III. Five-year programme of work on impacts, vulnerability and adaptation to climate change² (Agenda item 3)

13. The SBSTA welcomed the statements and relevant papers by FAO, the World Health Organization (WHO), WMO, the Intergovernmental Panel on Climate Change (IPCC), ISDR and OECD, on their possible contributions to the implementation of the Nairobi work programme on impacts, vulnerability and adaptation to climate change.

14. The SBSTA expressed its appreciation to the Governments of Canada, Norway, Sweden and Switzerland for providing financial support towards the implementation of the Nairobi work programme.

15. The SBSTA affirmed that its activities under the Nairobi work programme on impacts, vulnerability and adaptation to climate change are to be undertaken to assist all Parties, in particular developing countries, including the least developed countries and small island developing States, to improve their understanding and assessment of impacts, vulnerability and adaptation, and to make informed decisions on practical adaptation actions and measures to respond to climate change on a sound scientific, technical and socio-economic basis, taking into account current and future climate change and variability, and to contribute to the expected outcomes of the programme of work in accordance with paragraph 2 of the annex to decision 2/CP.11.

16. The SBSTA agreed to further implement the Nairobi work programme through the activities contained in these conclusions.

17. The SBSTA requested the secretariat to strive to engage a wide range of organizations, institutions, experts and communities in the implementation of the Nairobi work programme. To this end, the SBSTA invited relevant organizations and other stakeholders to participate in the implementation of the activities contained in these conclusions and urged them to undertake their own activities in support of the objective and themes identified in decision 2/CP.11 and to share the outcomes of these activities with the SBSTA at subsequent sessions, as appropriate.

18. The SBSTA requested the secretariat, under the guidance of the Chair of the SBSTA, to report, at its twenty-sixth session, its twenty-seventh session, and its twenty-eighth session (June 2008) on progress made in implementing the Nairobi work programme to inform the work of the SBSTA at these sessions.

19. The SBSTA recalled the request in decision 2/CP.11, paragraph 6 (c), to consider at subsequent sessions the results of initial activities and to provide guidance, as appropriate, on further action.

20. The SBSTA requested the secretariat to organize, under the guidance of the Chair of the SBSTA, an informal meeting of representatives from Parties before its

 $^{^{2}}$ The COP, at its twelfth session, decided to rename the programme as the "Nairobi work programme on impacts, vulnerability, and adaptation to climate change" (see FCCC/CP/2006/5, section V.E). References to the name of the programme in the conclusions contained in this report have been amended to reflect this decision.

twenty-eighth session to consider the outcomes of the activities completed prior to this meeting.

21. The SBSTA invited Parties to submit to the secretariat, before its twenty-eighth session, their views on further activities, based on the experience with the implementation of the Nairobi work programme. It requested the secretariat to compile these submissions into a miscellaneous document.

22. The SBSTA agreed to consider, at its twenty-eighth session, the outcome of the informal meeting referred to in paragraph 20 above, the miscellaneous document referred to in paragraph 21 above, the outcomes of the additional activities completed by that session, information presented in the Fourth Assessment Report of the IPCC and other new scientific information, as well as relevant activities from international and regional institutions, with the aim of contributing to the identification of further activities, as well as appropriate timing and modalities, for inclusion in the Nairobi work programme, in accordance with decision 2/CP.11, paragraph 6 (d).

23. The SBSTA requested the secretariat to prepare a summary report consolidating the results of the implementation of the Nairobi work programme for the period up to its twenty-eighth session, to be made available to Parties and relevant organizations by its twenty-ninth session.

24. This summary report and the reports from the expert meetings and workshops undertaken for the period up to the twenty-eighth session of the SBSTA, as appropriate, should contain information on, inter alia:

- (a) Analysis of the issues addressed by each activity, including current status and lessons learned;
- (b) Summary of identified gaps, needs (including any capacity needs), opportunities (including possible synergy among activities), barriers and constraints;
- (c) Summary of recommendations.

25. The SBSTA may provide information and advice on the scientific, technical and socio-economic aspects of impacts, vulnerability and adaptation to climate change arising from the implementation of the Nairobi work programme for consideration by the SBI, following consideration by the SBSTA of the outputs from preceding activities and consideration of further activities at its twenty-eighth session.

