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

Report on the technical workshop on collaboration among regional centres and networks

Note by the secretariat

Summary

This report provides a summary of the workshop on collaboration among regional centres and networks, held under the Nairobi work programme on impacts, vulnerability and adaptation to climate change. The workshop was held in Apia, Samoa, from 2 to 5 March 2010. Discussions at the workshop focused on the roles of regional centres and networks, and on current practices and lessons learned with respect to existing collaborative action, as well as barriers and challenges regarding facilitating further collaboration among different entities at the regional level in order to assist Parties in the assessment of and planning for adaptation. The report includes a summary of key discussion points at the workshop, as well as a summary of steps that can be undertaken by Parties, relevant organizations and other stakeholders to address the needs and gaps identified during the workshop, and issues for follow-up and further consideration under the Nairobi work programme.

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I. Introduction

A. Mandate

1. The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its twenty-eighth session, requested the secretariat, under the guidance of the Chair of the SBSTA and before its thirty-second session, to organize a technical workshop 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.¹

2. The SBSTA, at the same session, further requested the secretariat to include in the workshop consideration of relevant matters related to the following sub-themes² and under the areas of work on methods and tools, data and observations, and climate modelling, scenarios and downscaling:³

(a) 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;

(b) 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;

¹ FCCC/SBSTA/2008/6, paragraph 32.

² Decision 2/CP.11, annex, paragraph 3.

³ FCCC/SBSTA/2008/6, paragraphs 40, 43 and 45.

(c) Promoting the development of, access to, and use of information and data on projected climate change;

(d) Promoting the development and dissemination of methods and tools for assessment and improvement of adaptation planning, measures and actions, and integration with sustainable development.

3. The SBSTA further requested the secretariat to prepare a report on this workshop to be made available by its thirty-third session.⁴

B. Scope of the note

4. This report draws upon the presentations and discussions at the technical workshop, including on possible next steps under the Nairobi work programme on impacts, vulnerability and adaptation to climate change.⁵

5. This document contains:

(a) A description of the workshop proceedings (chapter II);

(b) A summary of key issues addressed at the workshop (chapter III);

(c) A summary of possible steps for enhancing collaboration among centres and networks (chapter IV);

(d) An outline of issues for follow-up and further consideration under the Nairobi work programme (chapter V).

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

6. The SBSTA may wish to consider this workshop report at its thirty-third session, as part of its consideration of the outputs of activities under the Nairobi work programme completed prior to that session, with a view to reviewing the effectiveness of the work programme.

D. Background

7. The overall objective of the Nairobi work programme is to assist all Parties, in particular developing countries, including the least developed countries 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.⁶

II. Proceedings

8. Under the guidance of the Chair of the SBSTA, the workshop on collaboration among regional centres and networks took place in Apia, Samoa, from 2 to 5 March 2010.

⁴ FCCC/SBSTA/2008/6, paragraph 33.

⁵ The relevant documentation related to this workshop is available at <<http://unfccc.int/5258>>.

⁶ Decision 2/CP.11, annex, paragraph 1.

It was organized by the secretariat in collaboration with the Ministry of Natural Resources and Environment in Samoa. The Governments of Japan, New Zealand and Switzerland, and the European Commission provided financial support. Mr. Mama Konaté, Chair of the SBSTA, chaired the workshop.

9. Participants at the workshop comprised 60 representatives from Parties, international organizations, intergovernmental organizations and non-governmental organizations, and regional centres that are active in the areas of methods and tools, data and observations, and climate modelling, scenarios and downscaling.

10. Discussions at the workshop were informed by a background note⁷ and the outcomes of two related meetings under the Nairobi work programme: an expert meeting on methods and tools and data and observations, held in March 2008 in Mexico City, Mexico;⁸ and an in-session workshop on climate modelling, scenarios and downscaling held in June 2008 in Bonn, Germany.⁹

11. The Prime Minister of Samoa, Mr. Tuilaepa Lupesoliai Sailele Malielegaoi, opened the workshop. After the introductory session, which included a presentation on the recent progress in the implementation of the Nairobi work programme, a set of stocktaking presentations provided an overview of collaborative activities currently being undertaken by organizations operating globally and highlighted potential areas for further collaboration among regional centres and networks.¹⁰

12. Subsequently, a plenary session and a breakout group discussion were held for each of the three thematic areas: methods and tools, data and observations, and climate modelling, scenarios and downscaling. The plenary sessions for the thematic areas included presentations by Parties and regional centres on the latest developments in the respective thematic areas, gaps and needs, ongoing collaborative initiatives and potential roles that regional centres and networks could play in support of adaptation.

