



**UNITED
NATIONS**



**Framework Convention
on Climate Change**

Distr.
GENERAL

FCCC/SBSTA/2009/INF.5
12 November 2009

ENGLISH ONLY

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

Thirty-first session

Copenhagen, 7–18 December 2009*

Item 3 of the provisional agenda

**Nairobi work programme on impacts, vulnerability
and adaptation to climate change**

**Progress made in implementing activities under the Nairobi work programme
on impacts, vulnerability and adaptation to climate change**

Note by the secretariat

Summary

This report provides an overview of the progress made in implementing activities under the Nairobi work programme on impacts, vulnerability and adaptation to climate change since the thirtieth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA). The elements of the second phase of the Nairobi work programme were defined by the SBSTA at its twenty-eighth session. The report describes progress made under the different areas of work and how organizations, institutions, experts and the private sector have been engaged in the activities under the Nairobi work programme during this period. It also contains summary accounts of how the secretariat is disseminating outcomes to stakeholders, and highlights of activities relating to the work programme independently of activities carried out under the Convention. The report concludes with an overview of next steps envisaged to further the work of the Nairobi work programme in the near future.

* Exact dates within the sessional period are subject to confirmation.

CONTENTS

	<i>Paragraphs</i>	<i>Page</i>
I. INTRODUCTION	1–5	3
A. Mandate	1	3
B. Background.....	2–4	3
C. Possible action by the Subsidiary Body for Scientific and Technological Advice	5	3
II. PROGRESS MADE IN IMPLEMENTING ACTIVITIES UNDER THE NAIROBI WORK PROGRAMME ON IMPACTS, VULNERABILITY AND ADAPTATION TO CLIMATE CHANGE.....	6–41	3
A. Progress made under the areas of work of the Nairobi work programme.....	7–17	4
B. Progress made in engaging organizations, institutions, experts, communities and the private sector	18–31	6
C. Dissemination of outcomes.....	32–41	10
III. OTHER RELEVANT INFORMATION RELATING TO THE NAIROBI WORK PROGRAMME ON IMPACTS, VULNERABILITY AND ADAPTATION TO CLIMATE CHANGE.....	42–46	12
IV. NEXT STEPS	47–50	13
<u>Annex</u>		
Call for action under the Nairobi work programme on impacts, vulnerability and adaptation to climate change.....		15

I. Introduction

A. Mandate

1. The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its twenty-eighth session, requested the secretariat to provide a report for consideration at each of its sessions, starting from SBSTA 29, on progress made in implementing activities under the Nairobi work programme on impacts, vulnerability and adaptation to climate change.¹

B. Background

2. The overall objective of the Nairobi work programme is to assist all Parties, in particular developing countries, including the least developed countries (LDCs) and small island developing States (SIDS), 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.²

3. Upon completion of the first phase of the Nairobi work programme,³ the SBSTA, at its twenty-eighth session, agreed on further activities for inclusion in the Nairobi work programme to be implemented by its thirty-third session⁴ taking into account the views of Parties on further activities, the report of the meeting of representatives from Parties on the outcomes of completed activities under the Nairobi work programme,⁵ the outcomes of additional activities completed by that session, information presented in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and other new scientific information, as well as relevant activities of international and regional institutions.

4. Since SBSTA 30, the secretariat has received financial contributions from the Governments of Norway and the United Kingdom of Great Britain and Northern Ireland to support the mandated activities under the Nairobi work programme.

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

5. In accordance with its conclusions at its twenty-eighth session, the SBSTA may wish to consider this progress report at its thirty-first session.

II. Progress made in implementing activities under the Nairobi work programme on impacts, vulnerability and adaptation to climate change

6. The activities and expected outputs of the Nairobi work programme are structured around the two thematic areas “impacts and vulnerability” and “adaptation planning, measures and actions”, as set out in the annex to decision 2/CP.11, and the nine areas of work identified at SBSTA 25.⁶ Progress made in the different areas of work between SBSTA 28 and 30 were described in the previous progress

¹ FCCC/SBSTA/2008/6, paragraph 18.

² Decision 2/CP.11, annex, paragraph 1.

³ A summary of the results of the implementation of the Nairobi work programme during this first phase is contained in document FCCC/SBSTA/2008/12.

⁴ FCCC/SBSTA/2008/6, paragraphs 10–74.

⁵ The report of this meeting is contained in document FCCC/SBSTA/2008/5.

⁶ FCCC/SBSTA/2006/11, paragraphs 32–71.

reports.⁷ This chapter summarizes progress made since then. All activities mentioned were carried out based on the mandate from SBSTA 28 mentioned in paragraph 3 above.

