UNITED NATIONS

UNFCCC Framework Convention on Climate Change

Distr.
GENERAL

FCCC/SBI/2000/INF.10
3 November 2000

ENGLISH ONLY

SUBSIDIARY BODY FOR IMPLEMENTATION
Thirteenth session
The Hague, 13-18 November 2000
Agenda item 10 (b)

NATIONAL COMMUNICATIONS FROM PARTIES NOT INCLUDED IN ANNEX I TO THE CONVENTION

Report of the regional workshop of the Consultative Group of Experts on national communications from non-Annex I Parties of the Asian region

CONTENTS

I. INTRODUCTION

A. Mandate

1. Pursuant to decision 8/CP.5, a Consultative Group of Experts on National Communications from Parties Not Included in Annex I to the Convention (CGE) was established with the objective of improving the national communications from those Parties. This decision mandated the CGE to hold three regional workshops during the year 2000, one each in Africa, Asia, and Latin America and the Caribbean. The secretariat[1] was requested to coordinate these workshops. The first regional workshop was held in Mexico City, Mexico, from 8 to 12 May 2000 for the Latin America and the Caribbean region and the second regional workshop was held in Nairobi, Kenya, from 15 to 18 August 2000. The Asian regional workshop, the third in the series, was held in Bangkok, Thailand from 16 to 20 October 2000.

B. Scope of the report

2. This report briefly describes the objectives, activities and outcomes of the Asian regional workshop. Section II of the report describes the objectives and activities of the workshop and section III summarizes the main issues and problems encountered by Asian countries in the preparation of their initial national communications. Section IV outlines recommendations and follow-up action needed to address the specific problems and concerns of non-Annex I Parties as they relate to the preparation of their national communications. The list of supporting material, the agenda of the workshop and the list of participants are attached as annexes I, II and III respectively.

II. WORKSHOP OBJECTIVES AND ACTIVITIES

3. The workshop objectives, as defined by the terms of reference of the CGE annexed to decision 8/CP.5, were to:

(a) Exchange experience and information on the preparation of national communications, including consideration of subregional experience;

(b) Consider, as appropriate, the needs for and availability of financial resources and technical support, and the identification of barriers to and gaps in this support;

(c) Consider, as appropriate, information in national communications from non-Annex I Parties in accordance with the guidelines for the preparation of initial national communications by Parties not included in Annex I to the Convention contained in the annex to decision 10/CP.2;

(d) Review existing activities and programmes to facilitate and support the preparation of national communications by non-Annex I Parties with a view to identifying gaps and making recommendations to better coordinate these activities and programmes in order to enhance the preparation of national communications;

[1] The term secretariat in this document refers to the secretariat of the United Nations Framework Convention on Climate Change.

(e) Identify the difficulties encountered by non-Annex I Parties in the use of the guidelines contained in the annex to decision 10/CP.2 (UNFCCC guidelines)[2] and in the use of the Intergovernmental Panel on Climate Change (IPCC) methodologies and other models, and make recommendations for improvement where appropriate;

(f) Identify the analytical and methodological issues, including technical problems in the preparation and reporting of greenhouse gas (GHG) inventories, in particular with respect to the improvement of data collection, the development of local and regional emission factors and activity data, and the development of methodologies, where appropriate, with a view to enhancing the quality of future inventories;

(g) Examine national communications, in particular greenhouse gas inventories, submitted by non-Annex I Parties, with a view to arriving at recommendations on ways of overcoming difficulties in the use of the IPCC methodologies and the UNFCCC guidelines relating to inventories contained in the annex to decision 10/CP.2, and on possible innovations, and produce reports thereon;

(h) Encourage interaction among experts from all Parties.

4. A total of 35 participants from 24 countries attended the workshop. They included 30 experts from 20 countries in Asia and experts from four Annex I Parties, Australia, Germany, the Netherlands and Slovakia, and from the IPCC Task Force on National Greenhouse Gas Inventories. The workshop was conducted by four members of the CGE from the Asian region participating in the workshop, and was chaired by Dr. Vute Wangwacharakul (Thailand). Mr. Mahboob Elahi (Pakistan) served as rapporteur of the workshop.

5. The agenda of the workshop, which had previously been circulated among the participants, was adopted unanimously.

6. The workshop was conducted through four working groups dealing with issues and problems related to the preparation of greenhouse gas inventories (working group I); vulnerability and adaptation assessments (working group II); identification of abatement options (working group III), and financial and technical needs related to the preparation of national communications (working group IV). Working group IV also considered other information contained in initial national communications such as research and systematic observation, training and education, and public awareness. The group further considered information on cross-cutting issues related to coordination and networking, institutional strengthening and enabling activity support programmes. The working group reports were then referred to the plenary for review and adoption at the completion of the workshop.

7. Technical and expert presentations on experience in the preparation of initial national communications by countries of the region were made during the plenary session of the first day.

[2] The term “UNFCCC guidelines” as used in this document refers to the “Guidelines for the preparation of initial communications by Parties not included in Annex I to the Convention”, contained in the annex to decision 10/CP.2.

8. The workshop also had, for its consideration, the national communications submitted to date by 14 countries of the region,[3] and a compilation of information contained in these national communications presented as working papers by the secretariat.

III. MAIN ISSUES AND PROBLEMS

9. The present section summarizes the main issues and/or problems discussed in the four working groups.

A. Greenhouse gas inventories

10. In order to improve the quality and comprehensiveness of inventories, it is essential that the communication process should ensure continuity and sustainability of inventory preparation. Emphasis should therefore be placed on building national capacity as well as securing adequate resources for collecting and archiving adequate activity data, developing emission factors in key sources for which the IPCC does not provide emission factors that fit national circumstances, reducing uncertainties and minimizing biases. Participants considered that the inventories of the second national communication have to present an incremental improvement compared to the first ones, addressing to the extent possible the problems and limitations previously identified, in accordance with their capacities.

Analytical and methodological issues (methods, activity data and emission factors)

11. All reporting countries, as well as other Asian countries participating in the workshop which are in the process of preparing their national communication, used the IPCC methodology for preparing inventories. Most of them used the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories. Participants discussed the following sectors for their national greenhouse gas inventory in the Asian context: energy, agriculture, industrial processes, land-use change and forestry, and waste.

Energy

12. In the energy sector, activity data and emission factors in the fuel combustion subcategory are generally well documented for emissions resulting from fossil fuels, especially for carbon dioxide (CO_2), but activity data are lacking for biomass combustion. These emissions may represent an important share of the total emissions for some countries of the region. The collection of such activity data is difficult due to the widespread use of these fuels in the informal sector. Problems also exist for collecting activity data in the transport sector, which is very important in many countries of the region. The IPCC coefficients and emission factors for non-CO_2 gases do not fit well with the vehicular fleet characteristics of many countries.