26. The SBSTA agreed that the deliverables resulting from the implementation of the Nairobi work programme, including the initial deliverables described in these conclusions and summarized in annex I, should be widely disseminated, as appropriate, to relevant stakeholders through effective means, including by the secretariat.

27. The SBSTA recognized that addressing impacts, vulnerability and adaptation to climate change is an immediate, as well as an ongoing, long-term challenge that is rapidly evolving, and agreed that there is a need to ensure expert input into the implementation of the Nairobi work programme.

28. The SBSTA therefore invited Parties to submit to the secretariat, by 21 September 2007, their views on the possible need for a group of experts and the role that they could have in the implementation and further development of the Nairobi work programme.

29. The SBSTA requested the secretariat to compile these submissions into a miscellaneous document for consideration at its twenty-seventh session, with a view to making recommendations, as appropriate.

30. The SBSTA noted that the implementation of the Nairobi work programme in the period up to its twenty-eighth session cannot be fully covered by the resources available from the core budget for the biennium 2006–2007, and that supplementary funds will need to be raised for this work given that implementation will be fulfilled subject to the availability of resources for this purpose.

31. The SBSTA urged Parties included in Annex II to the Convention, and other Parties in a position to do so, to provide financial support for the implementation of the Nairobi work programme.

Methods and tools

32. Activities in this area are undertaken in line with the objective in the annex to decision 2/CP.11, to advance subthemes a (i), "Promoting development and dissemination of methodologies and tools for impact and vulnerability assessments, such as rapid assessments and bottom-up approaches, including as they apply to sustainable development", and b (i), "Promoting the development and dissemination of methods and tools for assessment and improvement of adaptation planning, measures and actions, and integration with sustainable development".

33. The SBSTA invited Parties and relevant organizations to submit to the secretariat, by 15 May 2007, information on existing and emerging assessment methodologies and tools; and views on lessons learned from their application; opportunities, gaps, needs, constraints and barriers; possible ways to develop and better disseminate methods and tools; and training opportunities. It requested the secretariat to compile these submissions into a miscellaneous document to be made available to the SBSTA by its twenty-seventh session.

34. The SBSTA requested the secretariat to prepare, by its twenty-seventh session, a synthesis report on the information and views contained in the submissions mentioned in paragraph 33 above, and the relevant outputs from the work of the Least Developed Countries Expert Group (LEG), the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) and the Expert Group on Technology Transfer (EGTT).

35. The SBSTA requested the secretariat, under the guidance of the Chair of the SBSTA, to organize an expert meeting, before the twenty-eighth session of the SBSTA, with the participation of Parties, users and developers of methods and tools, relevant organizations, and representatives from sectoral and other communities to advance consideration of sub themes a (i) and b (i), taking into account the information contained in the miscellaneous document referred to in paragraph 33 above, the

synthesis report referred to in paragraph 34 above and relevant matters included in the miscellaneous document referred to in paragraph 38 below. It requested the secretariat to prepare a report on this meeting to be made available to the SBSTA by its twenty-eighth session.

36. Activities in this area can contribute to efforts by Parties and organizations, inter alia:

- (a) To apply and develop methodologies and tools for impact, vulnerability and adaptation assessments;
- (b) To develop methodologies and tools for adaptation planning, measures and actions, and integration with sustainable development;
- (c) To disseminate existing and emerging methods and tools;⁴
- (d) To facilitate the sharing of experiences and lessons learned, including those contained in the UNFCCC Compendium on methods and tools to evaluate impacts of, and vulnerability and adaptation to, climate change,⁵ including the assessment of costs and benefits.

Data and observations

37. Activities in this area⁶ are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme a (ii), "Improving collection, management, exchange, access to and use of observational data and other relevant information on current and historical climate and its impacts, and promoting improvement of observations, including the monitoring of climate variability".