13. Breakout group sessions provided an interactive forum that enabled participants to share information on the ongoing and planned collaborative activities of the entities that have regional representation, to outline needs and challenges regarding collaborative action, and to identify possible entry points for enhancing support for Parties by regional centres and networks through collaborative efforts.

14. Key discussion points from the breakout group sessions were reported back and further discussed at plenary sessions with a view to identifying areas where collaborative activities could be enhanced. In order to turn these possibilities into concrete actions, participants formed a second set of breakout groups to map out opportunities for regional centres and networks to scale up support for adaptation in the three thematic areas of the workshop.

15. Consolidated ideas that were developed during the second set of breakout group discussions were shared at the final plenary session, where participants identified potential steps for collaboration and shared information on existing models for collaboration.

16. In addition, organizations were invited to share information on relevant planned activities in response to the needs with regard to enhancing collaborative efforts identified during the workshop. Facilitators of breakout groups were also invited to provide reflections and key messages from discussions that they had led. The workshop concluded with a chair's summary and concluding remarks by the host Government.

⁷ <http://unfccc.int/files/adaptation/nairobi_work_programme/workshops_and_meetings/application/pdf/samoa_workshop_background_note-11feb.pdf>.

⁸ The report on this expert meeting is contained in document FCCC/SBSTA/2008/3.

⁹ The report on this workshop is contained in document FCCC/SBSTA/2008/9.

¹⁰ Presentations given at the workshop are available at <<http://unfccc.int/5258>>.

III. Summary of the key issues addressed at the workshop

A. Introduction

17. Participants were from a wide spectrum of adaptation stakeholder groups with diverse experiences and expertise. This enabled discussions to include the perspectives of both providers and users of climate information and knowledge services and the products that support climate impact assessment and adaptation planning.

B. Needs and gaps identified in the areas of methods and tools, data and observations, and climate modelling, scenarios and downscaling

18. This section summarizes the key issues discussed regarding needs and gaps where collaboration among regional centres can be beneficial, possible functions of regional centres and networks, types of collaboration and emerging areas for further collaboration, as well as lessons learned from current collaborative action.

19. Although plenary and breakout group discussions were held separately for each of the three thematic areas of the workshop, clear commonalities emerged in terms of the needs, gaps and challenges that can be addressed through enhanced collaboration among regional centres and networks. They can be summarized as follows: the need to strengthen institutional and technical capacity for the analysis and interpretation of data and forecasting; the need for more effective interaction among stakeholders; and gaps in the availability of data, information and knowledge, including on good practices and lessons learned with regard to the application of tools.

1. Institutional and technical capacity for analysis and interpretation of data and forecasting

20. The representative from the Global Climate Observing System (GCOS), reporting on the findings from the GCOS Progress Report 2004–2008,¹¹ informed the workshop that despite limited progress in resolving financial issues related to long-term continuity, developed countries have been improving their climate observation capabilities. Developing countries have made only limited progress, with a decline in some regions, and the support for capacity-building remains small in relation to needs, making long-term continuity an even greater challenge. Immediate attention to the design and implementation of the national and local-scale networks is needed in order to improve impact assessment and adaptation planning in developing countries.

21. This was reiterated by the representatives from the University of Cape Town and those from SIDS, who informed the workshop of particular institutional challenges in Africa and small island countries where difficulties in developing observation capabilities are manifold. The representative from Kiribati reported that in most SIDS, meteorological services are composed of only around 10 people and often lack capacity to forecast extremes and to analyse and interpret data and observations for climatic and non-climatic conditions, which limits the ability of countries to use them in adaptation planning.

22. The lack of critical mass in human resources not only hinders research initiatives but also limits the ability of countries to fully utilize available resources (equipment and tools). There is an urgent need to improve technical capacity to use tools, including for conducting comparative costing of different adaptation options and selecting appropriate technology.

¹¹ <<http://www.wmo.int/pages/prog/gcos/index.php>>.