13. Of the 15 national inventories submitted,[4] only three compared data obtained using the reference and the sectoral approaches, as requested by the IPCC Guidelines, which constitutes a useful technical check on the emission estimates of the fuel combustion subcategory. It was

[3] Cook Islands, Indonesia, Jordan, Kiribati, Lebanon, Malaysia, Micronesia (Federated States of), Nauru, Philippines, Republic of Korea, Samoa, Singapore, Tuvalu and Vanuatu.
[4] In addition to the GHG inventories contained in the 14 national communications, Israel has officially submitted its national inventory to the secretariat.

pointed out that there are differences between national energy balances and international energy data. It was noted that there are difficulties in selecting appropriate emission factors for the estimation of emissions from the boilers of desalination plants in some countries of the region. It was also noted that, due to the non-availability of appropriate activity data by sector and end-user, some countries had difficulty in using the non-CO_2 fuel combustion IPCC emission factors.

14. Participants identified examples of technical work done in developing national emission factors for fugitive methane (CH_4) emissions and/or flaring emissions resulting from the extraction and processing of oil and gas in some countries of the region, or emissions from biomass burning in domestic kitchens. Experience has not generally been shared with experts from other countries due to different factors, such as the lack of adequate networking, and/or non-publication of the results of the work.

Agriculture

15. Rice cultivation is a significant source of methane emissions for many countries of the region who are among the world's leading producers of rice. Livestock farming is also an important source of methane emission in the region. Agricultural soils constitute the largest source of nitrous oxide (N_2O) emissions for most countries that submitted their inventories. Difficulties have been identified in obtaining activity data for agricultural emissions, particularly because these data are dispersed and are in the rural sector where there is minimal or no data collection system. Local emission factors obtained from studies based on actual measurements of livestock and rice paddy emissions have been found to be more appropriate than IPCC default emission factors. However, the dissemination of these studies, as well as the sharing of experience among experts from the region on this matter, has been limited.

Industrial processes

16. Emissions arising from industrial processes are important for many countries of the region. The difficulty of collecting activity data from the private sector was acknowledged by participants. This may lead to a lack of reporting of emissions from this sector.

17. Although the UNFCCC guidelines encourage Parties to include perfluorocarbon (PFC) and sulphur hexafluoride (SF_6) emissions, they contain no explicit request to include hydrofluorocarbon (HFC) emissions. At its fourth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) encouraged the reporting of actual emissions of these three gases. Only Lebanon reported HFC emissions. The other 14 reporting Parties did not provide information on HFC, PFC or SF_6 emissions.

18. Experts from India provided a preliminary but comprehensive report on the estimation of HFC, PFC and SF_6 emissions that may constitute the first of its kind for non-Annex I Parties. The report indicates the existing difficulties of collecting these data (lack of appropriate statistics, confidentiality concerns, etc.) but represent an experience that may be used by other non-Annex I Parties, as appropriate.

Land-use change and forestry

19. In the land-use change and forestry sector, activity data are lacking or not accessible in many countries. Most participants pointed out the relatively large degree of uncertainty associated with activity data related to this sector. Participants also mentioned that it is very difficult to obtain activity data in the necessary time-series for achieving more reliable estimates. Large differences between international activity data and national activity data for forests were also mentioned.

20. Several participants also mentioned that the section on land-use change and forestry in the Revised 1996 IPCC Guidelines is often not comprehensive enough for Asian countries, e.g. the local classification of forests is different and does not fit with the extant classification system. Problems were also identified in default values of carbon density, growth rate of biomass, emission rate of soil carbon emissions, etc. Furthermore, there is a need for better definition of the terms used in this section of the IPCC methodology. In some instances, the IPCC Guidelines are not clear enough for consistent reporting across Parties. The Guidelines do not provide any detailed methodology for the estimation of CO_2 removal due to desert land conversion.

Waste

21. Emissions from waste constitute the most significant methane emissions for many countries of the region. Difficulties were identified in obtaining reliable activity data for estimating these emissions. The specific circumstances of solid waste disposal in the region may not be appropriately reflected in methods for estimating waste emissions of the IPCC Guidelines. It was also noted that efforts should be focused on the estimation of emissions from solid waste disposal in urban areas, where large anaerobic emissions take place.

Other issues

22. The need to disseminate among experts of the region the IPCC report, *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*, which could provide useful guidance in applying the IPCC Guidelines in the context of non-Annex I Parties, was recognized.

23. Information on emission factors resulting from research carried out in some non-Annex I Parties was often not included in the IPCC Guidelines because it is not published in international scientific journals. It may therefore not be available for use in other countries even within the same region.

24. The notation keys indicated by the IPCC Guidelines for not reporting emissions (e.g. NE: not estimated; NO: not occurring) have not been widely used. This affects the assessment of the completeness of reporting.

Use of the UNFCCC guidelines

25. The analysis of the use of the UNFCCC guidelines took into consideration information contained in the 14 national communications and one GHG inventory from the region as well as the opinion of experts attending the workshop.

26. The UNFCCC and IPCC guidelines facilitate the preparation of the national inventories by Parties. Parties provided inventory information additional to that explicitly requested by the UNFCCC guidelines.

27. Eleven reporting Parties used the Revised 1996 IPCC Guidelines. Other Parties that are currently preparing their national communication are also using them. Although the UNFCCC guidelines explicitly state that Parties should apply the IPCC Guidelines, no specific mention of the Revised 1996 IPCC Guidelines was made due to the fact that this last version of the IPCC Guidelines became available to Parties only after the adoption of decision 10/CP.2.

28. Most Parties provided inventory data using the IPCC reporting format (summary table 7A or modifications of such a table) and presented most of the information contained in the summary table. This information is more detailed than the information explicitly requested by table II of the UNFCCC guidelines. For example, table II does not explicitly require the reporting of GHG emissions that are important for these countries, such as N_2O from agricultural soils, or CH_4 from waste. Working paper No. 16: "National GHG inventories of non-Annex I Parties from Asia: Preliminary synthesis. Methodological issues" provides more information on this issue.

29. Some reporting Parties provided the worksheets of the IPCC reporting format. These worksheets provide for more transparent reporting of the inventory data than the UNFCCC guidelines, and facilitate the sharing of inventory information among experts and countries.

B. Vulnerability assessment and adaptation options

30. Countries of the Asian region cover a vast area and are of great diversity with respect to population, size, altitude, climate and economic development, and therefore the needs and requirements differ across the region. However, there are experiences that are commonly encountered by the countries in vulnerability and adaptation analysis.

31. The participants recognized that vulnerability and adaptation assessment is difficult and complex and this is an area where there is a large difference in capacity between Annex I and non-Annex I Parties. Accordingly, improved capacity in addressing vulnerability and adaptation assessment is a high priority for non-Annex I Parties.