38. The SBSTA invited the WMO and its member States, the secretariat of the Global Climate Observing System (GCOS) and other relevant organizations, to submit information and their views, by 21 September 2007, on how their work could contribute to improved understanding of current and historical climate, and its impacts, including the identification of gaps and deficiencies in data and observations, stakeholder data and capacity needs, especially at regional and national levels, and ways to improve technical infrastructure. The SBSTA requested the secretariat to compile these submissions into a miscellaneous document to be made available to the SBSTA by its twenty-seventh session.

39. The SBSTA requested the secretariat to include consideration of relevant matters related to subtheme a (ii) in the expert meeting referred to in paragraph 35 above.

40. Activities in this area can contribute to efforts by Parties and organizations, inter alia:

(a) To promote the implementation of systematic observation (including through the GCOS implementation plan and the regional workshops

⁵ <http://unfccc.int/adaptation/methodologies_for/vulnerability_and_adaptation/items/2674.php>.

⁶ The activities will be undertaken under, and in coordination with, the work of the SBSTA on research and systematic observation.

programme), focusing on issues relating to impacts and vulnerability and taking into account stakeholder data needs and needs to enhance capacity to supply and use the data, especially at the regional and national levels;

- (b) To improve capacity for collecting, managing and using observational data, and identify practical ways of enhancing technical capacity;
- (c) To exchange information on observed climate change impacts, including those observed through traditional knowledge.

Climate modelling, scenarios and downscaling

41. Activities in this area are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme a (iii), "Promoting the development of, access to, and use of information and data on projected climate change".

42. The SBSTA invited submissions, by 21 September 2007, from the IPCC, other relevant international, regional and national organizations, and from modelling centres and agencies, for compilation into a miscellaneous document to be made available to the SBSTA by its twenty-seventh session on ways in which they contribute to the following:

- (a) Development, availability and use of climate models, and development of, access to, and use of climate change scenarios, especially those that provide subregional and regional specificity, including data downscaled from general circulation models;
- (b) Enhanced capacity and experience with the use of these different models, statistical approaches and outputs, and any available training opportunities;
- (c) Identification and reduction of uncertainties.

43. The SBSTA requested the secretariat, under the guidance of the Chair of the SBSTA, to organize an in-session workshop under this sub-theme at its twenty-eighth session, with the participation of experts from Parties and representatives from the IPCC and other relevant organizations, and taking into account the miscellaneous document referred to in paragraph 42 above. It further requested the secretariat to prepare a report from the workshop to be made available to the SBSTA by its twenty-ninth session.

44. Activities in this area can contribute to efforts by Parties and organizations, inter alia:

- (a) To identify gaps in the development of regional and subregional climate scenarios, including the need for, and the availability and applicability of, climate models, and the options to fill these gaps;
- (b) To identify practical opportunities to improve access to, and use of outputs of different models, including assessment of their applicability, and training opportunities;

(c) To analyse means to improve the availability and applicability of climate change modelling and downscaling data to policy makers at all levels.

Climate related risks and extreme events

45. Activities in this area are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme a (iv), "Promoting understanding of impacts of, and vulnerability to, climate change, current and future climate variability and extreme events, and the implications for sustainable development".

46. The SBSTA invited Parties and relevant organizations to submit to the secretariat, by 23 February 2007, information on their relevant programmes, activities and views on the following issues:

- (a) Experience with assessment and management of current and future climate-related risks and impacts, including those related to extreme events and in specific sectors;
- (b) Ability, gaps, needs, opportunities, barriers and constraints to predicting climate variability, impacts and extreme events across regions and hazards;
- (c) Contribution of traditional knowledge to understanding and managing climate-related risks;
- (d) Implications for sustainable development in relation to paragraph 46 (a) to (c) above;
- (e) Promoting understanding of impacts of, and vulnerability to, climate change.

47. The SBSTA requested the secretariat to compile the submissions mentioned in paragraph 46 above into a miscellaneous document to be made available to the SBSTA by its twenty-sixth session.

48. The SBSTA requested the secretariat, under the guidance of the Chair of the SBSTA, to organize, before its twenty-seventh session, a workshop with the participation of Parties, experts and relevant organizations and institutions on the issues, information and submissions referred to in paragraph 46 above. It further requested the secretariat to prepare a report on the workshop to be made available to the SBSTA by its twenty-seventh session.