Participants noted that when capacity-building is planned, it is important for training to be internal and region/country-focused.

23. Continuity of funding poses a challenge, as the short-term (two to three years) funding cycle makes it difficult to develop long-term institutional capacity. The lack of resources often results in climate services being run without strategic planning, and in missed opportunities to catch up with advances in meteorological services technology (e.g. upgrading essential observations/communications infrastructure). Consequently, SIDS in the Pacific are dependent on the expertise of larger, external meteorological services in the region (Australia and New Zealand) for technical services, such as maintenance of equipment, and climate outlooks and oceanographic forecasts and monitoring.

24. In the case of Africa, while the situation is improving rapidly, specific infrastructural challenges remain, including limited Internet bandwidth, which restricts the sharing of data and information as well as e-learning opportunities. The lack of computational resources remains a major challenge in relation to complex climate modelling in the region.

25. Climate models are central to the understanding and forecasting of climate change. Presentations confirmed that various sources of information and technical guidance exist for assessing climate change threats, including: guidance on regional climate scenarios information for adaptation from the National Communications Support Programme; guidance on scenarios from global models and dynamical and statistical downscaling from the Task Group on Data and Scenario Support for Impact and Climate Analysis; and information from the UK Climate Impacts Programme and scientific literature and summaries such as Intergovernmental Panel on Climate Change (IPCC) reports. However, there are gaps in constructing robust climate change projections, particularly on national and subnational scales and for extreme events. There is also an urgent need to provide practical guidance and technical backstopping, especially for developing climate scenarios to support policy-relevant information on national and regional risk assessments, and for cost-benefit analyses on adaptation options.

26. While IPCC climate projections are available on global and continental scales, there is limited capacity to utilize the information on a regional scale. However, the representative from the Commonwealth Scientific and Industrial Research Organisation (CSIRO) reported that very few countries in the Asia-Pacific region currently have the capacity to dynamically downscale global climate model outputs for their regional applications. It was noted that dynamic downscaling for tropical regions is particularly challenging owing to General Circulation Models (GCM) bias, which leads to, inter alia, incorrectly downscaled tropical rainfall. Therefore, there is considerable demand for downscaling GCM outputs that have been assessed by the IPCC Fourth Assessment Report.

2. Effective interaction among stakeholders

27. Work on adaptation is fast evolving and expanding in scope; therefore, well-structured stakeholder interaction is essential in identifying common methods and learning from experiences. Mechanisms are needed to facilitate more effective interaction between the providers and users of data, information, methods and tools. Such interaction helps to ensure that the provision of data and tools is targeted to user needs, as well as helping to avoid misuse, misrepresentation and misinterpretation of data and tools.

28. Enhanced dialogue can also help to increase the usability of tools; in addition, it can facilitate the identification of scenarios, methods and tools that are appropriate to different groups by allowing local-level practitioners to provide feedback to the tool developers for review and improvement. For instance, the representative from the Cook Islands pointed out that tools that are currently available can be made more practical and user-friendly simply by localizing them (e.g. converting time information presented in local time from

Coordinated Universal Time) or taking immediately effective steps such as increasing the availability of information in different languages. From the users' point of view, improvements such as these can help local practitioners better prepare for extreme weather events, for example by forecasting a cyclone.

29. With regard to the guidance on the application of tools, the information available on the relevant websites is not always appropriate in terms of the level of information, and so does not enable users to use the tools effectively. Participants pointed out that there is a shortage of practical training on available methods and tools; such training could be carried out through online interactive courses or by inclusion in the curricula of higher education institutions.

30. With regard to climate models and scenarios, it is important to understand the strengths and limitations of data. Effective interaction among different groups of stakeholders can facilitate discussions on how to use the diverse range of regional scenarios for different sectors. For example, climate scenarios, constructed from different models used to assess the effects of climate change on water resources in Africa, varied by more than 50 per cent in the range of impacts. Enhanced dialogue among stakeholders can help identify the existing models by region and develop national downscaling tools that are flexible and dynamic to reflect specific circumstances. In addition, participants stressed the importance of the engagement of stakeholders being demand/internally driven in order to build capacity in the long term.

31. Participants also emphasized the need to strengthen the linkages between regional and national meteorological services, in order to ensure that regional services and collaboration can complement national meteorological services, particularly in matters that are beyond the capacity of national meteorological services.