32. Some countries in the Asian region have expressed the need to commence stage II adaptation activities, and assistance for capacity-building in this area is required.

33. Where there is a similarity of conditions in certain sectors, training on methodology can be usefully carried out either by a group of countries or on a regional basis. Wherever possible, vulnerability and adaptation assessment should preferably be carried out on a regional or subregional basis.

34. Vulnerability and adaptation assessment analysis is an ongoing process where nations learn to do the job better as they carry out the task. Further training will facilitate improvement of the vulnerability and adaptation assessment process. As understanding and methodology improves, the accuracy and usefulness of the analysis also increases.

35. Capacity-building is required for the region in vulnerability and adaptation assessment analysis. However, the requirements differ widely across sectors. Training is needed at both

basic and advanced level in vulnerability and adaptation assessment analysis, including ways to identify and collect information, apply models or tools and interpret results. Policy makers also need to be informed of vulnerability and adaptation issues so that they can be in a better position to appreciate the climate change problems and thus make better decisions.

36. It is recognized that uncertainty in regional climate scenarios will continue to exist for a while. It is suggested that, to reduce the uncertainty, only recent versions of global climate models that simulate the present climate of the region under consideration reasonably well, should be used for vulnerability and adaptation assessment studies. There is also a need to train national experts in the use of climate model outputs in vulnerability and adaptation assessment studies. Because there are uncertainties about future climate change at a regional or a local level, and in particular about the effect that climate change will have on extreme events, participants noted that some national communications provided information which suggested that adapting to climate variability may provide useful insights for adaptation to climate change.

37. The Asian region is currently experiencing stress due to climate-related events. Though it is not certain how climate change may affect these events, experience indicates the vulnerability of sectors such as water resources, agriculture and coastal zones, to the variability of climate.

38. The accessibility and availability of models involved in vulnerability and adaptation assessment are not uniform. Some models cannot be run because of the lack of data. As a result, some qualitative judgements are used in national communications. The accessibility and availability of models need to be improved, and training to understand and operate models is an important requirement.

Use of the UNFCCC guidelines

39. The UNFCCC guidelines are found to be vague with respect to reporting on national vulnerability and adaptation assessment. The guidelines on this subject are also not contained in one section but are found in various sections.

40. The UNFCCC guidelines assume that each nation has the capacity to carry out vulnerability and adaptation assessment analysis. There is no mention of the need to build capacity to perform the analysis.

41. Some countries used the IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptation in their vulnerability and adaptation assessment analysis. They found that these guidelines were difficult to apply.

C. Abatement options

42. Although developing countries do not have commitments for limiting GHG emissions, all 14 reporting countries provided information on mitigation[5] options in their national communications. Workshop participants from other Asian countries indicated that mitigation

[5] The secretariat uses the term mitigation in this chapter in the same way that reporting Parties used it in their national communications, reflecting efforts reported by Parties in abating, limiting or reducing GHG emissions in the context of their sustainable development plans.

options are being assessed for inclusion in their national communications. Asian developing countries have also given attention to the avoidance of emissions.

43. The participants recognized that there has been only a limited exchange of information and experience regarding assessment of abatement options.

44. All participating countries have identified mitigation options in the energy sector and many countries have also identified GHG abatement measures in the land-use change and forestry, transport, agriculture, and waste sectors. Some countries have also identified abatement measures in industrial processes.

45. In the energy sector, the tools used for mitigation analysis included the use of models such as LEAP[6], ENPEP[7] and MARKAL[8]. In the transport sector, the use of the MARKAL model was also mentioned.

46. During the workshop, some countries described their experience in the further assessment of the mitigation options and measures in some sectors after submission of their initial national communications. This highlights the fact that assessment of mitigation options is an ongoing process.

47. The prevailing abatement options analysed by the participating countries in the energy sector are energy conservation and efficiency measures, such as improved appliance efficiency and/or building standards. Other options include switching to cleaner fuels and the use of renewable energy and cogeneration.

48. In the transport sector, the main options are a more energy-efficient modal split and efficiency improvement in the different modes of transport; imposition of tariffs or taxes on cars; application of varied road tolls; and improvement of vehicle maintenance or replacement of old vehicles.

49. Reforestation and preservation of existing forest areas are considered to be among the most important mitigation options for the enhancement of sinks in the land-use change and forestry sector. Other mitigation options evaluated are prevention and control of forest fires, afforestation and plantation. Some countries reported on the implementation of economic instruments such as tax incentives.

50. For the agriculture sector, the main mitigation options analysed are rice cropping systems, including the adoption of improved management practices in rice cultivation; and promotion of low CH_4 emission rice cultivars. Other options identified include those relating to plant nutrient management such as the appropriate and rational use of fertilizers, promotion of improved agricultural practices, and improvement of livestock production through diet alteration.

51. For the waste sector, the main mitigation options analysed are waste minimization, integrated waste management, and waste water treatment.

[6] LEAP: Long-range Energy Alternatives Planning system.
[7] ENPEP: ENergy and Power Evaluation Programme.
[8] MARKAL: MARKet ALlocation model.

52. A number of Parties indicated limitations associated with the implementation of measures to limit emissions of GHGs and referred to the use of legislation, subsidies, tax incentives and development funds to encourage emission reduction measures.

53. Some participants also indicated that there are non-market barriers to the implementation of abatement options and measures. However, there is no requirement to report these barriers.

54. Although several methodologies and tools were used to assess the options to limit GHG emissions in different sectors, many countries faced difficulties of insufficient data and trained personnel to access and use appropriate models and methodologies. In addition, some countries have experienced problems because of the lack of access to model source codes.

55. Some technical difficulties were encountered in the estimation of the emissions reduction associated with the implementation of identified measures. Also, the technical potential for emission reduction in some of the sectors and the cost associated with the implementation of measures were difficult to assess. Other problems identified included limited access to appropriate technologies for the development of integrated mitigation strategies and policies.

56. Difficulties were also identified in determining the status of implementation of mitigation options due to different levels of reporting by Parties.

Use of the UNFCCC guidelines

57. The UNFCCC guidelines do not provide the framework for assessment of GHG abatement options. For instance, they do not supply definitions or guidelines for the estimation of incremental cost and GHG emissions reduction in relation to projects for financing. They also do not provide guidance on how Parties might incorporate the nationally developed mitigation measures into the national planning processes aiming at sustainable development.

D. Research and systematic observation

58. Participants observed that insufficient climatic data due to the absence of high quality monitoring stations and/or the limited geographical coverage of existing monitoring stations inhibit countries' ability to establish historical climatic changes in different local regions.

59. Existing monitoring stations have limited human, technical and financial capacities to monitor all parameters needed to carry out relevant climate change studies.