49. Activities in this area can contribute to efforts by Parties and organizations, inter alia:

(a) To enhance knowledge of, and capacity to understand, assess and predict, current and future climate variability, trends in long-term climate change, the occurrence and scale of extreme events, and their impacts;

- (b) To enhance capacity to understand vulnerability to, and to use information on, climate change, current and future climate variability and extreme events, and their impacts, including use of this information to analyse these impacts; and capacity to assess climate related risks, impact thresholds, trends, and implications for sustainable development;
- (c) To share and use information on, and analysis of, experiences in climate risk assessment and management;
- (d) To promote the use of tools and systems for these purposes.

Socio-economic information

50. Activities in this area are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme a (v), "Promoting the availability of information on the socio-economic aspects of climate change and improving the integration of socio-economic information into impact and vulnerability assessments".

51. The SBSTA invited Parties and relevant organizations to submit to the secretariat, by 21 September 2007, information and views on matters relating to the availability of information on the socio-economic aspects of climate change and improving the integration of socio-economic information into impact and vulnerability assessments, including information on the development of socio-economic scenarios and for understanding adaptive capacity, including:

- (a) Existing approaches and available data;
- (b) Needs, gaps, barriers and constraints;
- (c) Ways and means to improve availability and access to relevant information, including information on costs and benefits, as well as its better integration into impact and vulnerability assessments.

52. The SBSTA requested the secretariat to compile these submissions into a miscellaneous document to be made available to the SBSTA by its twenty-seventh session.

53. The SBSTA requested the secretariat to organize, under the guidance of the Chair of SBSTA, an expert meeting, before its twenty-eighth session, on ways and means to improve the integration of socioeconomic information into impact and vulnerability assessments, including as they relate to adaptation planning, taking into account the miscellaneous document mentioned in paragraph 52 above. It further requested the secretariat to prepare a report of the workshop, addressing the elements in paragraph 51 above, to be made available to the SBSTA by its twenty-eighth session.

54. Activities in this area can contribute to efforts by Parties and organizations, inter alia, to undertake stocktaking on what socio-economic information and approaches are available and in use, and what needs to be done to ensure better integration of socio-economic information into impact and vulnerability assessments.

Adaptation planning and practices

55. Activities in this area are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subthemes b (ii), "Collecting, analysing and disseminating information on past and current practical adaptation actions and measures, including adaptation projects, short- and long-term adaptation strategies, and local and indigenous knowledge", and b (iv), "Facilitating communication and cooperation among and between Parties and relevant organizations, business, civil society, and decision makers, and other stakeholders".

56. The SBSTA invited Parties and relevant organizations to provide structured submissions, by 15 May 2007, on adaptation approaches, strategies, practices and technologies for adaptation at the regional, national and local levels in different sectors, as well as on experiences, needs and concerns. It requested the secretariat to develop the structure for these submissions and to disseminate it to Parties by 20 January 2007. It further requested the secretariat to compile these submissions into a miscellaneous document to be made available to the SBSTA by its twenty-seventh session.

57. The SBSTA requested the secretariat to prepare, by its twenty-seventh session, a synthesis report of the information and views contained in the submissions mentioned in paragraph 56 above, and a synthesis report based on outputs relevant to this subtheme from the work of the LEG, the CGE and the EGTT, as appropriate.

58. The SBSTA requested the secretariat, under the guidance of the Chair of the SBSTA, to organize, before its twenty-seventh session, a workshop with the participation of Parties, relevant organizations, business, civil society, decision makers and other stakeholders, to exchange information and views on existing adaptation practices, experiences, needs, gaps, opportunities, barriers and constraints, and on the contribution of traditional knowledge to the work on adaptation planning and practices taking into account the miscellaneous document referred to in paragraph 56 above and the synthesis reports referred to in paragraph 57 above.

59. The SBSTA requested the secretariat to prepare a report on this workshop, to be made available to the SBSTA by its twenty-seventh session, and to prepare a web-based interface providing information on existing adaptation practices and local coping strategies for adaptation, building upon the secretariat's database on local coping strategies⁷, before its twenty-eighth session.