3. Dissemination of data, information and knowledge

32. The linkages between the producers and end-users of climate scenarios, especially those at the lower levels of the chain (e.g. farmers), need to be enhanced in order to increase the timeliness of the information. The representative from Egypt told participants about practices in a centre on agroclimate that provides information based on the seasonal forecasts through mobile phones.

33. Participants identified that a gap also remains in the capability to adapt existing methods and tools. In planning for adaptation, the concept of 'no one size fits all' applies. The central issue is adapting in a changing environment; therefore, it is important to focus on an approach or a process that can be used in different situations rather than on particular tools that can be applied. The representative from the International Union for Conservation of Nature (IUCN) drew attention to the fundamental difference between methods and tools for vulnerability and impact assessments and those for adaptation planning. The former are essentially for risk management as impacts can be calculated, whereas for the latter, quantified risks are used to validate the different aspects of the adaptation process. This is because the planning for adaptation is a social process which involves multiple factors of a diverse nature (e.g. analysis of the current situation, taking into account not only climatic information but also socio-economic and human development, market context, governance, etc.). Consequently, examining current adaptation practices (not the current climate) becomes crucial for future adaptation. This gives rise to an urgent need to enhance the formulation and dissemination of lessons learned from the application of methods, tools and interdisciplinary approaches so that conceptual strategies can lead to practicable adaptation activities.

C. Possible roles of regional centres and networks, and emerging areas for enhanced collaboration

34. Participants emphasized that existing regional centres and networks currently support adaptation work with diverse approaches and objectives. This diversity can be a basis for exploiting synergies and presenting opportunities for different entities to fill each other's gaps while capitalizing on their respective comparative advantages. There was general consensus that, given the multifaceted nature of adaptation, it is unrealistic and impractical to expect regional centres to be capable of meeting all the needs. Participants also strongly recommended that existing regional centres should be enhanced and their services further utilized.

35. Regarding common gaps and needs related to the three thematic areas, participants discussed the types of action that can be carried out most effectively by regional centres and networks, as well as emerging areas for increased collaboration. Opportunities for furthering the collaboration generally fall into three broad categories: data, information and knowledge services; provision of technical support; and cross-cutting issues.

36. Participants agreed that one of the primary roles of regional centres and networks is to be a central platform for knowledge management, providing data, information and knowledge for impacts and vulnerability assessments and planning for adaptation. This involves a diverse range of work, from collating and archiving data with harmonized and consistent standards to disseminating worked examples and lessons learned from the application of tools. Modellers among the participants highlighted that enhancing the dissemination of guidance relating to climate scenarios is especially important because currently modelling outputs are mostly disseminated by modelling centres without sufficient technical guidance. The repository function of regional centres should also extend to keeping records of outputs from regional meetings and training on the use of tools, in order to contribute to long-term in-region capacity-building. The need for increased cooperation in the area of knowledge management is highlighted by the fact that the majority of countries within the same region often share similar climate change and adaptation challenges. It is therefore beneficial to share data and information that are required for improving assessments and planning for adaptation in an efficient manner through cooperation at the regional level.

37. Harmonization of data is another aspect of information services for adaptation that needs further attention, as compatibility is essential when trying to increase the usability of data in adaptation planning. Regional centres can assist in conducting inventories of existing data and providing regional guidelines to ensure consistent and appropriate use of information and to create a common pool of information. Participants acknowledged the merit of using regional networks to exchange information, to coordinate data distribution and the provision of results from climate model simulations, and to establish a participatory process for scenario development involving both providers and users of scenario information.

38. Regional centres and networks are also well positioned for bridging the knowledge gap among countries within the same region, by providing information from adaptation projects implemented in different parts of the region. They can also share information on experiences of using tools, including testing different approaches and regularly reviewing lessons learned from both successes and failures of the application of methods and tools in order to identify what works in certain contexts. This would enable regional centres to develop templates for method selection for different adaptation contexts. If the information is held only by governments and stakeholders that are involved in designing or implementing specific projects, opportunities for learning would be lost to other practitioners in the region. In this context, it is important to develop collaborative efforts

aiming at enhancing support for national practitioners to share results at the regional and global levels.