60. Most monitoring stations have either been in operation for less than 30 years or have significant gaps in the data sets. This limits the use of methodologies suggested by the IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptation.

61. Countries experienced difficulties in accessing some climate data that have been collected at local stations but are stored at locations outside those countries.

62. Limited access to hardware, software and methodologies, and inadequate financial and technical capacity to develop or modify existing models and methodologies impede national ability to carry out climate related work.

E. Training and education

63. There is a lack of sufficiently trained scientific and technical personnel, as well as policy makers, in the field of climate change to effectively carry out Parties' obligations under the Convention.

64. Climate change issues are not adequately incorporated into formal educational curricula at the primary, secondary and tertiary levels for most Parties.

65. There is a lack of institutions and/or lack of capacity of existing institutions to carry out research and training on climate change issues to satisfy the reporting requirements of Parties and also to improve understanding of local and regional climate changes and impacts.

66. There is also a lack of ability of technical personnel to convey clear and concise information on climate change issues to policy makers.

Use of the UNFCCC guidelines

67. The guidance given in the guidelines on the elaboration of national programmes relating to training and education is inadequate and needs to be clarified in order to enable Parties to implement Article 6 of the Convention.

F. Public awareness

68. Although some countries presented their experience regarding the implementation of public awareness campaigns and the dissemination of information related to climate change, there was a general expression of a low level of public awareness of climate change issues in some countries. This hinders the full participation and support of the public in the formulation and implementation of activities and programmes designed to meet Parties' obligations under the Convention, including reporting requirements such as those concerning national communications.

69. There is a lack of institutional and technological capacity to assess public awareness needs relating to the causes and impacts of climate change, and the development and implementation of relevant public awareness programmes and activities.

Use of the UNFCCC guidelines

70. Guidance given in the guidelines on the elaboration of national programmes relating to public awareness is inadequate and needs to be clarified in order to enable Parties to implement Article 6 of the Convention.

G. Cross-cutting issues

Coordination and networking

71. There is a lack of hardware, software and expertise to establish and maintain networking facilities for the exchange of information.

72. The lack of financial, technical and human resources limits the capacity of institutions to effectively coordinate climate change activities and thus improve the national communication process.

Institutional strengthening

73. Climate change national focal points lack the capacity and support needed to efficiently coordinate and implement climate change activities at the national level and to participate in subregional, regional and international climate change initiatives.

74. Participants noted that weak national institutional frameworks (i.e. formation of climate change committees and technical/expert teams) do not facilitate the preparation of national communications, including the capacity to integrate climate change concerns into the national planning process on a sustainable basis.

75. There is a lack of capacity to formulate project proposals in the required format and to implement climate change projects.

76. Project management teams lack continuity.

Enabling activity support programmes

77. The efforts of the multilateral agencies, including the Global Environment Facility (GEF), as the operating entity of the financial mechanism, and its implementing agencies, as well as those of bilateral support programmes to help build capacity for the preparation of national communications are recognized. However, the cumbersome project cycle for the development, approval and implementation of projects as well as the disbursement of funds hinders the ability of Parties to efficiently carry out their mandates under the Convention.

78. As regards vulnerability and adaptation assessment, participants recalled the assistance provided to the countries of the region by the National Communications Support Programme (NCSP) of the United Nations Development Programme (UNDP), GEF and the World Bank, as well as the United States Country Studies Program, the South Pacific Sea-Level and Climate Monitoring Programme (Australia), Climate Change Vulnerability and Adaptation Assessment Certificate Programme (New Zealand), and South Pacific Vulnerability and Adaptation Studies (Japan).

79. The lack of consultation between Parties and the GEF, its implementing agencies, and bilateral agencies, in the design, formulation and evaluation of support programmes under the climate change enabling activity projects, means that support programmes are not country driven, resulting in projects that are not responsive to national needs.

80. Having revised and analysed the existing financial and technical support programmes, the workshop participants concluded that they are inadequate to help Parties meet their commitments under the Convention.

IV. RECOMMENDATIONS AND FOLLOW-UP

A. Greenhouse gas inventories

81. Recommendations arising from the analysis of information contained in the national communications and discussions during the workshop should not be considered as exhaustive due to the limited number of national communications submitted by Parties of the region as well as the limited number of experts present at the meeting.

82. Participants identified the preparation and updating of inventories on a systematic basis by a national team that ensures continuity of the work as the most important element in the proper collection and use of activity data, application of methods, or selection of emission factors. The availability and quality of activity data was also considered as an important factor that affects the quality of GHG inventories. It was also noted that the use of inappropriate emission factors negatively influences the inventory preparation.

83. National capacities should be developed to archive and manage all national inventory data (activity data, emission factors, conversion factors, etc.) for past and current years that will facilitate the periodic preparation of better quality inventories in a cost-efficient way.

84. Participants made several recommendations for financial and technical support, as well as for the strengthening of national and regional capacities, with the aim of overcoming identified problems in the preparation of national greenhouse gas inventories. These recommendations can be found in paragraphs 122 to 129, 145, 150, 151, 153 and 154 of this report.

85. Participants supported the preparation of the IPCC database on emission factors and requested the IPCC to design it in such a way as to facilitate the use of appropriate emission factors in the preparation of non-Annex I Party GHG inventories, by explaining the use of these emission factors in different national circumstances.

Possible improvement of the UNFCCC guidelines

86. Participants recognized that the current UNFCCC guidelines prepared in 1996 were of great value in facilitating the reporting by non-Annex I Parties. At the same time, in the context of decision 8/CP.5, the participants urged that the guidelines be updated in line with the experience of Parties so as to enhance the quality of the inventories and the transparency of reporting. In this context, the participants made the following proposals for improving the UNFCCC guidelines:

(a) Non-Annex I Parties should apply the Revised 1996 IPCC Guidelines, as appropriate and to the extent possible;

(b) Table II of the UNFCCC guidelines should be replaced by IPCC summary table 7A as the basis of reporting GHG emissions and removals;

(c) Non-Annex I Parties should be encouraged to provide, as appropriate, worksheets of the IPCC reporting format as an appendix to the GHG inventories included in the national communications, either in electronic form or in hard copy. The IPCC software, which is used by many non-Annex I Parties, allows for automatic reporting of both IPCC summary tables and worksheets;

(d) Non-Annex I Parties should be encouraged to use the IPCC notation keys;

(e) Non-Annex I Parties should be encouraged to use, as appropriate and to the extent possible, the IPCC Good Practice Guidance in the context of their national circumstances.

B. Vulnerability and adaptation assessments

87. Participants made several recommendations for financial and technical support, as well as for the strengthening of national and regional capacities, with the aim of overcoming identified problems in the assessment of vulnerability and adaptation. These recommendations can be found in paragraphs 130 to 136, 146 and 147 of this report.

