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Item 8 of the provisional agenda
Research needs relating to the Convention

Synthesis of views on issues from the research event at the twentieth session of the Subsidiary Body for Scientific and Technological Advice

Note by the secretariat

Summary

This note contains the synthesis of views submitted by five Parties on the following issues from the research event at the twentieth session of the Subsidiary Body for Scientific and Technological Advice: the need to assess the adequacy of research activities and their international coordination to meet the needs of the Convention; the importance of social as well as natural sciences, and the interaction between the two, in responding to the research needs arising from the assessment reports of the Intergovernmental Panel on Climate Change; and the enhancement of the capacity of developing countries to contribute to, and participate in, global climate change research efforts, such as those coordinated by the World Climate Research Programme, the International Geosphere–Biosphere Programme, the International Human Dimensions Programme and DIVERSITAS.

Parties may wish to consider the information in this note and identify further actions in relation to research needs relating to the Convention.

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I. Introduction

A. Mandate

1. At the request of the Subsidiary Body for Scientific and Technological Advice (SBSTA), at its nineteenth session,[1] a side event was organized, at SBSTA 20, with participation of representatives of the Intergovernmental Panel on Climate Change (IPCC) and international research programmes and bodies on ongoing and planned research initiatives to address the research recommendations of the Third Assessment Report (TAR) of the IPCC. The following issues were noted as requiring further consideration:

(a) The need to assess the adequacy of research activities and their international coordination to meet the needs of the Convention

(b) The importance of social as well as natural sciences, and the interaction between the two, in responding to the research needs arising from the assessment reports of the IPCC

(c) The enhancement of the capacity of developing countries to contribute to, and participate in, global climate change research efforts, such as those coordinated by the World Climate Research Programme (WCRP), the International Geosphere–Biosphere Programme (IGBP), the International Human Dimensions Programme (IHDP) and DIVERSITAS.

2. The SBSTA requested Parties to submit to the secretariat, by 15 September 2004, their views on how to adequately address the main issues arising from the event requested by the SBSTA, in particular those mentioned in paragraph 1 above, and, by 24 January 2004, additional views on this subject, for consideration by the SBSTA at its twenty-second session. It requested the secretariat to compile both sets of submissions into miscellaneous documents and to prepare a synthesis of all the views of Parties for consideration by the SBSTA at its twenty-second session.

B. Scope of the note

3. This document contains a synthesis of the views submitted by Parties contained in documents FCCC/SBSTA/2004/MISC.14 and FCCC/SBSTA/2005/MISC.1.

C. Information submitted

4. Five Parties submitted views to the secretariat: Australia, the European Community (submitted from the Netherlands, on behalf of the European Community and its member States, and from Luxembourg, on behalf of the European Community and its member States in an additional submission), Japan, the United States of America and Uzbekistan. In addition to views on the issues identified in paragraph 1 above, Parties provided views and information on other matters, such as research priorities in response to the needs of the Convention per se, activities on research and systematic observation at an international and a regional level, and information about the Parties' support to different international programmes and bilateral cooperation.

D. Possible action by the Subsidiary Body for Scientific and Technological Advice

5. The SBSTA may wish to consider the information provided in this document and in documents FCCC/SBSTA/2004/MISC.14 and FCCC/SBSTA/2005/MISC.1 and identify what further action is needed in relation to research needs relating to the Convention.

[1] See document FCCC/SBSTA/2003/15, paragraph 40 (c).

II. Synthesis of views

A. The need to assess the adequacy of research activities and their international coordination to meet the needs of the Convention

6. All Parties highlighted the critical role of the IPCC in assessing the state of the science and identifying gaps and priorities in different areas relating to climate change research: scientific basis and analysis of climate observations; impacts, vulnerability and adaptation; and mitigation of climate change. Parties stressed the importance of improving systematic observation and data management in addressing these gaps, particularly in the first two areas of climate change research mentioned above.

7. Parties also confirmed the importance of considering needs and priorities for research under the UNFCCC process and communicating these needs to the research community. But they expressed different views on the extent to which the SBSTA should be involved in the assessment of research activities and their international coordination.