39. Bridging the knowledge gap between stakeholders at different levels is another role that regional centres and networks can effectively undertake. Participants recognized that there is a disconnect between work on adaptation at the local level and that at the global level, and a gap between the level of information and knowledge required to enable effective adaptation planning and what is currently available. Participants noted that there is a lack of a mandatory requirement or framework to feed knowledge from the ground upward to regional centres, and for the information available at the global level to trickle down to the local level. There is a need to further develop regional cooperation mechanisms in this regard. Such mechanisms can also facilitate potential service initiatives, such as the Global Framework for Climate Services under the World Meteorological Organization (WMO), to respond more effectively to the demands of adaptation practitioners.

40. Regional centres can take a proactive role in keeping decision makers informed by improving in-country communication through bringing together various stakeholders (e.g. finance, environment, meteorological services, research institutes and planning). Some participants also indicated that there is often a lack of communication between civil society and government, which hinders the ability of civil society to make valuable information available to a wider group of stakeholders.

41. Adaptation planning and decisions are often made on a sector-specific basis; participants emphasized the value of linking existing specialized networks. Regional centres and networks can facilitate cross-sectoral/cross-disciplinary learning by bringing sectoral stakeholders together for greater cooperation in order to increase the effectiveness of support for adaptation. Between the areas of expertise where there is a similar or common objective, synergy from such cooperation can be substantial. For instance, participants noted that in developing national adaptation strategies, utilizing disaster risk reduction (DRR) expertise already housed in regional centres can be beneficial.

42. In addition, noting the synergy between the adaptation and mitigation communities (i.e. achieving emission reductions from adaptation activity), some participants drew attention to the potential benefits for collaboration between these communities. Participants noted that this would also help leverage extra funding and relevant expertise to support adaptation action.

43. Various entities in the private sector (e.g. insurance, finance and businesses that are sensitive to climate variability and change) are already actively engaged in assessing their exposure to climate change. Collaboration with them (e.g. through the World Business Council for Sustainable Development) provides an opportunity to enhance the knowledge base on adaptation and to mobilize possible new sources of funding.

44. Participants were informed of the experience of Australia's Cooperative Research Centres (CRC) Program¹² as a collaborative knowledge production mechanism. It brings together organizations such as universities, research institutes and private-sector entities to deliver research products in a seven-year time frame. It works with higher education institutions and is managed by a board. Each entity is contracted to deliver a certain number of days of services. As the accountability of members (entities) is placed at the centre for collaboration, it is up to the centres to determine how they would engage with collaborative activities.

45. Facilitation of interregional learning is another area where regional centres and networks can contribute in enhancing support for adaptation. The Caribbean Community Climate Change Centre (CCCCC) reported on the dialogue that was initiated between 2001

¹² <<http://www.crc.gov.au>>.

and 2004 with the Secretariat of the Pacific Regional Environment Programme (SPREP) and the Pacific Islands Climate Change Assistance Programme for collaboration on climate change. This collaboration has led to the successful launch of a Master's programme in climate change. Further, taking into account the similar geographical and socio-economic characteristics of these two regions, collaboration on the training of meteorological personnel is also being undertaken.

46. An example shared by the representative from Spain showed that collaboration among interregional networks (e.g. Ibero-American Network of Climate Change Offices (RIOCC)¹³) can be useful in developing a framework for identifying existing skills and resources, providing targeted training and linking means and funding for technology transfer. Collaboration among interregional networks can also bring the South–North perspective into interregional learning, as it enables developed countries to learn from developing countries, including about community-based adaptation.

47. In addition, some participants identified transboundary issues, such as cross-border resource management, as an area of work that regional centres can effectively address because they can generate and store data for a number of countries and disseminate information within the region. The Mekong River Commission is one such cooperating platform in managing cross-border natural resources.¹⁴

D. Types of collaboration and lessons learned from current collaborative practices

1. Types of collaboration

48. A number of organizations gave presentations on their structural and organizational arrangements for collaborating at the regional level in the areas of information and knowledge sharing, institutional strengthening, capacity-building, training, joint research and work on cross-regional/sectoral issues.¹⁵

49. The presentations revealed that there are different types of collaboration in terms of timespan and level of collaborative actions. Several organizations shared examples of short-term collaboration, including jointly holding workshops and meetings aimed at sharing knowledge, raising awareness or building capacity on specific topics. In contrast, launching a Master's programme in the Caribbean region through collaborative efforts with regional centres that had already initiated similar initiatives in the Pacific, mentioned in paragraph 45 above, exemplifies a long-term collaborative action to enhance regional capacity-building.