88. In making available information and methods relevant to vulnerability and adaptation assessment, it is recommended that the Internet be used so that national vulnerability and adaptation assessment teams can access them. However, since Internet facilities in some countries are unreliable, it is important that other methods of distribution are used as well.

89. Training is required in a number of key areas: development and application of methods for undertaking vulnerability and adaptation assessment, use of climate models and preparation of scenarios for vulnerability and adaptation assessment, use of impact models, establishment and management of databases, identification and collection of information and interpretation of results.

90. Training programmes should be designed to meet both the basic and advanced-level needs of experts in vulnerability and adaptation assessment analysis.

91. Participants stressed the need for continued capacity in vulnerability and adaptation assessment within non-Annex I Parties and recommended the establishment of appropriately skilled and resourced national teams. In order to enhance region-wide capacity in vulnerability and adaptation assessment, it is important that national teams network with others in the region or those that are addressing comparable issues.

92. A mechanism to involve policy makers in the design of multilateral programmes for vulnerability and adaptation assessment needs to be established.

93. One area of need in this region is the lack of data or information for vulnerability and adaptation assessment. Each country requires support to establish and maintain databases relevant to vulnerability and adaptation assessment.

94. Non-Annex I Parties indicated that they require capacity to obtain and run regional climate models. The ability to use impact models in sectors such as water resources, agriculture, coastal zones and natural ecosystems is also needed.

95. Support is required to facilitate the integration of vulnerability and adaptation assessment into economic development and planning. There is also a need to enable policy makers to be aware of the national vulnerability and adaptation.

96. Some countries expressed the need for assistance to prepare for disasters related to extreme weather events.

Possible improvement of the UNFCCC guidelines

97. Since reporting vulnerability and adaptation assessment is an important part of the national communication, it is recommended that vulnerability and adaptation assessment be explicitly mentioned in the UNFCCC guidelines.

98. It is recommended that further work to improve the methods of vulnerability and adaptation assessment be undertaken, and that such guidelines be made widely available to non-Annex I Parties so as to assist in the preparation of national communications.

99. The revised guidelines for non-Annex I national communications should request Parties to identify the gaps in data and monitoring in support of vulnerability and adaptation assessment.

C. Abatement options

100. The provision of adequate financial and technical support as well as capacity-building in such areas as institutional strengthening, human resource development, methodologies, technology assessment and networking, is a prerequisite for the adequate formulation of abatement options.

101. Participants made several recommendations for financial and technical support, as well as for the strengthening of national and regional capacities, with the aim of overcoming identified problems in the formulation of abatement options. These recommendations can be found in paragraphs 137, 138 and 157 of this report.

102. It is strongly recommended that the regional exchange of experience and training in the area of GHG abatement methodologies and assessment be encouraged, taking into consideration that duplication of effort should be avoided. They also agreed that countries, subregions and regions should establish networks in order to exchange information on GHG abatement assessment. The assistance of regional and international organizations and/or bilateral donors is required for this purpose.

Methodologies

103. Technical guidance should be provided to facilitate the assessment of mitigation options for the preparation of national communications, especially regarding the estimation of incremental cost. Special consideration should be given to the limited availability of relevant data and information in the region, and to the interaction between abatement options and/or measures.

104. The use of appropriate tools should be encouraged. These tools may include a variety of models and methods that are being used in the analysis of abatement options in various sectors, e.g. LEAP, ENPEP, MARKAL.

105. It was observed that, in some cases, country study teams did not have access to the models that they would require for the preparation of their national communications. Other constraints relate to the lack of data and limited expertise in the use of the models. These constraints were evident in studies on abatement options.

106. A mitigation assessment should include at least two types of scenario for each sector, a baseline or reference scenario (which is a description of a plausible future in which no policy

action is taken to reduce GHG emissions or enhance carbon sinks) and mitigation scenarios which assume that policies and programmes are implemented.

107. Full cost-benefit analysis and the use of the opportunity cost concept should be encouraged to evaluate the proposed GHG abatement options at sectoral levels.

108. Development of emission scenarios needs to be strengthened.

109. Evaluation criteria should be developed to improve the coherent analysis of mitigation options in the national context and to facilitate the cross comparison of such options.

Reporting

110. There is a need for clear definitions and/or terminology of the sectors, units, indicators, parameters and country-specific assumptions used in the abatement analysis and reporting of mitigation options in the national communications.

111. Selected mitigation options should include an indication of the status of progress (planned, ongoing, implemented) of such measures.

112. As countries should seek to include the programmes containing measures for the abatement of greenhouse gas emissions and enhancement of removals by sinks, participants felt that - if countries report on the subject - they could best do so in a comparable manner.

Technical support

113. There is a need for the exchange of experience in abatement assessment in all relevant sectors. Examples include the establishment of networks and/or clearing houses and the organization of workshops.

114. Taking into consideration the work done on GHG abatement analysis by the NCSP, it is requested that, as far as practicable, the support for this programme should be continued.

115. Training is needed in the preparation of project proposals in the appropriate formats for funding. This is important for obtaining GEF funds for the implementation of enabling activities within the framework of subsequent national communications.

116. Support for cost-benefit and opportunity cost analysis to evaluate the proposed GHG abatement options needs to be strengthened.

117. Support for the development of emissions scenarios needs to be strengthened.

Possible improvement of the UNFCCC guidelines

118. There is a need to improve the process of preparation of national communications. In doing so, and taking into account national circumstances, the UNFCCC guidelines could, when appropriate, be expanded to include considerations of methodologies, reporting and technical support related to abatement options along the lines of paragraphs 103 to 117 above.

D. Financial and technical support

119. Timely provision of adequate financial and technical support underpins the whole process of preparing national communications.

120. From the information contained in the national communications submitted, country presentations and discussions held at this workshop, it was observed that due to inadequate financial and technical support, non-Annex I Parties have not been able to cover all the elements of information required by the UNFCCC guidelines in fulfilment of Article 12.1 of the Convention in a sufficient way.

121. Significant constraints and gaps still exist in the provision of both financial and technical support in the areas indicated below.

GHG inventories

122. The participants considered that adequate funding should be provided for the preparation of the second national communications of non-Annex I Parties to facilitate the preparation and updating of inventories on a systematic basis by a national team that ensures the continuity of the work. This would help reduce uncertainties in the emissions and removals which constitute a large share of the national inventories.

123. The participants recommended that resources should be provided to countries in order to alleviate problems related to activity data and/or emission factors that could affect the reliability of the estimates of those emissions which constitute a large share of the total national emissions. The participants also recommended that resources should be used efficiently. In line with this, the participants recommended that, in general, resources should not be used in developing national emission factors in source categories that do not represent a large share of total emissions.