8. The European Community suggested that a more active role for the SBSTA and the UNFCCC process is warranted. The Party proposed that the SBSTA should initiate an additional process of assessment of the adequacy of research to meet the needs of the Convention, which would include a study that would summarize and assess current research with regard to the Convention needs, and identify gaps and ways and means of addressing these gaps and the costs of doing so. Such a study would be undertaken by the UNFCCC secretariat, in cooperation with the IPCC and in communication with other international research organizations. This study would be based on analysis of the views on the priority areas of research and questions for the scientific community relevant to the Convention expressed by Parties in previous submissions (for example, as presented in FCCC/SBSTA/2002/MISC.15 and Add.1 and synthesized in FCCC/SBSTA/2002/INF.17), and on possible new submissions, on relevant material in national communications, and on other documents.

9. Australia, having supported the role of the IPCC as the primary forum for assessing the adequacy of climate change research, suggested that the Earth System Science Partnership (ESSP) provides a clear mechanism for cooperation and collaboration across the individual research programmes and complements activities on global climate observing systems with socio-economic data and analysis.

10. The United States recognized the importance of the UNFCCC process to ascertain when the Convention has specific needs for research and to communicate those needs to the research community. However, it argued that it is unnecessary for the SBSTA to undertake a major assessment of research relating to climate/global change, which it said would be in addition to the IPCC process.

11. Australia and Japan highlighted that the SBSTA has an important role to play in contributing to the work on systematic observation and reconstruction (which was noted in the TAR as a priority area for research), primarily through monitoring progress vis-à-vis the Global Climate Observing System (GCOS) *Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC*, (hereinafter referred to as GCOS implementation plan) which was presented at the twenty-first session of the SBSTA.[2] Japan also stressed the need to ensure coordination and cooperation between activities of the GCOS and the Global Earth Observation System of Systems (GEOSS), and its ad hoc Group on Earth Observations (GEO), which is developing a 10-year GEOSS action plan.[3]

B. The importance of social as well as natural sciences, and the interaction between the two

12. All Parties recognized the critical role of social and natural sciences, and of the interaction between them, in responding to the research needs identified in the IPCC assessment reports. The

[2] <http://www.wmo.ch/web/gcos/Implementation_Plan_(GCOS).pdf>.

[3] The plan was agreed upon at the Third Earth Observation Summit in February 2005 in Brussels. For further information see <http://earthobservations.org/>.

European Community noted also that where research has been or is being undertaken specifically to meet policy requirements there is an even greater need for cross-cutting interdisciplinary research.

13. Several Parties noted that all international global change research programmes (e.g. IGBP, IHDP, WCRP, and DIVERSITAS) are seeking to further promote interdisciplinary research and more effective international coordination. Parties stressed the important role of the ESSP in facilitating international collaboration to move forward the research required to address the socio-economic and scientific aspects of climate change. Australia noted the four cross-cutting joint projects of the ESSP which involve studies on developing policy-relevant knowledge of the natural and human dimensions of different aspects of impacts and adaptation and mitigation of climate change, and noted that these programmes can be expected to produce pertinent results to feed into the Fourth Assessment Report (AR4) of the IPCC process across all three IPCC working groups.

14. Parties noted their efforts toward interdisciplinary work and effective integration of the social and natural sciences through a variety of activities, including the development of synthesis and assessment products of the national research programmes (United States), supporting the efforts of the ESSP (Australia, United States), and organization of interdisciplinary research centres that link natural and social sciences to address global environmental issues covering both natural and socio-economic sciences (European Community).

C. The enhancement of the capacity of developing countries to contribute to, and participate in, global climate change research efforts

15. All Parties generally highlighted the importance of enhancing the capacity of developing countries to contribute to, and benefit from, the international research activities of the global climate studies, such as those undertaken under the umbrellas provided by global and regional programmes, such as WCRP, IGBP, IHDP, DIVERSITAS. In particular, Parties stressed the critical role of enhancing the capacity of developing countries for climate monitoring and analysis of climate observations.