A. Progress made under the areas of work of the Nairobi work programme

1. Socio-economic information

7. The secretariat has prepared a technical paper under the socio-economic information work area. The paper reviews the existing literature on the potential costs and benefits of adaptation options and its relevance for adaptation planning and implementation. Some of the information contained in this paper may inform the ongoing discussions of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention on issues relating to decision 1/CP.13, paragraph 1 (c). This paper is available as document FCCC/TP/2009/2.

8. Also relevant to this area of work is the invitation given by the SBSTA at its twenty-eighth session⁸ to Parties and relevant organizations to submit information on efforts undertaken, including methods used, to assess the costs and benefits of adaptation options, as well as their views on lessons learned, good practices, gaps and needs. These submissions are compiled in document FCCC/SBSTA/2009/MISC.9.

2. Adaptation planning and practices

9. In its previous progress report, the secretariat reported on a technical workshop on integrating practices, tools and systems for climate risk assessment and management and disaster risk reduction strategies into national policies and programmes, which took place, under the guidance of the Chair of the SBSTA, in Havana, Cuba, from 10 to 12 March 2009. The report on this workshop is now available as document FCCC/SBSTA/2009/5.

10. At its twenty-eighth session, the SBSTA requested the secretariat to prepare a synthesis report based on:

- (a) Submissions received on approaches to and experiences in integrating and expanding adaptation planning and action at national, subnational, community and local levels, including scaling up of local and community-based adaptation (contained in document FCCC/SBSTA/2009/MISC.4);
- (b) Submissions received on lessons learned, good practices, gaps, needs, barriers and constraints to adaptation, including implementation of adaptation projects (also contained in document FCCC/SBSTA/2009/MISC.4);
- (c) Other relevant sources, including experiences gained during the national adaptation programme of action process.⁹

11. This synthesis report has been published as document FCCC/SBSTA/2009/6.

12. The secretariat further received a mandate to organize, under the guidance of the Chair of the SBSTA, a technical workshop to consider how to advance the integration of various approaches to adaptation planning, including scaling up of local and community-based adaptation.¹⁰ This workshop took place in Bangkok, Thailand, from 12 to 14 October 2009 and involved representatives from Parties, relevant organizations, communities and experts. It was held with a view to enhancing informed

⁷ FCCC/SBSTA/2008/INF.5 and FCCC/SBSTA/2009/INF.3.

⁸ FCCC/SBSTA/2008/6, paragraph 51.

⁹ FCCC/SBSTA/2008/6, paragraph 60.

¹⁰ FCCC/SBSTA/2008/6, paragraph 61.

decision-making on integrated practical adaptation actions and measures at various levels and for various sectors and livelihoods, taking into account the miscellaneous document and the synthesis report referred to in paragraphs 10 and 11 above. The report on the workshop will be made available by SBSTA 32 in accordance with the conclusions of SBSTA 28.

13. Furthermore, Parties and relevant organizations have submitted information to the secretariat on efforts undertaken to monitor and evaluate the implementation of adaptation projects, policies and programmes and the costs and effectiveness of completed projects, policies and programmes as well as views on lessons learned, good practices, gaps and needs. The compilation of these views is available in document FCCC/SBSTA/2009/MISC.10.

3. Research

14. The SBSTA, at its twenty-eighth session, encouraged greater consideration of adaptation in future dialogues between international and regional research bodies and programmes and Parties. The SBSTA noted the research needs identified in document FCCC/SBSTA/2007/12 and invited bodies and programmes involved in this type of research to inform it of their activities, including during the research dialogue to take place at SBSTA 30 and 32.¹¹

15. At SBSTA 30, the secretariat organized a meeting as part of the research dialogue in the context of decision 9/CP.11, with the participation of Parties and regional and international climate change research programmes and organizations, as well as the IPCC. In its conclusions of that session, the SBSTA encouraged Parties and research programmes and organizations to enhance their existing efforts to build capacity for research in developing countries, in particular those aimed at supporting adaptation efforts such as those identified as part of the ongoing activities of the Nairobi work programme.¹²

4. Technologies for adaptation

16. As mentioned in the previous progress report,¹³ two reports relating to technologies for adaptation were prepared for consideration by the SBSTA at its thirtieth session. These reports contain information that may be useful for the Nairobi work programme. The main points are highlighted below:

- (a) Second synthesis report on technology needs identified by Parties not included in Annex I to the Convention (FCCC/SBSTA/2009/INF.1), prepared by the secretariat: Drawing on technology needs assessments and national communications, this report found that adaptation technologies are considered priority needs by 51 of the 69 Parties that provided information. The highest number of technologies identified was in the agriculture and forestry sector, which covers more than 43 per cent of the technologies for adaptation. The technology needs identified in relation to adaptation comprised hard technologies, such as drought-resistant crop varieties, seawalls and irrigation technologies, and soft technologies, such as crop rotation patterns. Some Parties included information on indigenous technologies that have been applied to adapt to weather hazards. Examples included traditional housing designs, bunds, levees, dykes and mangrove plantations. For these technologies, the needs mainly relate to deployment and dissemination, as well as to the further improvement of their design and quality, which is based on the capacity for research and development;
- (b) Recommendations on future financing options for enhancing the development, deployment, diffusion and transfer of technologies under the Convention (FCCC/SB/2009/2), prepared by the Chair of the Expert Group on Technology Transfer:

¹¹ FCCC/SBSTA/2008/6, paragraph 67.