124. Participants also stressed the need to use regional expertise in developing emission factors that could be used at a regional level. In this regard, it was pointed out that there is a need to develop such emission factors based on actual measurement of emission fluxes performed by centres of expertise. Experts from other countries of the region have to be involved in this development. This approach will also promote the training of these experts.

125. Resources may be sought for the purposes described in the previous paragraph on condition that the related emissions constitute a large share of the total emissions for several countries of the region, and if the available emission factors of the IPCC do not fit regional circumstances. The participants considered that this approach may be used in the region for developing emission factors for livestock, rice cultivation and fugitive emissions.

126. It was also suggested that adequate funding should be provided to undertake activities leading to the improvement of local emission factors when this is important to reduce the uncertainty of the inventories.

127. Financial and technical support for activities related to GHG inventories should be sought from the GEF, bilateral donors and international organizations, and through collaboration between countries of the region. Different inventory-related activities should be better coordinated.

128. Financial and technical support should be provided where needed to Asian non-Annex I Parties, particularly least developed countries, to assist them in the creation, development and maintenance of national web sites which could save expense in capacity-building and sharing information. The assistance may be provided within the framework of multilateral or bilateral cooperation. The use of existing web sites is encouraged.

129. The participants welcomed the UNDP project "Capacity-building for improving national GHG inventories" for the Asian region. The participants requested UNDP to link this project with enabling activity projects in order to ensure the availability of appropriate hardware and software to archive and process the GHG inventory data for all involved Parties. The participants mentioned the need to include countries from all parts of the Asian region to ensure that the needs of all Asian countries are covered to the extent that is feasible and relevant. The participants also mentioned the need for the project to draw on submitted national communications or published national GHG inventories.

Vulnerability and adaptation assessments

130. Financial and technical assistance should focus on the four most important sectors identified for this region, namely, water resources, agriculture, coastal zones and natural ecosystems including forestry. In some countries, other sectors may also be important and need assistance.

131. The participants in the workshop identified the preparation of national vulnerability and adaptation assessments in a systematic manner, by a national team that ensures continuity of the work, as an important element in strengthening and maintaining the capacity to assess vulnerability and adaptation in each country. This core team should network with others in the region and subregion so that information and knowledge can be shared.

132. Since reporting vulnerability and adaptation assessment is an important part of the national communication, it is recommended that vulnerability and adaptation assessment be explicitly mentioned in the UNFCCC guidelines.

133. It is recommended that there should be further work to improve the methods for undertaking vulnerability and adaptation assessment, and that such methods be made widely available to non-Annex I Parties so as to assist in the preparation of national communications.

134. In making available information and methods relevant to vulnerability and adaptation assessment, it is recommended that the Internet be used so that national vulnerability and adaptation assessment teams can have access to them. However since Internet facilities in some countries of the region are unreliable, it is important that other methods of distribution are used as well.

135. The revised guidelines for non-Annex I Party national communications should request Parties to identify the gaps in data and monitoring in support of vulnerability and adaptation assessment.

136. Participants stressed the need for continued capacity in vulnerability and adaptation assessment within non-Annex I Parties and recommended the establishment of appropriately skilled and resourced national teams. In order to enhance region-wide capacity in vulnerability

and adaptation assessment, it is important that national teams network with others in the region or those addressing comparable issues.

Abatement options

137. Financial assistance and access to appropriate technologies are also identified as being crucial for the identification and analysis of abatement options.

138. Parties also emphasized the need to improve the national capacities to prepare mitigation projects for funding.

Research and systematic observation

139. Financial assistance should be provided to enhance national capacity to either establish new monitoring stations or upgrade the existing stations to provide adequate climate data to support the climate change studies.

140. There is a need to enhance the expertise of technical personnel to run the climate stations.

141. Financial assistance is needed to access national climatic data in order to study the causes and effects of climate change.

Training and education

142. Technical and financial support is needed for the development of appropriate educational curricula and for training and implementation of curricula including the preparation of teaching and learning materials.

143. Existing institutions, including universities and research institutions, require strengthening in order to carry out climate change studies so as to facilitate implementation of the Convention by Parties. Where these institutions do not exist, assistance should be provided to establish them.

144. Parties are encouraged to share their capacity-building materials possibly through some depositary centres in order to facilitate distance learning.

145. Participants urged UNDP, UNEP, IPCC and the secretariat to work collectively in order to find ways of disseminating the IPCC good practice guidance to non-Annex I Party experts and training such experts in the application of the guidance. They also encouraged those organizations to develop a training kit for the application of the good practice guidance in the preparation of GHG inventories by non-Annex I Parties, taking into account the specific circumstances of each region. Experts of non-Annex I Parties have to be involved in the development of the training kit.

146. Training is required in a number of key areas in vulnerability and adaptation assessment: development and application of methods for undertaking vulnerability and adaptation assessment, use of climate models and preparation of scenarios for vulnerability and adaptation assessment, use of impact models, establishment and management of databases, identification and collection of information on vulnerability and adaptation assessment and interpretation of results.

147. Assistance is needed to design training programmes that would meet both the basic and the advanced-level needs of experts in vulnerability and adaptation assessment.

Public awareness

148. Sufficient financial and technical assistance should be provided to support the public awareness efforts of non-Annex I Parties in the context of the national communications. The support should include assistance in assessing public awareness needs, developing and implementing public awareness programmes, developing and disseminating relevant materials in local language(s), and establishing web sites.

149. Parties are encouraged to share their public awareness materials with other countries. The library of the secretariat has been identified as one of the possible depositary centres of public awareness materials on climate change.

Cross-cutting issues

Coordination and networking

150. Participants stressed the importance of developing and maintaining a network of national communications teams for sharing information and training purposes. Participants further suggested that, in relation to the national GHG inventories, this network may be developed on the basis of sectoral expertise and taking advantage of the increasing availability of Internet services in the region. Such a network should include experts and institutions involved, with a clear identification of their areas of expertise. It is also recommended that the network be associated with the web site of the secretariat and promote effective interaction with relevant intergovernmental organizations, such as the IPCC. Participants recommended allocating appropriate funding for this cost-effective way of capacity-building among experts of the region.

151. Participants noted that the facilities for regional information exchange and the development of expertise are insufficient. There is a need to strengthen coordination among stakeholders in the preparation of national communication through the provision of hardware and software and also to enhance network facilities for exchange of information through the creation of web sites and databases.

152. Existing networks such as the Asia-Pacific Net could be used in a cost-effective manner to enhance the regional networking, with a view to enhancing capacity for the preparation of national communications.

153. Participants considered that collaboration between experts associated with national communication and inventory researchers would be mutually beneficial, and in this context the "Institute for Global Environmental Strategies Network for Asia Pacific to Improve (GHG) Inventories Database"[9] was brought to the attention of the workshop.

