information sharing, solicit feedback on draft papers, and disseminate national studies, methods and tools through newsletters and events.

71. Ms. Feng Min Kan (ISDR) outlined the areas for collaboration between the climate change and disaster communities at the national, regional and international levels. ISDR is a global strategy for disaster reduction involving stakeholders, dialogue and concerted action to address issues relating to disaster reduction and climate change adaptation. ISDR is implemented at the national level through national committees/platforms involving partner institutions and regional centres. Cooperation between disaster reduction and climate change communities could be enhanced through participation, awareness, knowledge networking, integration of information, and disaster risk reduction applications through disaster reduction platforms and national communication processes.

72. Mr. Eduardo Banus (IAI) outlined the activities of the IAI and described how it could assist the countries of the Latin America and the Caribbean (LAC) region in the preparation of national communications. He noted that given the mission of the IAI to develop the capacity to understand the integrated impacts of present and future global changes on regional and continental environments in the Americas and to promote collaborative research and informed action at all levels, it would be prudent to encourage the participation of experts from LAC in its summer institute on vulnerability associated with climate change and variability in Central America and the Caribbean. The summer institute of the IAI would strengthen the local and regional capacity to deal with vulnerability associated with climatic variability/change and extreme events by providing participants with a comprehensive and integrative framework approach to better understand climate variability/change and its potential impacts on productive sectors in Central America and the Caribbean, such as water resources, agriculture, tourism, health, and the application of climate forecasts into the policy and decision-making processes, and contribute to the preparation of national communications.

73. Mr. Satender Singh (Canada) indicated that the goals of the CCCDF are to contribute to Canada's international objectives on climate change, promote activities in developing countries that address the causes and effects of climate change, and contribute to sustainable development and poverty reduction. It is currently involved in 46 projects relating to emissions reduction (41%), carbon sequestration (30%), adaptation (18%) and core capacity-building (11%). The CCCDF has

⁴ Refer to paragraphs 30, 31 and 44 for further information on support from UNDP.

provided support for the preparation of national communications of China and Nigeria, and for other activities which could contribute to the preparation of national communications of countries in which the projects are set.

74. Mr. Yoshihide Hirao (Japan) indicated that Japan provides support for the preparation of national communications by promoting information exchange, developing human resources and providing financial resources through various channels. He made particular note of the importance of information sharing through the Asia-Pacific Seminar on Climate Change which has been held annually since 1991 with participation by policy makers and experts of the region. He noted that Japan also contributed to the third replenishment of the GEF to the amount of US\$ 420 million.

75. Mr. Kees Dorland (Institute for Environmental Studies, Free University Amsterdam) and Mr. Ian Tellam (ETC International) provided information on the activities of the NCCSAP Phases I and II. Phase I of the NCCSAP has assisted 13 countries in Africa, Asia and Latin America in the preparation of their (initial) national communications, to carry out in depth studies (emission inventories, mitigation assessments and impact and adaptation assessments), and to prepare national action plans. The NCCSAP phase I will be completed by 2004. Phase II, which began on 1 March 2003, will focus on multi-criteria analysis for adaptation assessments, and financing adaptation assessments in Bolivia, Colombia, Ecuador, Ghana, Mali, Mongolia, Senegal, Suriname and Yemen. An additional five countries will join the programme during the period 2003–2004. Phase II will assist developing countries to prepare, formulate, implement and evaluate climate change policy, raise awareness of the problem of climate change, increase the involvement of policy makers, scientists and 'broad layers' of the population in the climate change debate, focus on policy relevant and scientifically sound studies in the area of climate change, vulnerability and adaptation analyses and the preparation of national communications.

76. Mr. Othmar Schwank (Switzerland) made a presentation on the activities of the Swiss Bilateral Fund which was established in 1991 for supporting global environment projects in developing countries including investment projects, technical assistance and capacity-building. The projects that have been supported fall in three main areas: climate change, biodiversity conservation, and ozone and handling of toxic substances through the Swiss Agency for Development and Cooperation (SDC). The fund provided co-financing and support for the NCSU/UNDP between 2001 and 2004. It also provided technical assistance support to the preparation of the IPCC good practice guidance, development of the Adaptation Policy Framework and travel grants for non-Annex I experts to attend workshops, and meetings. The Fund also provided support for capacity-building and technology transfer in India, Peru and Central America. Through the United Nations Institute for Training and Research (UNITAR), it supports the preparation of NAPAs by the least developed countries and supports the UNFCCC secretariat and Swiss participation in holding workshops on national communications and in-depth reviews of Annex I national communications.

77. Participants noted that the level of support for such activities, programmes and projects has been decreasing, while the needs and concerns for detailed reporting of information have increased under the guidelines.

Recommendations

78. Participants made the following recommendations:

(a) Bilateral and multilateral support programmes should be encouraged to mobilize additional resources in order to provide and/or facilitate assistance to non-Annex I Parties in the preparation of their national communications.

(b) Provision of assistance from bilateral and multilateral support programmes should be better coordinated so as to avoid duplication of effort.

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