UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Subsidiary Body for Scientific and Technological Advice Thirty-third session Cancun, 30 November to 4 December 2010

Item 3 of the provisional agenda

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

Views and information on the effectiveness of the Nairobi work programme on impacts, vulnerability and adaptation to climate change in fulfilling its objective, expected outcome, scope of work and modalities

Submissions from Parties and relevant organizations

- 1. The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its thirty-second session, invited Parties and relevant organizations to submit to the secretariat, by 16 August 2010, views and information on the effectiveness of the Nairobi work programme on impacts, vulnerability and adaptation to climate change in fulfilling its objective, expected outcome, scope of work and modalities, as set out in the annex to decision 2/CP.11 (FCCC/SBSTA/2010/6, para. 20).
- 2. The SBSTA requested the secretariat to compile these submissions into a miscellaneous document to be made available by SBSTA 33.
- 3. The secretariat has received 18 such submissions. In accordance with the procedure for miscellaneous documents, the nine submissions received from Parties, the two submissions from United Nations organizations and the one submission from an intergovernmental organization are attached and reproduced* in the languages in which they were received and without formal editing. In line with established practice, the six submissions from non-governmental organizations have been posted on the UNFCCC website at https://unfccc.int/3689.php>.

Please recycle

^{*} These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

Contents

| | | Page |
|-----|-------------------------------------------------------------------------------------------------------------------------------|------|
| 1. | Argentina (Submission received 3 September 2010) | 3 |
| 2. | Belgium and the European Commission on behalf of the European Union and its member States* (Submission received 22 July 2010) | 4 |
| 3. | Bolivia (Plurinational State of) (Submission received 16 August 2010) | 6 |
| 4. | Egypt (Submission received 23 August 2010) | 9 |
| 5. | Lesotho on behalf of the least developed countries (Submission received 26 August 2010) | 10 |
| 6. | Mali (Submission received 16 August 2010) | 16 |
| 7. | Mexico (Submission received 28 July 2010) | 20 |
| 8. | Panama (Submission received 20 August 2010) | 22 |
| 9. | South Africa (Submission received 16 August 2010) | 23 |
| 10. | United Nations Environment Programme (Submission received 3 September 2010) | 25 |
| 11. | United Nations International Strategy for Disaster Reduction (Submission received 16 August 2010) | 28 |
| 12. | Global Water Partnership (Submission received 16 August 2010) | 30 |

^{*} This submission is supported by Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Turkey.

Paper no. 1: Argentina

Argentina

Submission to the Subsidiary Body for Scientific and Technological Advice on the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change

August 2010

Regarding the invitation by SBSTA to Parties and relevant organization to submit to the secretariat, by 16 August 2010, views and information on the effectiveness of the Nairobi work programme in fulfilling its objectives, expected outcomes, scope of work and modalities as stated in decision 2/CP.11, Argentina would like to take the opportunity to express its views.

The Nairobi work programme has been highly successful in gathering a wide range of adaptation experts, practitioners at the regional and international level and Parties representatives, distributed in its 9 areas of work. These activities have led to the generation of relevant information regarding the impacts, vulnerability and adaptation to climate change, with the objective of assisting Parties, in particular developing countries.

Despite the major outcomes on adaptation achieved in the context of the programme, one main barrier in the fulfillment of its objective of assisting Parties has been the lack of proper outreach to sub-national and local practitioners and stakeholders that deal with adaptation implementation.

Taking into account that impacts are felt at the local level, and that vulnerabilities are location specific, varying between communities, it is of foremost importance that key actors are well aware of the information generated in the implementation of the programme that can be applied to enhance resilience to climate change.

Regardless of the efforts taken by the Secretariat to promote the dissemination of the outcomes and information arising from the implementation of the activities of the programme, still remains a gap between how the international community engages with the programme and the unawareness of its existence among national and sub-national stakeholders. There is the urgent need to improve this key aspect to enhance the value of the process undertaken.

To this end, we would like to recommend the strengthening of existing dissemination channels and communication mechanisms at the regional and national level to enhance the outreach of the programme's results and information, taking into consideration language barriers and means to overcome them.

Furthermore, the programme partner organizations could contribute to this purpose by developing means to link their activities with the needs identified at the local level.

In this sense, training and building capacity in existing local institutions should be prioritized taking into account that impacts and vulnerabilities are location specific, varying among communities. In our view, it is of foremost importance that key actors are well aware of the information generated in the implementation of the programme that can be applied to enhance resilience to climate change.