¹² FCCC/SBSTA/2009/3, paragraph 53.

¹³ FCCC/SBSTA/2009/INF.3, paragraphs 18–19.

One of the challenges faced by studies in this area is that information on the financial resources currently available for the development, deployment, diffusion and transfer of technologies for adaptation is uncertain. Gaps in information on technologies for adaptation and their associated costs are substantially larger than for technologies for mitigation.

5. Economic diversification¹⁴

17. The secretariat previously reported on a technical workshop on increasing economic resilience to climate change and reducing reliance on vulnerable economic sectors, which took place, under the guidance of the Chair of the SBSTA, in Cairo, Egypt, from 28 to 30 April 2009. The workshop report is now available as document FCCC/SBSTA/2009/7. The call for action resulting from recommendations made during that workshop is enclosed in the annex to this progress report.

B. Progress made in engaging organizations, institutions, experts, communities and the private sector

1. Organizations, institutions, experts and communities

18. Implementing the Nairobi work programme involves, among other things, catalysing action on adaptation and ensuring that products and deliverables target stakeholders at all levels and across all sectors.

19. Since SBSTA 30, the secretariat, under the guidance of the Chair of the SBSTA, has further enhanced the process of engaging organizations in the implementation of the Nairobi work programme, putting emphasis on activities defined at SBSTA 28:

- To engage organizations, institutions, experts, communities and members of the private sector, including those active at the community level and those undertaking education, training and awareness-raising;¹⁵
- To encourage organizations and institutions that have national and regional representation to develop specific activities at the national and regional levels in support of the Nairobi work programme, and to make the information on the results achieved available to the SBSTA for its consideration;¹⁶
- To engage regional centres and networks undertaking work relevant to climate change.¹⁷

20. Positive feedback and constructive input was received during workshops and the side events on the Nairobi work programme held at SBSTA 30 and at the Barcelona Climate Change Talks in November 2009, and through discussions with focal points of individual organizations. Eight additional organizations and institutions have expressed their interest in participating in the Nairobi work programme and appointed focal points since SBSTA 30, bringing the total number of partner organizations to 141 as at 4 November 2009.

21. The newly joined partner organizations are: the African Institute of Corporate Citizenship, the Association of World Reindeer Herders, the City University of New York Institute for Demographic Research, ICLEI–Local Governments for Sustainability, the International Union of Forest Research Organizations, the International Union of Railways, the Kyoto University Graduate School of Global Environmental Studies and Resources for the Future.

¹⁴ FCCC/SBSTA/2008/6, paragraph 74.

¹⁵ FCCC/SBSTA/2008/6, paragraph 26.

¹⁶ FCCC/SBSTA/2008/6, paragraph 30.

¹⁷ FCCC/SBSTA/2008/6, paragraph 31.

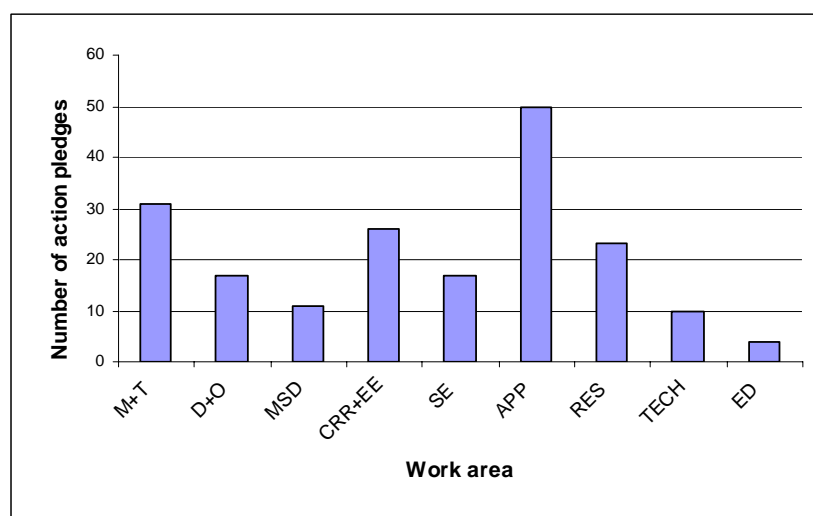
Action pledges

22. The SBSTA, at its thirtieth session, welcomed the direct engagement of Parties and a wide range of organizations in the implementation of the Nairobi work programme, and the contributions they have made. The SBSTA expressed its appreciation to the organizations that have undertaken, or stated their intention to undertake, actions in support of the objective of the Nairobi work programme, including through submissions of action pledges.¹⁸