60. Activities in this area can contribute to efforts by Parties and organizations, inter alia:

- (a) To exchange information on experiences, lessons learned, constraints and barriers of past and current adaptation measures and actions, and the implications for sustainable development;
- (b) To promote different ways and means for information sharing and for the enhancement of cooperation among Parties and relevant sectors,

⁷ <http://maindb.unfccc.int/public/adaptation>.

institutions and communities, including in the areas of disaster risk reduction and management;

- (c) To promote understanding of response strategies, including early warning systems and local coping strategies, and of lessons learned that can be applied elsewhere;
- (d) To assess ways and means to support adaptation, and address barriers and constraints to its implementation.

Research

61. Activities in this area8 are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme b (iii), "Promoting research on adaptation options and the development and diffusion of technologies, know-how, and practices for adaptation, particularly addressing identified adaptation priorities and building on lessons learned from current adaptation projects and strategies".

62. The SBSTA requested the secretariat to prepare, before its twenty-seventh session, a synthesis report on ongoing and planned adaptation research, as well as the adaptation research needs identified in the submissions from Parties and relevant organizations included in documents FCCC/SBSTA/2006/INF.2, and FCCC/SBSTA/2006/MISC.3 and Add.1, and to take this into account in the consideration of further activities.

63. Activities in this area can contribute to efforts by Parties and organizations, inter alia, to analyse opportunities and ways to promote research on adaptive capacities and adaptation practices that increase resilience.

Technologies for adaptation

64. Activities in this area⁸ are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme b (iii), "Promoting research on adaptation options and the development and diffusion of technologies, know-how, and practices for adaptation, particularly addressing identified adaptation priorities and building on lessons learned from current adaptation projects and strategies".

65. The SBSTA requested the secretariat to prepare a synthesis report, by its twentyseventh session, on technologies for adaptation identified in the submissions from Parties and relevant organizations referred to in paragraph 56 above.

66. The SBSTA took note of its conclusions on the development and transfer of technology at its twenty-fourth session.⁹ It agreed to take into account the synthesis of technology needs assessments for adaptation,¹⁰ information relating to technologies for adaptation in national communications and national adaptation programmes of action,

⁸ The activities will be undertaken under, and in coordination with, the work of the SBSTA on research and systematic observation.

⁹ The activities will be undertaken under, and in coordination with, the work of the SBSTA on technology transfer.

¹⁰ FCCC/SBSTA/2006/5, paras. 20–34.

the technical paper on the application of technologies for adaptation,¹¹ and relevant deliberations by the SBSTA, in the consideration of further activities.

67. Activities in this area can contribute to efforts by Parties and organizations, inter alia, to enhance work on different aspects of technologies and know-how for adaptation, as well as on opportunities for their transfer, development and diffusion, taking into account local and indigenous knowledge and experience as well as ongoing activities and projects.

Economic diversification

68. Activities in this area are undertaken in line with the objective in the annex to decision 2/CP.11 to advance subtheme b (v), "Promoting understanding and the development and dissemination of measures, methodologies and tools including for economic diversification aimed at increasing economic resilience and reducing reliance on vulnerable economic sectors, especially for relevant categories of countries listed in Article 4, paragraph 8, of the Convention".

69. The SBSTA invited Parties and relevant organizations to submit to the secretariat, by 17 August 2007, information on examples of measures, methodologies and tools to increase the economic resilience of, and reduce reliance on, vulnerable sectors. It requested the secretariat to compile these submissions into a miscellaneous document to be made available to the SBSTA by its twenty-seventh session.

70. The SBSTA requested the secretariat to prepare a synthesis report based on the submissions mentioned in paragraph 69 above, by its twenty-seventh session.

71. Activities in this area can contribute to efforts by Parties and organizations, inter alia:

- (a) To exchange experiences and opportunities on the development and dissemination of measures, methodologies and tools aimed at increasing economic resilience;
- (b) To exchange experiences and lessons learned in economic diversification, including ways to develop institutional capacity, and improve understanding on how economic diversification can be integrated into sustainable development plans, especially those that promote sustainable economic growth and eradication of poverty.

¹¹ FCCC/SBSTA/2006/INF.1.