Paper no. 2: Belgium and the European Commission on behalf of the European Union and its member States

SUBMISSION BY BELGIUM AND THE EUROPEAN COMMISSION ON BEHALF OF THE EUROPEAN UNION AND ITS MEMBER STATES

This submission is supported by Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Turkey

Brussels, 20 July 2010

Subject: Nairobi Work Programme on impacts, vulnerability, and adaptation to climate change:

Submission on views and information on the effectiveness of the Nairobi work programme in fulfilling its objective, expected outcome, scope of work and modalities as stated in decision

2/CP.11

Introduction

The SBSTA invited Parties and relevant organizations to submit to the secretariat, by 16 August 2010, views and information on the effectiveness of the Nairobi work programme on impacts, vulnerability, and adaptation to climate change (NWP) in fulfilling its objective, expected outcome, scope of work and modalities as stated in decision 2/CP.11.

Belgium and the European Commission, on behalf of the EU and its Member States, welcome this opportunity to share its views on this subject.

General Comments

Fulfilling of the objective

The EU believes that the NWP has taken great steps forward towards achieving its objectives. The NWP has a unique design and has created a platform for sharing of information and building knowledge on impacts, vulnerability and adaptation to climate change between practitioners, experts, relevant international and regional institutions and policymakers. The programme is well designed, covering all countries and with a focus on adaptation to the impacts of climate change. As such, the NWP has been well received and is an important deliverable of the UNFCCC.

The objective of the NWP is to empower countries to make informed decisions on practical adaptation actions and measures to respond to climate change. The NWP has contributed to strengthening, sharing and making available the knowledge on key critical issues for adaptation along its two-phased programme. However, the EU believes this objective could have been better realised. It has proven difficult to fill knowledge gaps on the ground and to disseminate the information gathered in a user-friendly way, in particular in the least developed countries and the small island developing States.

Furthermore, knowledge gaps remain in all the nine work areas that may limit the capacity of the programme.

Outcome & scope of work

The outcomes of the programme have been comprehensive and relevant, comprising of, for example, reports, technical papers, recommendations, calls for action and databases.

The scope of work of the NWP and the nine areas of work has allowed parties and stakeholders to address a broad range of relevant topics. In addition, the EU notes the significant challenge and importance of updating and disseminating information on a continuous basis given the scope of work under the NWP, especially for those who are most vulnerable.

Modalities

A number of different modalities for implementation of the NWP could have been used according to 2/CP.11 and most have been put in practice, such as the organisation of workshops and the production of technical papers. However, the international workshops only reached a limited number of addressees and much more has to be done to disseminate the knowledge on a regional level and within the countries.

Writing compendiums and producing web-based resources have been important components of the NWP. However, key pending challenges include ensuring the usefulness and the accessibility of these products, as well as avoiding overlaps with other initiatives. Furthermore, the usefulness of targeted submissions could be questioned, considering that the number of countries responding and/or organisations has been very limited in some cases.

The UNFCCC secretariat's use of the roster of experts in preparing workshops and technical papers has also been useful. This has enabled a wide range of relevant expertise to participate under each of the themes covered by the NWP.

The meetings of the focal points have become an important opportunity for the network of participating institutions to meet and share views and experiences. The EU and its Member States have appreciated these very informative meetings.

The EU views the catalytic role of the NWP as successful. As of April 2010, 174 organisations have pledged to tackle gaps and needs identified by Parties and experts in Calls for action. In this regard the NWP is catalysing action on adaptation on the ground in an effective and participative way.

Further work

The EU is looking forward to taking part in the assessment of the NWP during the informal meeting in Canada in September this year. Since the start of the NWP there has been an improvement in the understanding of climate impacts and adaptation needs, but there is still much more to be done. Therefore, the EU anticipates a growing global demand for an even greater understanding and deeper assessment of the impacts of climate change. How this can be achieved needs to be discussed.

IDEAS Y PROPUESTAS SOBRE LA EVALUACIÓN DE LA EFICACIA DEL PROGRAMA DE TRABAJO DE NAIROBI (PTN) EN CUANTO AL CUMPLIMIENTO DE SU OBJETIVO, RESULTADOS PREVISTOS, ALCANCE DE LAS ACTIVIDADES Y MODALIDADES

El Estado Plurinacional de Bolivia presenta las siguientes ideas y propuestas en el marco de la evolución de la eficacia del programa de trabajo de Nairobi (PTN) en cuanto al cumplimiento de su objetivo, resultados previstos, alcance de las actividades y modalidades tales como fueron acogidos en la decisión 2/CP.11 y en el contexto de la Convención Marco. Se presentan las siguientes ideas con el fin de contribuir de una forma transparente y participativa para la evaluación del PTN a llevarse a cabo durante el 33º período de sesiones del Órgano Subsidiario de Asesoramiento Científico y Tecnológico (OSACT).