16. Almost all Parties provided information about their participation in, and support for, a number of global and regional initiatives on enhancing capacity-building of developing countries. Australia, Japan and the United States noted that activities of the System for Analysis Research and Training (START), the Asia–Pacific Network for Global Change Research (APN) and the Inter American Institute for Global Change (IAI), as well as efforts hosted by the United States, the International Research Institute for Climate Prediction (IRI), and the Consultative Group on International Agricultural Research (CGIAR), include substantial components directed at enhancing the capabilities of scientists from developing countries to participate in such regional research and contribute to global-scale studies. The European Community noted that several of its member States have programmes to assist institutions in developing countries in conducting climate-related studies, and to assist students from developing countries through scholarships and training. The United States described its activities on the international climate change agenda undertaken through the establishment of results-oriented "action plans" with many bilateral and regional partners.

D. Other

17. Some Parties (Japan and Uzbekistan) listed specific research areas that they consider a priority. These areas included modelling and process studies, further research on attribution of climate change, and analysis of observed changes and reconstructions. Other Parties (Australia, European Community, United States) referred to the priority areas for research identified in the TAR, and recalled earlier submissions by Parties which provided more detailed information on the priority areas of research and questions for the scientific community relevant to the Convention.

18. In addition to providing information on a wide range of capacity-building programmes outlined in section II.C above, all Parties described other programmes and initiatives that, in their view, contribute to addressing the research needs of the Convention including needs identified in the TAR. Japan presented information about its national Science and Technology Basic Plan (2001–2005), and a number

of different national initiatives that have high potential for addressing research to meet the IPCC TAR requirements and contributing to the AR4. The European Community noted its inter-disciplinary research centres. The United States described a process of developing a Strategic Plan for the United States Climate Change Science Program that involved examination of research and observation needs, review by the international scientific stakeholder communities, and establishment of further goals for the research. The United States noted that the Climate Change Science Program plans to release 21 synthesis and assessment products that will be made available to the UNFCCC, IPCC and other possible users over a four-year period.

19. Uzbekistan mentioned its participation in, and cooperation on, monitoring of climatic systems and exchange of climatic data on bilateral and multilateral bases, and its experiences in the use of observation data for assessment of impacts on water resources and enhancing the system of early prevention of droughts. Uzbekistan noted the importance of creating a regional database for assessment of natural climatic variability using existing mechanisms, such as the World Climate Data and Monitoring Programme.

III. Discussion

20. The SBSTA, at its seventeenth session (October, 2002),[4] decided to regularly consider the issues relating to research on climate change in order: to inform Parties about on-going and planned activities of the international and intergovernmental research programmes through periodic briefings; to provide a forum for consideration of research needs and priorities and ways and means for addressing them; and to communicate these research needs and priorities to the scientific community. The SBSTA also noted the independence of the IPCC and international research programmes, as well as their willingness to respond to the scientific challenges posed by the Convention and the TAR.

21. A number of activities have been undertaken in response to this decision. During the seventeenth session of the SBSTA a special side event was held where representatives of the IPCC and international research programmes and bodies provided their views on the research recommendations identified in the TAR. The SBSTA also considered views of Parties on priority areas of research and questions for the scientific community relevant to the Convention, presented in document FCCC/SBSTA/2002/MISC.15 and Add.1, and synthesized in document FCCC/SBSTA/2002/INF.17, and forwarded these documents to the relevant research organizations and bodies, which were invited to comment. At SBSTA 20, another special side event was held to inform Parties about ongoing and planned research initiatives to address the research recommendations of the TAR. Parties were invited to submit their views on the issues identified at the side event. These views are summarized in this document.

22. The latest submissions from Parties showed that there is an interest in continuing the SBSTA work on this agenda item in the light of the broad range of activity in this area at the national, bilateral and international level. The SBSTA may wish to consider the following specific questions regarding further work under this agenda item:

(a) Should SBSTA play a more active role in stimulating and promoting research activities relating to climate change and their international coordination, including enhancing the capacity of developing countries to contribute to global climate change research efforts? If yes, what additional activities by the SBSTA in this area could add value (noting the "scope of work" under this agenda item noted in paragraph 20 above)?

(b) Should additional information on issues identified in paragraph 1 be developed to better inform the SBSTA about ongoing research activities, and, if so, how should this be done and by whom?

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[4] See FCCC/SBSTA/2002/13, paragraph 45.