23. Between 10 June and 4 November, the secretariat has received new action pledges from the following nine organizations: the Asian Development Bank, the Commonwealth Scientific and Industrial Research Organisation, ICLEI–Local Governments for Sustainability, the International Crops Research Institute for the Semi-Arid Tropics, the International Union of Forest Research Organizations, the International Water Management Institute, the Kyoto University Graduate School of Global Environmental Studies, the Water Center for the Humid Tropics of Latin America and the Caribbean, and Wetlands International.

24. A list of all action pledges received to date (91 pledges from 39 organizations), as well as the full details of all pledges, can be found on the Nairobi work programme pages of the UNFCCC website.¹⁹ All activities undertaken so far have considerably furthered the understanding of scientific, technical and socio-economic aspects of all work areas of the Nairobi work programme. Figure 1 provides an overview of the action pledges under the programme's nine areas of work.²⁰

Figure 1. Action pledges under the Nairobi work programme by area of work



Abbreviations: APP = adaptation planning and practices, CRR+EE = climate-related risks and extreme events, D+O = data and observations, ED = economic diversification, M+T = methods and tools, MSD = climate modelling, scenarios and downscaling, RES = research, SE = socio-economic information, TECH = technologies for adaptation.

25. Twenty-six organizations provided information between 10 June and 4 November on the status of implementation of their action pledges, in particular on the outcomes and impacts of their pledged activities and on emerging good practices and lessons learned from their implementation. In many cases, this information was prepared by partner organizations as a contribution to a Nairobi work programme

¹⁸ FCCC/SBSTA/2009/3, paragraph 13.

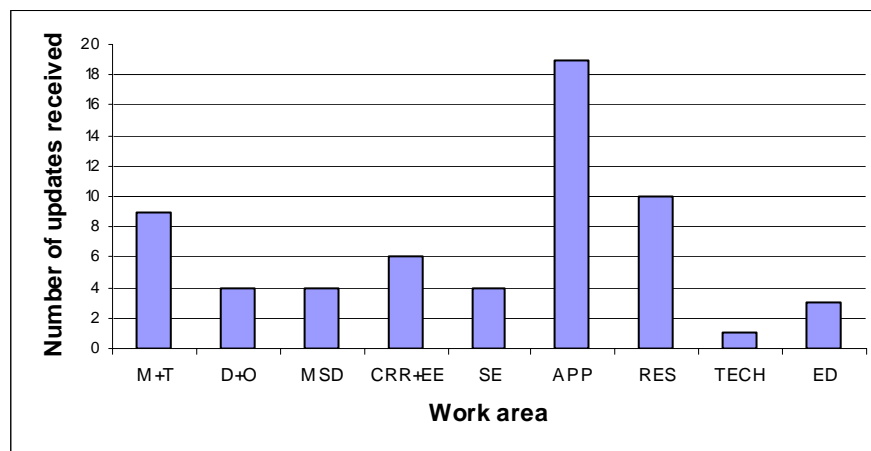
¹⁹ <<http://unfccc.int/3633.php>>.

²⁰ One action pledge can cover more than one work area.

synthesis publication (see para. 36 below). Contributing organizations to this publication welcomed this opportunity to take stock of their relevant activities and share with Parties and other stakeholders what they have achieved and learned through various adaptation activities. The following organizations have provided information on the implementation of their action pledges:

- Asian Development Bank
- Center for International Forestry Research
- Christian Aid
- Environmental Development Action in the Third World
- Food and Agriculture Organization of the United Nations
- Global Change System for Analysis, Research and Training
- Ibero-American Network of Climate Change Offices (RIOCC)
- Institute for Social and Environmental Transition
- Institute of Development Studies
- International Trade Union Confederation
- International Union for Conservation of Nature
- International Union of Forest Research Organizations
- Kyoto University Graduate School of Global Environmental Studies
- Munich Climate Insurance Initiative
- Office of Agricultural Risk (Argentina)
- Practical Action
- Satkhira Unnayan Sangstha
- Stockholm Environment Institute
- United Nations Development Programme
- United Nations Environment Programme
- United Nations International Strategy for Disaster Reduction
- Water Center for the Humid Tropics of Latin America and the Caribbean
- World Federation of Engineering Organisations
- World Food Programme
- World Health Organization
- World Meteorological Organization

26. Figure 2 illustrates distribution by area of work of the information received between 10 June and 4 November 2009. In most cases, progress reported covered more than one work area. Full details of all information received by partner organizations on the implementation of their action pledges are available on the Nairobi work programme web pages.