CONSIDERACIONES GENERALES

Se considera que el objetivo de este programa de trabajo debe ser evaluado en vista al objetivo establecido en la decisión 2/CP.11 en el contexto de ayudar a las Partes en la implementación de la Convención, en particular a los países en desarrollo, a mejorar su comprensión y evaluación de los impactos, la vulnerabilidad y la adaptación, y adoptar decisiones informadas sobre actividades y medidas prácticas de adaptación para hacer frente al cambio climático sobre una sólida base científica, técnica y socioeconómica, teniendo en cuenta la variabilidad del clima y el cambio climático presentes y futuros.

De esta forma, se considera que el PTN ha generado una cantidad importante de información y conocimiento pero no han existido los mecanismos para velar que la información y el conocimiento llegue a los países Parte en desarrollo y a las comunidades, especialmente las comunidades vulnerables. Si bien se ha mejorado la comprensión general de los impactos, el limitado apoyo para la implementación de actividades y medidas prácticas de adaptación hace difícil evaluar por si sola la efectividad del PTN en el contexto de ayudar a las Partes, en particular a los países en desarrollo, a implementar sus compromisos bajo la Convención, pero sobre todo a la reducción de las vulnerabilidades estructurales frente al cambio climático y desarrollar las capacidades de adaptación y/o resiliencia al cambio climático.

CON RESPECTO A LOS RESULTADOS PREVISTOS

Es necesario aumentar la capacidad en los planos internacional, regional, nacional, sectorial y local para seguir identificando y comprendiendo los impactos, la vulnerabilidad y las respuestas a la adaptación, y para seleccionar y aplicar actividades de adaptación prácticas y afines a las necesidades de los pueblos.

Los resultados del PTN para mejorar la información y el asesoramiento a la Conferencia de las Partes y su órgano subsidiario de implementación sobre la vulnerabilidad y la adaptación y mejorar el desarrollo, la difusión y la utilización de los conocimientos derivados de actividades prácticas de adaptación han sido limitados. No es claro como se esta contribuyendo a la implementación bajo los compromisos bajo el artículo 4 de la Convención. Por tanto, se requiere un mecanismo para registrar la contribución de las actividades apoyadas y como estas contribuyen a la implementación de la Convención como parte de la justa compensación.

La cooperación entre las Partes y los actores de sociedad civil ha sido una contribución del PTN, incluyendo el mejoramiento a nivel nacional en la gestión de riesgos del cambio climático y la integración de las

actividades de adaptación al cambio climático con el desarrollo sostenible, pero con limitado impacto a nivel local atribuible al PTN.

CON RESPECTO A LAS MODALIDADES Y ESTRUCTURA

En nuestra perspectiva, las modalidades principales del PTN han consistido de talleres, reuniones y el desarrollo de herramientas para la difusión de los conocimientos, la experiencia y los aportes de expertos, profesionales y las organizaciones competentes. El programa ha sido limitado en cuanto a la conexión y apoyo a puntos focales y la coordinación de la aplicación del conocimiento.

Los informes y documentos técnicos, evaluaciones preparadas por la secretaría han sido útiles, pero falta aun desarrollar esta información de una forma que facilite la toma de decisiones, incluyendo los costos de los efectos adversos del cambio climático y los costos de adaptación.

La documentación presenta un alto sesgo y es limitada al idioma inglés, por la propia estructura centralista, adicionalmente, no se ha logrado alcanzar una estrategia comunicacional más amplia, más frecuente y de alcance a todas las naciones. Por lo que se plantea la necesidad de establecer redes regionales que retroalimenten esta información.

La importancia de la temática exige un sistema más participativo que incluya a todos los puntos focales de los Estados Parte de la CMNUCC, más allá de adhesión de instituciones interesadas en participar voluntariamente.

Además, las modalidades actuales limitan la participación de actores y no se ha usado efectivamente la aplicación del conocimiento a nivel regional, ni se ha integrado el conocimiento de diferentes actores, incluyendo el conocimiento tradicional y ancestral de los pueblos indígenas.