50. Representatives from universities and research institutes from different regions shared information on collaborative activities in training, capacity-building and education. For example, the University of the Sunshine Coast in Queensland, Australia, is creating a collaborative network with universities within the region (Pacific) as well as across other regions (the Caribbean, South-East Asia and Southern Africa) on training in the application of integrated modelling tools (e.g. SimCLIM). CSIRO is collaborating with the University of Pretoria and the Council for Scientific and Industrial Research in South Africa, Badan Meteorologi Klimatologi dan Geofisika in Indonesia, the University of Hanoi in Viet Nam and the Philippine Atmospheric, Geophysical and Astronomical Services Administration on regional climate scenarios using downscaling techniques. The Pacific Climate Change

¹³ <http://www.lariocc.net/riocc_principal/es/index.htm>.

¹⁴ <<http://www.mrcmekong.org>>.

¹⁵ Further information on the ongoing collaborative actions presented at the workshop is available at <<http://unfccc.int/5258>>.

Science Program under the International Climate Change Adaptation Initiative of the Australian Government is aimed at building capacity through training meteorological officers of partner countries on climate data management, analysis and interpretation.

51. Discussions also suggested that there are a number of specialized collaborative networks focusing on particular sectors (e.g. food security, DRR, etc.). For instance, the representative from IUCN reported on their ongoing cross-sectoral collaboration – the Ecosystems and Livelihoods Adaptation Network (ELAN) initiative. ELAN aims to disseminate information on adaptation strategies and help build local capacity to use available tools and methods for assessments and improvement of ecosystem-based adaptation planning and actions.

52. Collaborative action can also be achieved virtually in addition to being carried out through the physical presence of institutions. Participants shared information on current practices of virtual centres (e.g. network of networks, clearing houses), which aim to provide, among other things, technical support, assistance in career pathways for adaptation professionals, or to bring together knowledge across other centres that are more sector-specific. For instance, the representative from the United Nations International Strategy for Disaster Reduction (UNISDR) reported on knowledge management through a website, Prevention Web,¹⁶ to strengthen regional capacities in the area of DRR.

2. Lessons learned

53. Some of the elements that underlie the success of collaborative action emerged from discussions on current initiatives. Although collaborative activities are coordinated at the regional level, participants underscored that such efforts need to effectively respond to national needs and priorities, emphasizing that the ultimate purpose of a regional centre and network is to facilitate support for adaptation at national and subnational levels. In this regard, it is critical for countries to establish and communicate what they wish to achieve from engaging in regional cooperation platforms. Similarly, participants acknowledged that collaborative action should seek to engage vulnerable groups, because these are the ones whose need for support should ultimately be catered for.

54. It was also suggested that knowledge management through regional collaboration is most effective when it is linked with tangible adaptation actions that make a difference to livelihoods. In order to ensure the on-the-ground impacts from collaborative efforts, it is essential to have a clear understanding of the thematic topics or issue areas to be focused on. A well-planned design phase to form collaborative action helps to create ownership and define the nature of such action and the scope of the provision of very specific technical services, including access to individual experts, which is made possible through collaboration.

55. Adaptation requires a multidisciplinary approach, and therefore effective collaboration requires a broad-based membership. However, the success of collaboration depends on the engagement of those regional organizations with interest in such collaboration and specialized expertise. This is fundamental when identifying core partners and donors to participate in projects and/or contribute resources for a concrete planning mechanism to advance projects. Some participants suggested that only those with a strong interest in collaborative activities should be involved, while some collaborative network initiatives employ a two-tiered approach, the first tier with core partners and the second tier with a wider range of stakeholders. In addition, participants stressed the value of involving universities in the region as they can contribute to building long-term capacity.

¹⁶ <<http://www.preventionweb.net/english/>>.