Figure 2. Progress reported under the Nairobi work programme by area of work

Abbreviations: APP = adaptation planning and practices, CRR+EE = climate-related risks and extreme events, D+O = data and observations, ED = economic diversification, M+T = methods and tools, MSD = climate modelling, scenarios and downscaling, RES = research, SE = socio-economic information, TECH = technologies for adaptation.

2. Dialogue among focal points and Parties

27. Following the guidance of the Chair of the SBSTA, and taking into account the expected workload of delegates during the United Nations Climate Change Conference in Copenhagen, the third forum of Nairobi work programme focal points will take place in June 2010 on the margins of SBSTA 32.

3. The private sector

28. In line with decision 2/CP.11²¹ and the conclusions of the SBSTA at its twenty-eighth session,²² the secretariat has continued in its efforts to catalyse the involvement of the private sector in the adaptation community and the wider objectives of the Nairobi work programme.

29. The private sector initiative aims to provide a platform to address three threads of work:

- (a) The challenges and opportunities arising from the impacts of climate change for business operations;
- (b) The strategies that should be put in place by businesses to ensure that their practices and operations are climate-proof and sustainable;
- (c) The contribution that the private sector is making and can potentially make to adaptation, including in the most vulnerable countries, in particular LDCs and SIDS.

30. The private sector has become increasingly engaged in the Nairobi work programme and wider adaptation assessment, planning and practice. Companies are incorporating adaptation into their long-term strategic planning and risk management practices. They are also developing projects that expand adaptation options in developing countries, such as the pilot application of microinsurance or the development and application of adaptation technologies. The secretariat has requested companies to submit case studies of their adaptation work, and 15 have been published on the Nairobi work

²¹ Decision 2/CP.11, annex, paragraph 3 (b) (iv).

²² FCCC/SBSTA/2008/6, paragraph 26.

programme web pages to date,²³ illustrating a wide diversity of interests and action assisting adaptation to climate change.

31. In total, 26 companies and private-sector associations have joined the Nairobi work programme. This includes the following to have joined since the publication of the previous progress report by nominating focal points: AccountAbility, BASF SE, Boston Consulting Group, Corporate Social Responsibility in Asia and Sampo Japan Insurance Inc.

C. Dissemination of outcomes

32. At its thirtieth session, the SBSTA welcomed the dissemination of user-friendly information products developed by the secretariat to promote the outputs and information produced under the Nairobi work programme, and requested the secretariat to further develop and disseminate these outputs.²⁴ In response to this, the secretariat has continued to consolidate workshop recommendations in the form of calls for action, it is continuously improving the Nairobi work programme web pages and it has issued several publications to inform Parties, organizations and other stakeholders about the progress made by partner organizations, as detailed in paragraphs 33–41 below.

Calls for action

33. At its twenty-eighth session, the SBSTA agreed to promote, both within the UNFCCC process and among relevant organizations, institutions, experts and communities, the consideration of recommendations and calls for action that result from workshops and expert meetings, with a view to undertaking activities at international, regional, national and subnational levels aimed at addressing the gaps and needs identified.²⁵ To date, eight calls for action have been produced, endorsed by Parties and widely disseminated during different Nairobi work programme activities and relevant partner organization events and have, as a result, triggered targeted actions by Nairobi work programme partners.

34. In addition, one new call for action has been produced since SBSTA 30. It is based on the recommendations made by participants during the technical workshop mentioned in paragraph 17 above. This call for action is contained in the annex to this report. All calls for action produced to date are available on the Nairobi work programme web pages.²⁶

Publications

35. A publication entitled *Climate Change: Scientific, Technical and Socio-Economic Aspects of Adaptation* will be published by the secretariat in early 2010. The objective is to make available to the wider public the knowledge generated and shared in the implementation of Nairobi work programme activities. The book highlights the current knowledge on gaps and needs, and actions undertaken or pledged by partners on adaptation, including:

- The policy context;
- The information base;
- Assessment;
- Planning and practices.

36. The secretariat also facilitated the production of a synthesis publication entitled *Action Pledges: Making a Difference on the Ground. A Synthesis of Outcomes, Good Practices, Lessons Learned, and*

²³ <<http://unfccc.int/4623.php>>.

²⁴ FCCC/SBSTA/2009/3, paragraph 16.

²⁵ FCCC/SBSTA/2008/6, paragraph 15.