CON RESPECTO A LAS AREAS TEMÁTICAS Y ALCANCES

En el área de información socioeconómica, no se han abordado los impactos del cambio climático correspondientes a los millones de personas que están forzados a dejar sus hogares y migrar hacia nuevos pueblos, ciudades y países. Además, es aun necesario mejorar la disponibilidad de información sobre el impacto del cambio climático a comunidades vulnerables, particularmente sobre los impactos a sus derechos humanos, incluyendo el derecho al agua.

En lo que respecta a costos de adaptación y datos y observaciones, la implementación del PTN aun no permite tener acceso a datos para tomar decisiones informadas sobre actividades y medidas prácticas de adaptación en países en desarrollo que permitan realizar una valoración adecuada y más precisa de: (i) los impactos del cambio climático (ii) sus costos de los impactos en países en desarrollo y (iii) las necesidades financiera que de estos impactos se deriven;

En el área de trabajo de "Datos y Observaciones," no existen aun plataformas inclusivas, participativas y orientadas a la toma de decisiones que permitan a los ciudadanos contribuir con información que pueda ser utilizada para la toma de decisiones, tales como información que permita consultar a los ciudadanos acerca de las prioridades y la información para la toma de decisiones.

En el área de trabajo de "Tecnologías para la adaptación" con el mandato de la COP 2/11 es imperante la eliminación de barreras que impiden el real y efectivo desarrollo y transferencia de tecnología: aún no se tiene acceso a un inventario global de tecnologías medioambientales existentes, de fuentes abiertas, libres de

costo y no restringidas por derechos de propiedad intelectual que permitan las implementación de medidas de adaptación.

COMENTARIOS GENERALES

El PTN debe ser visto en el contexto de la totalidad de la Convención, y cómo contribuye al logro de sus objetivos. Una base sólida, científica, técnica y socioeconómica para considerar la variabilidad del clima y el cambio climático presentes y futuros debe incluir sintetizar la información y cuantificar impactos para la toma de decisiones de la COP y el OSI, siendo así compatible con el mandato del Órgano Subsidiario de Asesoramiento Científico y Tecnológico y el Articulo 4.1, 4.4, y 4.8 de la Convención.

Considerando que los países Anexo I de la Convención tienen la obligación moral y legal de compensar la totalidad de la deuda de adaptación, a través del resarcimiento de los impactos causados por el cambio climático, la implementación de medidas de adaptación para reducir los impactos en el futuro y cubrir el costo causado por las pérdidas en las oportunidades de desarrollo de los países no Anexo I, es necesario considerar que la labor del trabajo del OSACT en el contexto de cumplir el objetivo máximo de la Convención debe considerar lo siguiente:

- Es necesario considerar dentro de las tecnologías para la adaptación las tecnológicas y técnicas ancestrales, locales, e indígenas para la adaptación para permitir recuperar, aprender, y reaprender los principios y enfoques del legado ancestral de sus pueblos originarios para detener la destrucción del planeta, así como los conocimientos y prácticas ancestrales y recuperación de la espiritualidad en la reinserción del vivir bien.
- Es preciso abordar temas de prevención y fortalecimiento de capacidades de respuesta para impulsar el rol fundamental de la mujer en la adaptación al cambio climático.
- En el área de trabajo de "Investigación", es necesario fortalecer la contribución de las redes regionales y nacionales en estudios referentes a la cosecha de aguas, sea de manera superficial o subterránea, siendo evidente que la reducción en la disponibilidad de agua potable, tiene implicancias en la salud, la seguridad alimentaria, agricultura, entre otros.
- En el ámbito de planificación y las prácticas de adaptación, en coherencia a la conclusiones del 12º periodo de sesiones del Comité de Políticas de Desarrollo de las Naciones Unidas, es preciso desarrollar mecanismos e indicadores para el flujo financiero de los costos adicionales y totales de la adaptación al cambio climático en los procesos de formulación e implementación de planes de desarrollo Diferenciado/disgregado/Separado de las Ayudas oficiales al Desarrollo.
- En tanto a los datos y observaciones, se precisa incrementar la provisión de recursos para el mantenimiento sostenido a largo plazo de las redes de observación sistemática clave y priorizada para cambio climático y bajo enfoques regionales la instalación de nuevas estaciones prioritarias y representativas para el monitoreo de cambio climático.
- En el área de modelado del clima, escenarios y reducción de escala se debe asegurar un acceso y uso libre de la información de los datos resultantes sobre el cambio climático previsto.
- En cuanto a información socioeconómica, en necesario mejorar el conocimiento de los aspectos socioeconómicos del cambio climático en grupos vulnerables (comunidades indígenas, comunidades locales y/o originarios, entre otros) de los países en desarrollo y fortalecer la disponibilidad de información para realizar estimaciones más precisas.