56. Participants discussed the difficulties of ensuring that technical backstopping provided by, or knowledge disseminated through, collaborative networks or action reach the relevant people. One reason for this is that there is usually only one designated focal point per collaborating entity, which in some cases results in information bottlenecks. Experience gained from creating ongoing collaborative networks showed that close monitoring and follow-up with members of the network is crucial. Participants also emphasized that the sustainability of such a network and activities may necessitate a full-time coordinator (e.g. regional steering or leadership group, regional programme officer or secretariat) in order to manage the network as well as to maintain relationships among members, and regular and effective communication for better monitoring, fundraising and advocacy.

57. While recognizing the value of virtual collaboration, participants generally agreed that face-to-face meetings, such as annual meetings of the relevant community/network, are crucial for successful collaboration.

58. With regard to strengthening the knowledge base, one way to ensure that knowledge generated by adaptation projects is collected and shared is to include the documentation of good practices and lessons learned as part of the mandatory reporting requirement for project funding. One example of this is the adaptation projects funded by the Global Environment Facility, which are mandated to document and share lessons learned from project implementation through the Adaptation Learning Mechanism.¹⁷

59. Participants recognized that the existence of common vulnerabilities within regions makes collaboration among regional centres and networks necessary. Current efforts to strengthen regional capacity for DRR being carried out by the UNISDR with regional partners show that in Africa, for instance, the focus of cooperation is to strengthen the linkage of adaptation with DRR, in particular in developing capacity for drought risk reduction. In Asia, the partnership efforts aim to increase synergy in thematic assessments, such as on climate-resilient cities, whereas in Europe and Central Asia the focus is on improvements with regard to water-related hazards and governance issues through enhancing academic networks and documenting good practices.

E. Barriers and challenges regarding increasing collaboration

60. Participants recognized that, in some cases, ongoing initiatives by regional centres and networks overlap, partly due to the mandates of each organization. This often results in multiple coverage or support for a certain location or issue, but with insufficient coordination. While there is a general recognition that collaboration among existing centres and networks would increase the effectiveness and efficiency of support for adaptation, it is still essential for the entities concerned to reach an appropriate level of awareness of potential mutual benefits. The challenge remains to find a method of cooperation that will bring out synergies and avoid duplication with a minimum level of coordination.

61. One way to achieve this is to first define the comparative advantages of centres and entities willing to participate in and contribute to collaborative networks. Then effective mechanisms need to be devised to ensure that these comparative advantages are fully harnessed in delivering the cooperative action. Participants agreed that the lack of knowledge on available sources of expertise and knowledge is a barrier in this regard. There is a need to make an inventory of entities and networks with the interest in enhancing collaborative efforts and requisite capacity and specialized expertise, and to include information on how to access these skills and resources. However, it is also recognized that

¹⁷ <<http://www.adaptationlearning.net>>.

developing such inventories is time-consuming and that the inventories can quickly become outdated.

62. The difficulty in measuring the effectiveness of collaboration, owing to the large number of joint initiatives by regional centres and 'networks of networks' aiming to support adaptation, was identified as another barrier for increasing collaborative activities. Participants underlined the importance of avoiding the replication of functions and mandates of existing regional architectures. Therefore, clearly defining the added value of any new collaborative network or action is absolutely essential.

63. Current collaborative networks, such as the Global Adaptation Network led by the United Nations Environment Programme (UNEP), demonstrated that collaboration leads to effective use of limited resources to help reap the benefits on the ground. However, participants also noted that securing commitment to provide start-up resources for such collaborative action still remains a challenge and that the unpredictable nature of long-term financial support hinders the sustainability of such action. The lack of political support or supportive mandates to formalize the creation or enhancement of collaboration among regional entities remains a barrier in this regard.

IV. Summary of steps for enhancing collaboration among regional centres and networks

64. Participants made a number of recommendations for further steps to be taken in enhancing collaboration among regional centres and networks, based on the presentations and discussions and reflecting the priority areas of work. These recommendations are described in this chapter.