²⁶ <<http://unfccc.int/4430.php>>.

*Future Challenges and Opportunities.*²⁷ This publication highlights the key output of pledged actions from Nairobi work programme partner organizations. The intention is to showcase some concrete results of the Nairobi work programme by focusing on practical actions that have assisted Parties in improving assessment and/or planning for adaptation, good practices and lessons learned, and emerging opportunities and challenges. The paper is structured around a set of adaptation themes:

- Improving the provision of climate data and information;
- Assessing impacts of, and vulnerability and adaptation to, climate change;
- Communicating climate risks;
- Developing and disseminating methods and tools;
- Scaling up community-based actions;
- Reducing risks of extreme events and climate-related disasters;
- Promoting knowledge sharing and learning.

37. The secretariat continues to send an electronic newsletter (eUpdate) to partners every four months on the latest developments under the Nairobi work programme. The latest issue was made available in November 2009. All eUpdates are also available on the UNFCCC website.²⁸

Website

38. The Nairobi work programme web pages serve as a central platform for collecting and disseminating information on adaptation. The pages contain the latest contributions of partner organizations and the most recent outcomes of the negotiation process under the SBSTA, as well as new and forthcoming activities carried out by partners and the secretariat.

39. To further the role of the Nairobi work programme in sharing knowledge on adaptation to climate change, the secretariat has further developed the web pages, with assistance from partners, to provide searchable indices of Nairobi work programme partners and action pledges as well as a new index of adaptation experts. In order to provide this service, the secretariat has been gathering detailed information from partner organizations on the nature of their organization, including the regional and thematic focus of their work, and experts working in their organization on adaptation. This new partners, pledges and experts portal provides easy access to information on organizations, action pledges and experts. The information can be easily searched through according to the users' needs.

40. The secretariat is calling on partners that have not yet provided relevant information on their organization to do so, so that they can be given a full profile on the web pages and to maximize the potential of bringing together those who are active in climate change adaptation with those who are in need of it. A form has been made available²⁹ for organizations to complete and return to the secretariat. Parties and organizations are also encouraged to nominate experts in order to assist Parties and other Nairobi work programme partners to match expertise with need and better enable adaptation action. Parties can do so through the UNFCCC roster of experts,³⁰ while organizations are invited to nominate expert(s) in their organizations by returning the nomination form available on the Nairobi work programme web pages.

²⁷ <<http://unfccc.int/4628.php>>.

²⁸ <<http://unfccc.int/4628.php>>.

²⁹ <<http://unfccc.int/3633.php>>.

³⁰ <<http://unfccc.int/534.php>>.

41. The secretariat also regularly updates all information under the Nairobi work programme, including the Adaptation Practices Interface. All information is available on the Nairobi work programme web pages.³¹

III. Other relevant information relating to the Nairobi work programme on impacts, vulnerability and adaptation to climate change

42. Parties and organizations are increasingly undertaking activities in support of the objective of the Nairobi work programme, independently of activities carried out under the Convention. For example, ICLEI–Local Governments for Sustainability is organizing an international forum “Resilient Cities 2010 – 1st World Congress on Cities and Adaptation to Climate Change”. This will be the first of a series of annual conferences, which will be organized in Bonn, Germany. For this forthcoming conference, ICLEI purposefully chose the dates for this event in May, just prior to the sessions of the subsidiary bodies. This conference is the organization’s first action pledge to the Nairobi work programme.

43. As another example, the International Fund for Agricultural Development (IFAD) has produced a factsheet entitled “IFAD and the Nairobi Work Programme”,³² which details the work that IFAD is carrying out on adaptation and how it can strengthen its links with the Nairobi work programme, including through the CLIMTRAIN initiative.³³

44. The United Nations International Strategy for Risk Reduction, as part of its action pledge, supports the Nairobi work programme by translating essential documents into Spanish. To date, it has provided the Spanish translation of a technical paper on integrating practices, tools and systems for climate risk assessment and management and disaster risk reduction strategies into national policies and programmes,³⁴ a paper on baseline socio-economic scenarios based on the UNFCCC user manual³⁵ and a document on the application of methods and tools for assessing impacts and vulnerability, and developing adaptation responses.³⁶

45. The Nairobi work programme is becoming more widely recognized as a catalyst for action and a mechanism for sharing knowledge on adaptation among a wide range of stakeholders, including Parties and international, intergovernmental and non-governmental organizations and businesses involved in climate change issues. This growing awareness of the work programme is reflected in the way it is mentioned in public statements, declarations, publications and presentations.

46. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes of the United Nations Economic Commission for Europe will release, in November 2009, its *Guidance on Water and Adaptation to Climate Change*, which has a special focus on transboundary cooperation. Based on the concept of integrated water resources management, the guidance provides advice to decision makers and water managers on how to jointly assess impacts of climate change on water quantity and quality, how to perform risk assessment, including health risk assessment, how to gauge vulnerability and how to design and implement appropriate adaptation strategies. Thereby, the publication supports the work of the Nairobi work programme in the broad context of climate change, and in particular in its work of supporting Parties in developing appropriate and integrated plans for water resources management and water-related sectors, as well as for the protection and rehabilitation of areas affected by floods or drought and desertification.

³¹ <<http://unfccc.int/nwp>>.

³² <http://unfccc.int/files/adaptation/sbsta_agenda_item_adaptation/application/pdf/ifad_factsheet.pdf>.

³³ <<http://www.ifad.org/climate/climtrain/workshops/index.htm>>.

³⁴ <<http://unfccc.int/3991.php>>.

³⁵ <<http://unfccc.int/3990.php>>.

³⁶ <<http://unfccc.int/3316.php>>.

IV. Next steps

47. This chapter provides a preview of mandated activities to be undertaken between SBSTA 31 and SBSTA 32, as well as ongoing work in the different work areas of the Nairobi work programme. The secretariat is currently preparing the following deliverables:

Methods and tools

- (a) A user-friendly version of the UNFCCC “Compendium on methods and tools to evaluate impacts of, and vulnerability and adaptation to, climate change”, in collaboration with relevant organizations, institutions and networks;³⁷

Socio-economic information

- (b) A synthesis report³⁸ based on:
 - (i) The submissions on efforts undertaken, including methods used, to assess the costs and benefits of adaptation options, as well as lessons learned, good practices, gaps and needs (see para. 8 above);
 - (ii) Other relevant sources;
- (c) A technical workshop,³⁹ under the guidance of the Chair of the SBSTA, on costs and benefits of adaptation options. The workshop is to involve representatives from Parties, relevant organizations, communities and experts. It will be held with a view to facilitating the identification of appropriate adaptation practices and measures and avoiding maladaptation, taking into account the submissions and the synthesis report referred to in paragraph 47 (b) above. The technical paper referred to in paragraph 7 above will be used as input to this workshop;
- (d) A report on this workshop to be made available by SBSTA 33;

Adaptation planning and practices

- (e) A report on the technical workshop⁴⁰ to consider how to advance the integration of various approaches to adaptation planning, as described in paragraph 12 above. The respective call for action will be annexed to the progress report for SBSTA 32;
- (f) A synthesis report⁴¹ based on the submissions referred to in paragraph 13 above, as well as on other relevant sources, with a view to facilitating the development of indicators for assessing the implementation of adaptation projects, policies and programmes;

Research

- (g) Under the agenda item “Research and systematic observation”, the SBSTA has at various occasions encouraged enhancing efforts to support research for adaptation, in particular efforts under the Nairobi work programme. As mentioned in paragraph 14 above, the SBSTA has also encouraged greater consideration of adaptation in future dialogues between international and regional research bodies and programmes and Parties. For the

³⁷ FCCC/SBSTA/2008/6, paragraph 41.

³⁸ FCCC/SBSTA/2008/6, paragraph 52.

³⁹ FCCC/SBSTA/2008/6, paragraph 53.

⁴⁰ FCCC/SBSTA/2008/6, paragraph 62.

⁴¹ FCCC/SBSTA/2008/6, paragraph 64.

upcoming research dialogue meeting between Parties and regional and international climate change research programmes and organizations in the context of decision 9/CP.11, to be held during SBSTA 32, Parties have been invited to provide their views on topics, including adaptation, to be discussed at that dialogue meeting;

48. One deliverable cutting across all areas of the Nairobi work programme is a technical workshop⁴² to be held under the guidance of the Chair of the SBSTA, with representatives from Parties, relevant organizations, regional centres and networks, communities and experts, on how regional centres and networks undertaking work relevant to climate change could collaborate, with a view to:

- (a) Providing information on the use of different methods and tools for various users and types of assessment;
- (b) Enabling users to share information on different methods and tools, including details on their application, limitations and usefulness for different types of tasks and users;
- (c) Facilitating a dialogue between users and developers of methods and tools to encourage the development and application of more demand- and stakeholder-driven methods and tools;
- (d) Enabling users to exchange good practices and lessons learned in accessing and applying data;
- (e) Promoting a dialogue between the providers and users of data in order for providers to better meet the needs of different users;
- (f) Disseminating good practices and lessons learned in the development and application of methods and tools;
- (g) Providing information on available climate models, scenarios and downscaled projections, including on their application, limitations and usefulness for different purposes and geographical areas;
- (h) Facilitating feedback between users and providers of climate models, scenarios and downscaled projections, in order to enable or enhance the development and to improve the usability of regional climate models and scenarios;

49. The report on this workshop to be made available by SBSTA 33.

50. The secretariat will provide its next report on progress made in implementing activities under the Nairobi work programme, including calls for action, for consideration by the SBSTA at its thirty-second session.