Paper no. 4: Egypt

- The Egyptian government is grateful for the efforts of the UNFCCC Secretariat, parties and other organizations in supporting the delivery of activities under the Nairobi Work Program during its first and second phases, and considers that the program has made valuable contributions to parties. understanding of impacts of climate change and their vulnerabilities.
- Egypt notes the growing adaptation support efforts carried out by an increasing numbers of stakeholders, mainly independent organizations and institutions. We acknowledge that such efforts have generated a wealth of knowledge and can play a very positive role in supporting adaptation actions at the local, sub regional levels.
- Egypt believes that in the new phase of the NWP, the Secretariat should continue and enhance its current operational models, including through the following:
 - o Enhance and encourage the engagement of a wide range of stakeholders, while creating synergies between the different activities performed by organizations, stakeholders and parties to avoid overlaps.
 - o Enhance the coordination of the different activities performed by stakeholders and parties to ensure synergy and complementarity of efforts.
 - o Facilitate the compilation and dissemination of knowledge generated through the work of the NWP and all other stakeholders and make it available to parties in a timely manner. This can be enhanced by using regional and national centers to disseminate the knowledge generated by the NWP in a targeted way and in a manner that is relevant to the specific local contexts to which they apply.
 - Move NWP action closer to the national and sub-national level, by mobilizing a process to receive requests from countries for technical support, which can be channeled to NWP partners for action.
 - o Identify and implement activities to position the NWP as the knowledge hub for the adaptation framework and the adaptation communities envisaged in the BAP process.
- Egypt also believes that there is a need to enhance the work on coordination of the adaptation at the regional level, especially regarding the adaptation measures with cross border effect. In this regard, the NWP could play a catalytic role in supporting regional collaboration including cross-sectoral adaptation, and identify methodologies and tools for regional-level impact, vulnerability and adaptation assessments.
- The NWP could support the adaptation fund by conducting workshops focused on enhancing the technical capacities of the national implementing entities in developing countries to assess their needs in a way that increases and facilitates direct access to the adaptation fund resources.

SUBMISSION BY LESOTHO

ON BEHALF OF THE LEAST DEVELOPED COUNTRIES

I. SUBJECT

Views and information on the effectiveness of the Nairobi Work Programme in fulfilling its objectives, expected outcome, scope of work and modalities as stated in decision 2/CP.11.

II. INTRODUCTION

At its thirty-second session, SBSTA invited Parties and relevant organizations to submit to the Secretariat, by 16 August 2010, views and information on the effectiveness of the Nairobi work programme in fulfilling its objectives, outcomes, scope of work and modalities as stated in decision 2/CP.11. Submissions are to be compiled by the secretariat as a miscellaneous document, for consideration at the informal meeting to be organized before the thirty-third session of the SBSTA.

The Least Developed Countries (LDCs) take this opportunity to respond to this request and Lesotho is presenting this submission on behalf of the Group.

III. THE NAIROBI WORK PROGRAMME

The Nairobi work programme is a 5 year programme established in order 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 to climate change; and
- 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 climate variability.

IV. IMPLEMENTATION OF THE PROGRAMME

The scope of work under the Nairobi Work Programme is categorized into two thematic areas, each with five action oriented sub-themes.

1.0 Impacts and vulnerability

- Promoting the 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;
- ii) Improving the 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;
- iii) Promoting the development of, access to, and use of information and data on projected climate change;
- iv) Promoting understanding of impacts of, and vulnerability to, climate change, current and future climate variability and extreme events, and the implications for sustainable development; and
- v) Promoting the availability of information on the socio-economic aspects of climate change and improving the integration of socio-economic information into impact and vulnerability assessments.

2.0 Adaptation planning measures and action

- Promoting the development and dissemination of methods and tools for assessment and improvement of adaptation planning, measures and actions, and integration with sustainable development;
- Collecting, analysing and disseminating information on past and current practical adaptation actions and measures, including adaptation projects, short- and long-term adaptation strategies, and local and indigenous knowledge;
- iii) Promoting research on adaptation options and the development and diffusion of technologies, know-how and practices for adaptation, particularly addressing identified adaptation priorities and building on lessons learned from current adaptation projects and strategies;
- iv) Facilitating communication and cooperation among and between Parties and relevant organizations, business, civil society and decision makers, and other stakeholders; and
- v) Promoting understanding and the development and dissemination of measures, methodologies and tools including for economic diversification aimed at increasing

economic resilience and reducing reliance on vulnerable economic sectors, especially for relevant categories of countries listed in Article 4, paragraph 8, of the Convention.