[9] http://www.iges.or.jp/cc/napiid/NAPIID.htm

Institutional strengthening

154. National technical coordinators for the preparation of national communications in the context of the Convention process should be officially designated by the UNFCCC national focal points in those countries where this has not been done.

155. Adequate financial and technical support is needed to increase the capacity of national focal points to effectively coordinate and implement climate change activities at all levels through the establishment of a national climate change office.

156. The national institutional framework should be strengthened to facilitate the preparation of national communications.

157. National capacity should be enhanced to formulate climate change project proposals in the format that will facilitate the approval and subsequent implementation.

Enabling activity support programmes

158. The workshop recommended that enabling activity projects be country driven and that adequate consultations should take place between the donor agencies and the recipient Parties in the design, formulation and implementation of these projects.

159. The GEF project cycle should be further streamlined so that Parties have easy access to resources for project implementation

160. Some Asian countries benefited from assistance under the National Communications Support Programme. The design and focus of the present phase of that programme is at present insufficient to provide the length of training needed to carry out the studies under their enabling activity projects. It is recommended that the programme be extended and that its new phase be designed with maximum input from the beneficiary countries to ensure that the programme best meets their needs.

161. Irrespective of the assistance received by Parties through various support programmes, significant capacities still need to be built if countries of the region are to effectively implement their commitments as Parties to the Convention, with the assistance provided as stipulated by Article 4.3, 4.5 and 4.7.

162. The workshop participants identified significant barriers and constraints in accessing resources under some of the support programmes. These barriers include a lack of information on the programmes, donors and funds available, deadlines, etc. Also a follow-up of the proposals would benefit the process. In addition, there is a need to enhance the capacity of national experts to formulate project proposals in accordance with the format and guidelines of the donor agencies.

Annex I

SUPPORTING MATERIAL

Decisions of the Conference of the Parties

1. Decision 11/CP.1 - Initial guidance on policies, programme priorities and eligibility criteria to the operating entity or entities of the financial mechanism (FCCC/CP/1995/7/Add.1).

2. Decision 10/CP.2 - Communications from Parties not included in Annex I to the Convention: guidelines, facilitation and process for consideration (FCCC/CP/1996/15/Add.1).

3. Decision 11/CP.2 - Guidance to the Global Environment Facility (FCCC/CP/1996/15/Add.1).

4. Decision 2/CP.4 - Additional guidance to the operating entity of the financial mechanism (FCCC/CP/1998/16/Add.1).

5. Decision 12/CP.4 - Initial national communications from Parties not included in Annex I to the Convention (FCCC/CP/1998/16/Add.1).

6. Decision 8/CP.5 - Other matters related to communications from Parties not included in Annex I to the Convention (FCCC/CP/1999/6/Add.1).

Other UNFCCC documents presented at the workshop

1. Report of the regional workshop of the Consultative Group of Experts on national communications from non-Annex I Parties of the African region (FCCC/SBI/2000/INF.9).

2. Working paper No. 16 (2000) - Report of the working group on national greenhouse gas inventories (workshop of the Consultative Group of Experts on national communications from non-Annex I Parties of the African region).

3. Working paper No. 17 (2000) - Report of the working group on vulnerability assessment and adaptation options (workshop of the Consultative Group of Experts on national communications from non-Annex I Parties of the African region).

4. Working paper No. 18 (2000) – Report of the working group on abatement options (workshop of the Consultative Group of Experts on national communications from non-Annex I Parties of the African region).

5. Working paper No. 19 (2000) - Report of the working group on financial and technical needs (workshop of the Consultative Group of Experts on national communications from non-Annex I Parties of the African region).

6. Analysis of decision 8/CP.5: Consultative Group of Experts, presented at the workshop.

7. National GHG inventories of non-Annex I Parties from Asia: Preliminary synthesis and methodological issues, presented at the workshop.

8. Vulnerability and adaptation assessments from the Asian region: A preliminary synthesis and methodological issues, presented at the workshop.

9. GHG abatement options of non-Annex I Parties from Asia: Preliminary synthesis and methodological issues, presented at the workshop.

10. An introduction to problems identified in the region regarding financial and technical support for the preparation of national communications, presented at the workshop.

Other documents

1. Carter, T. R., Parry, M. L., Harasawa, H., Nishioka, S., *IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptation*, ed. IPCC (WMO/UNEP). Cambridge University Press, 1994.

2. Comparison of national communications to the UNFCCC (Pakistan)

Other supporting material

1. Preliminary estimation on emissions of HFCs, PFCs and SF_6 in Indian industry, presented at the workshop.

2. Estimating land-use change and forestry sources and sinks: The Philippine experience, presented at the workshop.

3. Inventory of anthropogenic emissions by sources and removal by sinks of greenhouse gases not controlled by the Montreal Protocol – Base year 1990: Saudi Arabia, presented at the workshop.

4. Experiences with the preparation of GHG inventory from agriculture sector in Sri Lanka, presented at the workshop.

5. Preparation of national GHG inventory in Vietnam's initial communication related to UNFCCC, presented at the workshop.

6. Impact of climate change on agriculture: Thailand, presented at the workshop.

7. Water resources of small islands (Vanuatu experience), presented at the workshop.

8. Problems and difficulties in vulnerability and adaptation analyses: Malaysia, presented at the workshop.

9. Mitigation options for the energy sector of Lebanon, presented at the workshop.

10. Assessment of GHG abatement options: Korean experience, presented at the workshop.

11. Indonesia's experience in assessment of GHG abatement options in the forestry sector, presented at the workshop.

12. Micronesia's experiences related to financial and technical support, presented at the workshop.

13. Lao PDR's experience on financial and technical assistance, presented at the workshop.

14. Financial and technical needs for the preparation of national communications: United Arab Emirates, presented at the workshop.

15. Financial and technical needs in the preparation of initial national communications of Mongolia, presented at the workshop.