⁴² See document FCCC/SBSTA/2008/6, paragraph 32.

Annex**Call for action under the Nairobi work programme on impacts, vulnerability and adaptation to climate change¹**

Promoting understanding and the development and dissemination of measures, methodologies and tools 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

GAP/NEED TO WHICH ACTION IS RESPONDING

Economic diversification in the context of climate change is a strategy for risk reduction that aims to lessen exposure and increase options for adaptation to climate change by vulnerable countries. The economies of developing countries that are vulnerable to adverse effects of climate change are often heavily dependent on the primary sector, especially the agriculture sector, which is greatly affected by climate change. Increasing the potential of these countries to diversify economic activities requires, among other things, education; better access to vocational training for vulnerable populations; development of new skills and practices in relevant sectors (e.g. agriculture and fisheries); and development of new economic sectors (e.g. food processing and manufacturing).

Low levels of economic resilience to climate change in developing countries are exacerbated by factors that include weak institutional capacity, a poorly developed internal market, insufficient business and financial management skills, negative impacts of the globalized economy and reliance on a limited economic sector. Integrated approaches are required that take into account the multiple social, economic and environmental factors contributing to developing countries' vulnerability.

Enhancing economic resilience is critical at the community level, where climate change impacts are felt considerably. The lack of relevant information at this level is a major gap that leads to inadequate understanding by local people and other stakeholders of climate change impacts and adaptation options, including resilience measures.

To ensure the inclusion of marginal and vulnerable groups, it is important to communicate information in a locally appropriate manner, which includes using local languages. Women in some communities face difficulties in accessing education and training opportunities (including for business planning and financial literacy), assessing business opportunities or becoming involved in land ownership. Addressing these difficulties requires gender-specific resource allocation at multiple levels and facilitation of increased participation of women in decision-making and governance.

ACTIVITIES

The Subsidiary Body for Scientific and Technological Advice (SBSTA) has requested the secretariat to strive to engage a wide range of organizations, institutions, experts and communities in the implementation of the Nairobi work programme on impacts, vulnerability and adaptation to climate

¹ The secretariat prepares calls for action following guidance from the Chair of the Subsidiary Body for Scientific and Technological Advice. Calls for action aim to facilitate the implementation of recommendations resulting from the Nairobi work programme by a wide range of stakeholders. This call for action is derived from the report on the technical workshop on increasing economic resilience to climate change and reducing reliance on vulnerable economic sectors, held in Cairo, Egypt, from 28 to 30 April 2009. Details of related ongoing work are available at <<http://unfccc.int/4430.php>>.

change. The SBSTA has also encouraged relevant organizations and other stakeholders to develop specific activities at the national and regional levels in support of the objective and expected outcomes of the Nairobi work programme identified in decision 2/CP.11, and to share outcomes of these activities with the SBSTA at subsequent sessions, as appropriate.²

Activities identified under the focus area of **economic diversification** include:

Developing options to build economic resilience to climate change, including through:

- Promoting multi-stakeholder participation;
- Identifying investment opportunities for alternative businesses and livelihoods, as well as markets for new products and services;
- Promoting the integration of socio-economic concerns into national development plans;
- Developing effective tools and processes to facilitate the incorporation of indigenous and local knowledge into decision-making at all levels;
- Further developing mechanisms for cost-benefit assessment of adaptation measures, including co-benefits of economic diversification options.

Strengthening economic resilience in vulnerable sectors at the community level, including through:

- Providing information on alternative employment and livelihood programmes to broaden skills and retrain workers;
- Developing training materials on financial tools and mechanisms;
- Identifying mechanisms to link appropriate risk transfer tools (such as microinsurance) with existing social protection measures;
- Incentivizing the involvement of the private sector, including insurance companies, to facilitate resource (including technological and financial) transfer.

Promoting documentation and dissemination of good practices, measures and tools, including through:

- Developing a 'case study library' of successful tools, good practices and lessons learned, including indigenous and local knowledge;
- Enhancing the engagement of existing knowledge networks, including non-governmental organizations, to reach community-level stakeholders, and ensuring communication materials are presented in an accessible, relevant and practical way.

Strengthening the institutional and technical capacity for economic risk management, including through:

- Enhancing the effectiveness and adequacy of early warning systems;
- Creating vulnerability and resilience indices;
- Increasing the availability of climatic and non-climatic data.

Strengthening existing modalities for regional and international cooperation.

² FCCC/SBSTA/2008/6, paragraph 30.