Areas of work

The two sub-themes are addressed through 9 areas of work, aimed at realizing the implementation of the Nairobi Work Programme and its objectives. The areas were introduced during the first phase, and considerable progress was made thereon. They will be further implemented and enhanced during the second phase.

- 1) Methods and tools
- 2) Data and observations
- 3) Climate modelling, scenarios and downscaling
- 4) Climate related risks and extreme events
- 5) Socio-economic information
- 6) Adaptation planning and practices
- 7) Research
- 8) Technologies for adaptation
- 9) Economic diversification

V. STAKEHOLDERS OF THE NAIROBI WORK PROGRAMME

- Parties The Parties mandated the Programme in the context of the SBSTA, and are the most significant actors with regard to directing the implementation of its activities and making progress towards its objectives.
- Organizations, experts, the private sector, and other stakeholders These are important partners in
 the programme, as the realization of the programme's goals depends on a multi-stakeholder
 approach. Further engagement of organizations is one of the most important activities of the second
 phase of the Nairobi Work Programme.
- The global community The global community is affected both directly and indirectly by the negative impacts of climate change, with the most vulnerable communities being disproportionately affected. These are mainly people living in developing countries, particularly the LDCs, SIDS and African countries, especially those affected by drought, desertification and floods.

• The UNFCCC secretariat - The secretariat supports the implementation of the programme, under the guidance of the SBSTA and at the instruction of the COP, and catalyzes action on the work areas.

VI. IMPLEMENTING THE NAIROBI WORK PROGRAMME

1.0 Progress made during the first phase

At an informal meeting of representatives from Parties on the outcomes of the activities completed under the Nairobi work programme, held in April 2008 in Bangkok (*see FCCC/SBSTA/2008/5*), Parties and organizations welcomed the approach taken during the first phase towards implementing the programme.

During the first phase, much engagement with Parties and organizations took place, with over 100 organizations nominating focal points. In addition to this, 18 Organizations provided 55 Action Pledges, and 7 Calls for Action were produced. Action pledges commit the organizations to carry out activities in support of adaptation, and to share the experience and knowledge gained from these pledged activities at SBSTA sessions during the second phase.

Action across the 9 work areas was catalyzed at all levels during the first phase.

2.0 Activities during the second phase

At SBSTA 28, Parties agreed on a clear set of activities for the second phase of the Nairobi Work Programme, with a particular emphasis on activities dealing with economic diversification and adaptation planning and practices, as well as an emphasis on education, training and public awareness, and the promotion of regional centres.

The secretariat has been mandated by the SBSTA, with input from relevant stakeholders, to undertake numerous activities, including a number of workshops, forums and meetings.

The implementation of the second phase is in good progress and will be completed in Cancun at SBSTA 33 in December 2010.

VII. THE GLOBAL FRAMEWORK FOR CLIMATE SERVICES (GFCS)

The First World Climate Conference held in 1979 resulted in raising awareness about climate change as a serious problem in the world.

The Second World Climate Conference held in 1989 resulted in the establishment of the Intergovernmental Panel on Climate Change (IPCC).

The Third World Climate Conference held in 2009 agreed to a Global Framework for Climate Services (GFCS).

In order to address the need for improved climate information and to provide an effective interface between scientists, service providers and decision-makers, the World Meteorological Organization (WMO) and its partner organizations for the World Climate Conference-3 propose the development of a new Global Framework for Climate Services (also referred to as the 'Framework') with the goal to: "Enable better management of the risks of climate variability and change and adaptation to climate change at all levels, through development and incorporation of science-based climate information and prediction into planning, policy and practice."

1.0 What is the Global Framework for Climate Services?

The Global Framework for Climate Services is proposed as a long-term cooperative arrangement through which the international community and relevant stakeholders will work together to achieve its stated goal.

The Framework will have four major components: Observation and Monitoring;

Research, and Modelling and Prediction; a Climate Services Information System; and a User Interface Programme. The first two components are well established but are in need of strengthening. The latter two components together constitute a 'World Climate Service System'.

2.0 What will be achieved through the Global Framework for Climate Services?

The Framework, when fully implemented, will support disaster risk management and climate risk management practices, and will contribute to achieving the objectives of various Multilateral Environmental Agreements (MEAs) such as the United Nations Framework Convention on Climate Change (UNFCCC), and of internationally agreed upon goals including the Millennium Development Goals.