Annex II

AGENDA

Monday, 16 October 2000

08:30 Registration

09:00 Opening session

Welcome address by Dr. Vute Wangwacharakul, Asian CGE member (Thailand), Chairperson of the workshop
Self-introduction of participants and resource persons
Statement by Ms. Martha Perdomo, Manager, Non-Annex I Implementation Subprogramme, UNFCCC secretariat
Opening address by Dr. Saksit Tridech, Secretary General of the Office of Environmental Policy and Planning of Thailand

09:40 Coffee break

10:00 Adoption of the agenda and administrative matters.
Introduction to workshop and analysis of decision 8/CP.5: Consultative Group of Experts, Martha Perdomo, UNFCCC secretariat

10:15 National GHG inventories of non-Annex I Parties from Asia: Preliminary synthesis and methodological issues, Roberto Acosta, UNFCCC secretariat

10:35 Presentation on estimation of HFCs, PFCs, and SF_6 in non-Annex I Parties, Ms. Soraja Asthana, India

10:45 Presentation of countries' experience with the preparation of the GHG inventories in the following sectors:

Land-use change and forestry	Dr. Jose Villarin (Philippines)
Agriculture	Mr. Subodh Sharma (India)
Energy	Dr. Taha Zatari (Saudi Arabia)
Agriculture	Dr. B.V.R. Punyawardena (Sri Lanka)
Any sector	Mr. Nguyen Mong Cuong (Viet Nam)

11:25 Discussion on GHG inventory presentations

11:45 Vulnerability and adaptation assessments of non-Annex I Parties from Asia: Preliminary synthesis and methodological issues, Graham Sem, UNFCCC secretariat

12:00 Presentation of countries' experience with the preparation of vulnerability and adaptation assessments:

Agriculture	Dr. Vute Wangwacharakul (Thailand)
Water resources	Mr. Nelson Rarua (Vanuatu)
Coastal zones	Mr. Nakibae Teuatabo (Kiribati)
	Mr. Khondoker Rashidul Huq (Bangladesh)
Human health	Mr. Ah Kee Chan (Malaysia)

12:40 Discussion on vulnerability and adaptation presentations

13:00 Lunch break

14:30 GHG abatement options of non-Annex I Parties from Asia: Preliminary synthesis and methodological issues, Dominique Revet, UNFCCC secretariat

14:45 Countries' experience in assessment of GHG abatement options in specific sectors.

Energy	Dr. Riad Chedid (Lebanon)
Industrial/residential/commercial	Mr. Shim San-Yul (Republic of Korea)
Forestry	Mr. M. Satta Wigenasantana (Indonesia)

15:15 Discussions on GHG abatement presentations

15:35 An introduction to problems identified in the region regarding financial and technical support for the preparation of national communications, George Manful, UNFCCC secretariat

16:00 Coffee break

16:15 Countries' experience related to financial and technical support:

Mr. Aimin Ma (China)
Mr. Nima Dorji (Bhutan)
Mr. Joseph Konno (Federated States of Micronesia)
Mr. Xayaveth Vixay (Lao People's Democratic Republic)
Mr. Al-Waleed El-Malik (United Arab Emirates)
Ms. Batima Punsalmaa (Mongolia)

17:15 Discussion on financial and technical support presentations

17:30 **Plenary I**
Chairperson: Dr. Vute Wangwacharakul (Thailand)
Rapporteur: Mr. Mahboob Elahi (Pakistan)

The plenary will meet to set the agenda for four working groups to be established during the session. The working groups will deal with GHG inventories, GHG abatement, vulnerability and

adaptation assessment and financial and technical support. They will conduct their deliberations in parallel on Tuesday through to Thursday (17-19 October 2000). The rapporteur of each group will report on the deliberations of the group using an agreed reporting format.

Working group I (GHG inventories):
Chair: Dr. Taha Zatari (Saudi Arabia)
Rapporteur: Dr. Jose Villarin (Philippines)

The working group on national greenhouse gas (GHG) inventory issues will address the following:

Identify analytical and methodological issues, including technical problems in the preparation and reporting of GHG inventories. Make specific recommendations for improvement of data collection, and for the development of local and regional emission factors and activity data, particularly in the energy and land-use change and forestry sectors;

Identify relevant activities related to inventories in the process of preparing second national communications by non-Annex I Parties;

Identify difficulties encountered in the use of the section of the guidelines contained in the annex to decision 10/CP.2 which relates to inventories. Make recommendations for improvement, where appropriate.

Working group II (Vulnerability and adaptation assessment)
Chair: Mr. Nakibae Teuatabo (Kiribati)
Rapporteur: Mr. Ah Kee Chan (Malysia)

The working group on vulnerability assessment and adaptation options will address the following issues:

Consider information in Asian national communications submitted so far, in accordance with the guidelines for the preparation of initial national communications by Parties not included in Annex I to the Convention contained in the annex to decision 10/CP.2;

Identify the difficulties encountered in the use of the UNFCCC guidelines and in the use of the Intergovernmental Panel on Climate Change (IPCC) methodologies and other models, and make recommendations for improvement where appropriate;

Exchange experience (including regional and subregional) and information on the assessment of vulnerability and adaptation options during the preparation of national communications.

Working group III (Abatement options)
Chair: Dr. Vute Wangwacharakul (Thailand)
Rapporteur: Dr. Riad Chedid (Lebanon)

The working group on abatement options will consider the following:

Information in national communications submitted so far from Asian countries, in accordance with the guidelines for the preparation of initial national communications by Parties not included in Annex I to the Convention contained in the annex to decision 10/CP.2;

Identify analytical and methodological issues related to analysis of abatement options as well as the difficulties encountered in the use of the UNFCCC guidelines annexed to decision 10/CP.2 and make recommendations for improvement, where appropriate;

Exchange experience (including regional and subregional) and information on assessment of mitigation options during the preparation of national communications.

Identify issues related to mitigation actions in the context of sustainable development.

Working group IV (Financial and technical needs)
Chair: Mr. Mahboob Elahi (Pakistan)
Rapporteur: Mr. Joseph Konno (Federated States of Micronesia)

The working group on financial and technical needs related to the preparation of national communications will address the following:

Identify the needs for and availability of financial resources and technical support for the preparation of all elements of the national communications of countries from the region, as well as the barriers to and gaps in the support. Make specific recommendations for improving the provision of financial and technical assistance in order to facilitate the national communication process;

Review existing activities and programmes to facilitate and support the preparation of national communications by the countries of the region. Make recommendations to better coordinate these activities and programmes in order to enhance the preparation of national communications;

Identify the needs for strengthening national institutions in the preparation of national GHG inventories, including capacity-building.

Identify the capacity-building needs of the region including technology transfer and the process of preparing second national communications by non-Annex I Parties.

18:30 Close.

Tuesday and Wednesday, 17-18 October 2000

09:00 Working group session

10:30 Coffee break

10:50 Working group session continued

12:30 Lunch break

14:00 Working group session continued

16:30 Coffee break

16:50 Working group session continued

18:00 Close.

Thursday, 19 October 2000

09:00 Working group session

10:30 Coffee break

10:50 Working group session continued

12:30 Lunch break

14:00 Working group session continued

16:00 Coffee break

16:30 Plenary II

Presentation and discussion of the reports of the working groups by chairs/rapporteurs of the working groups.

18:30 Close.

Friday, 20 October 2000

09:00 Report writing

11:30 Report distributed

12:00 Plenary III
Consideration, discussion and adoption of the workshop report

13:45 Closing remarks by Dr. Wanee Samphantharok, Deputy of the Executive Secretary of the Office of Environmental Policy and Planning of Thailand

14:00 Close.

Annex III

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