65. To promote better knowledge management and dissemination through collaborative action, participants proposed the following actions:

(a) Develop regional clearing houses that will hold a large amount of library resources, make available knowledge on current research and periodically hold workshops; it should be possible for partners and centres to make inquiries in an interactive way on which organization is best for collaboration on specific issues. The process of establishing clearing houses should involve stakeholders, in order to ensure that by the time a clearing house is created organizations are aware of and can make use of it. As the primary function of a clearing house is to facilitate interaction among collaborating centres, it should not replicate work being undertaken by regional centres. One of the functions of such a clearing house should be to collect information and make it available to the IPCC. It should also build on existing experiences, such as the clearing house for natural hazards research that has been set up in the United States of America;

(b) Hold regular face-to-face meetings focusing on learning from good practices and enhancing concrete adaptation actions;

(c) Link regional centres and networks with ongoing climate service networks and initiatives, such as the Global Framework for Climate Services of WMO, to ensure that the development and implementation of climate information services and products are informed by the needs of adaptation 'customers';

(d) Facilitate the sharing of knowledge and lessons learned with the private sector.

66. To increase the effectiveness of future collaborative action for technical backstopping, participants proposed the following actions:

(a) Conduct adaptation needs analyses for different regions, including a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis, with a view to regional centres and Parties identifying region-specific needs for technical backstopping. This can be done by building on the general needs identified under the Nairobi work programme, and also in response to up-to-date needs explicitly communicated;

(b) Take stock of activities undertaken by existing regional centres, in order to identify their comparative advantages and their project areas. This entails mapping or making directories of the expertise available at centres and that of individual experts accessible through centres, keeping the directories updated and making them widely available. This step should focus on mapping out the skills, services, resources and mandates that are available in the region and could be built upon and enhanced. This would help identify specific areas of technical backstopping as a basis for increasing collaboration with other regional centres, and assessing gaps and potential overlaps;

(c) Clearly define the vision, goal, scope, outcome and modes of operation for any collaborative action. This is key to identifying the specific services that the collaboration aims to deliver;

(d) Identify practical solutions to creating links among existing networks. This may entail:

(i) Mandating a group of resource people, such as an expert group, to liaise among networks and centres. The group could be made up of retired senior adaptation officers who could be drawn upon for specific areas of services, including in the field. Alternatively, such a group could be composed of personnel from centres and networks themselves in order to facilitate the further exchange of ideas. For this type of service to work effectively, it is important to clearly define the demand/needs and to ensure that the action takes place in a demand-driven, rather than supply-driven, manner;

(ii) Creating a steering group or committee as a mechanism for collaboration. Then, in response to specific calls for assistance, work groups of experts and practitioners in the region can be established to develop joint programmes and to collectively mobilize resources;

(e) Start pilot projects and mandate experts from centres with concrete tasks targeting specific gaps and needs;

(f) Explore opportunities to use virtual centre models (e.g. CRC) that build on existing regional organizations to provide technical backstopping services;

(g) Encourage university networks and research centres to be involved in order to create and sustain long-term capacity-building efforts and to increase the knowledge base.

V. Issues for follow-up and further consideration

A. Planned actions by Nairobi work programme partners

67. UNEP, through its Global Adaptation Network initiative, has conducted a mapping exercise for regional entities in Asia, West Asia, Africa and Latin America. It pledged to make the results of this exercise available through the Nairobi work programme.

68. SPREP pledged to share information on its ongoing adaptation work in the Pacific and the related lessons learned through the Nairobi work programme website. CCCCC informed the participants of a forthcoming meeting, to be held at the end of March 2010, of

national focal points in the Caribbean to determine a new set of adaptation projects to be funded in the region. It will share the outcomes of the meeting through the Nairobi work programme.

69. The Met Office Hadley Centre of the United Kingdom of Great Britain and Northern Ireland reported on its new research initiative in Africa supported by the Department for International Development. It focuses on the understanding of climate processes in Africa, and aims to improve decadal and seasonal forecasts, and on making downscaling techniques and products available to African climate research centres. The inception phase involving consultations with research and other climate information users has recently started.

B. Possible next steps under the Nairobi work programme

70. As a number of regional centres and networks are partners of the Nairobi work programme, the work programme can maintain a good overview of the work undertaken by its partner organizations. It was suggested that the Nairobi work programme could facilitate collaborative initiatives and interregional cooperation among regional centres and networks.

71. The summary of steps as outlined in chapter IV could be undertaken by Parties, relevant organizations and other stakeholders engaged in the implementation of the Nairobi work programme to address the needs and gaps identified during the workshop. These steps could also inform the general consideration by the SBSTA at its thirty-third session of the outcomes of the activities under the Nairobi work programme.