Effective implementation of the four components of the Framework would lead to the following:

- Strengthened local, national, regional and global observational networks and information management systems for climate and climate-related variables;
- Enhanced climate modelling and prediction capabilities through strengthened international climate research focused on seasonal to decadal timescales;
- Improved national climate service provision arrangements based on enhanced observation networks and prediction models, and greatly increased user interaction;
- More effective use of global, regional and national climate information and prediction services by all stakeholders in climate-sensitive sectors in all countries (leading to improved planning and investment in sectors vital to national economies and livelihoods); and thereby
- Widespread social, economic and environmental benefits through more effective climate risk management and increased capacities for adaptation to climate variability and change.

3.0 Who will participate in the Global Framework for Climate Services?

The Framework will build on and strengthen existing local, national, regional and global networks of climate observation, monitoring, research, modelling and service programmes, including those of WMO. It aims to achieve its goal through the enhanced role and involvement of national meteorological services and regional/global centres, as well as greater participation of other stakeholders and centres of excellence across relevant socio-economic sectors, particularly those in developing countries, Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

To meet its objectives, the Framework would require extensive collaboration among national and local governments, agencies, non-governmental organizations, civil society, the private sector, as well as universities and research institutions around the world and outreach to communities in all socio-economic sectors benefiting from the application of climate data and information in planning, policy and practice. This outreach will be facilitated through participation of relevant organizations and institutions in coordination with governments. Implementing and operating the Framework will therefore require continuation and enhancement of the broad collaboration and partnerships, centred around these entities, which underpin and improve on its technical strengths. As such the Framework will be supported by the entire United Nations System and other organizations.

In this regard, the GFCS is in perfect harmony with the mandate of the Nairobi Work Programme regarding vulnerability assessments and adaptation planning, measures and actions and the LDC Group is proposing that the SBSTA supports during the next phase of the Nairobi Work Programme, the further development and operational implementation of a Global Framework for Climate Services.

MALI

August 16, 2010

Response to SBSTA requests for submissions on:

The effectiveness of the Nairobi Work Programme in fulfilling its objectives, expected outcome, scope of work and modalities as stated in decision 2/CP.11.

THE NAIROBI WORK PROGRAMME

The Nairobi work programme is a 5 year programme established in order 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 to climate change; and
- 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

IMPLEMENTATION OF THE PROGRAMME

The scope of work under the Nairobi work programme is categorized into 2 thematic areas, each with five action oriented sub-themes.

1. Impacts and vulnerability

I Promoting the 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; II Improving the 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;

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

IV Promoting understanding of impacts of, and vulnerability to, climate change, current and future climate variability and extreme events, and the implications for sustainable development; and

V Promoting the availability of information on the socio-economic aspects of climate change and improving the integration of socio-economic information into impact and vulnerability assessments.

2. Adaptation planning measures and action

I Promoting the development and dissemination of methods and tools for assessment and improvement of adaptation planning, measures and actions, and integration with sustainable development;

II Collecting, analysing and disseminating information on past and current practical adaptation actions and measures, including adaptation projects, short- and long-term adaptation strategies, and local and indigenous knowledge;

III Promoting research on adaptation options and the development and diffusion of technologies, know-how and practices for adaptation, particularly addressing identified adaptation priorities and building on lessons learned from current adaptation projects and strategies;

IV Facilitating communication and cooperation among and between Parties and relevant organizations, business, civil society and decision makers, and other stakeholders; and

V Promoting understanding and the development and dissemination of measures, methodologies and tools including for economic diversification aimed at increasing economic resilience and reducing reliance on vulnerable economic sectors, especially for relevant categories of countries listed in Article 4, paragraph 8, of the Convention.

Areas of work

The 2 sub-themes are addressed through 9 areas of work, aimed at realizing the implementation of the Nairobi work programme and its objectives. The areas were introduced during the first phase, and considerable progress was made thereon. They will be further implemented and enhanced during the second phase.

- 1. Methods and tools
- 2. Data and observations
- 3. Climate modelling, scenarios and downscaling
- 4. Climate related risks and extreme events
- 5. Socio-economic information
- 6. Adaptation planning and practices
- 7. Research
- 8. Technologies for adaptation
- 9. Economic diversification

STAKEHOLDERS OF THE NAIROBI WORK PROGRAMME

- Parties. The Parties mandated the programme in the context of the SBSTA, and are the most significant actors with regard to directing the implementation of its activities and making progress towards its objectives.
- Organizations, experts, the private sector, and other stakeholders. These are important partners in the programme, as the realization of the programme's goals depends on a multi-stakeholder approach. Further engagement of organizations is one of the most important activities of the second phase of the Nairobi work programme.
- The global community. The global community is affected both directly and indirectly by the negative impacts of climate change, with the most vulnerable communities being disproportionately affected. These are mainly people living in developing countries, particularly the LDCs, SIDS and African countries, especially those affected by drought, desertification and floods.
- The UNFCCC secretariat. The secretariat supports the implementation of the programme, under the guidance of the SBSTA and at the instruction of the COP, and catalyzes action on the work areas.

IMPLEMENTING THE NAIROBI WORK PROGRAMME

PROGRESS MADE DURING THE FIRST PHASE

At an informal meeting of representatives from Parties on the outcomes of the activities completed under the Nairobi work programme, held in April 2008 in Bangkok (see FCCC/SBSTA/2008/5), Parties and organizations welcomed the approach taken during the first phase towards implementing the programme.

During the first phase, much engagement with Parties and organizations took place, with over 100 organizations nominating focal points. In addition to this, 18 Organizations provided 55 Action Pledges, and 7 Calls for Action were produced. Action pledges commit the organizations to carry out activities in support of adaptation, and to share the experience and knowledge gained from these pledged activities at SBSTA sessions during the second phase. Action across the 9 work areas was catalyzed at all levels during the first Phase

ACTIVITIES DURING THE SECOND PHASE

At SBSTA 28, Parties agreed on a clear set of activities for the second phase of the Nairobi work programme, with a particular emphasis on activities dealing with economic diversification and adaptation planning and practices, as well as an emphasis on education, training and public awareness, and the promotion of regional centres.

The secretariat has been mandated by the SBSTA, with input from relevant stakeholders, to undertake numerous activities, including a number of workshops, forums and meetings.

The implementation of the second phase is in good progress and will be completed in Cancun at SBSTA 33 in December 2010.

THE GLOBAL FRAMEWORK FOR CLIMATE SERVICES (GFCS)

The First World Climate Conference held in 1979 resulted in raising awareness about climate change as a serious problem in the world.

The Second World Climate Conference held in 1989 resulted in the establishment of the Intergovernmental Panel on Climate Change(IPCC).

The Third World Climate Conference held in 2009 agreed to a Global Framework for Climate Services (GFCS).

In order to address the need for improved climate information and to provide an effective interface between scientists, service providers and decision-makers, the World Meteorological Organization (WMO) and its partner organizations for the World Climate Conference-3 propose the development of a new Global Framework for Climate Services (also referred to as the 'Framework') with the goal to:

"Enable better management of the risks of climate variability and change and adaptation to climate change at all levels, through development and incorporation of science-based climate information and prediction into planning, policy and practice."

What is the Global Framework for Climate Services?

The Global Framework for Climate Services is proposed as a long-term cooperative arrangement through which the international community and relevant stakeholders will work together to achieve its stated goal.

The Framework will have four major components: Observation and Monitoring; Research, and Modelling and Prediction; a Climate Services Information System; and a User Interface Programme (Fig. 1). The first two components are well established but are in need of strengthening. The latter two components together constitute a 'World Climate Service System'.

What will be achieved through the Global Framework for Climate Services?

The Framework, when fully implemented, will support disaster risk management and climate risk management practices, and will contribute to achieving the objectives of various Multilateral Environmental Agreements (MEAs) such as the United Nations Framework Convention on Climate Change (UNFCCC), and of internationally agreed upon goals including the Millennium Development Goals.

| Effective implementation of the four components of the Framework would lead to the following: |
|--------------------------------------------------------------------------------------------------------------------------|
| □ Strengthened local, national, regional and global observational networks and information management systems for |
| climate and climate-related variables ; |
| □ Enhanced climate modeling and prediction capabilities through strengthened international climate research focused on |
| seasonal to decadal timescales; |
| ☐ Improved national climate service provision arrangements based on enhanced observation networks and prediction |
| models, and greatly increased user interaction; |
| □ More effective use of global, regional and national climate information and prediction services by all stakeholders in |
| climate-sensitive sectors in all countries (leading to improved planning and investment in sectors vital to national |
| economies and livelihoods); and thereby |
| |
| ☐ Widespread social, economic and environmental benefits through more effective climate risk management and |
| increased capacities for adaptation to climate variability and change. |

Who will participate in the Global Framework for Climate Services?

The Framework will build on and strengthen existing local, national, regional and global networks of climate observation, monitoring, research, modelling and service programmes, including those of WMO. It aims to achieve its goal through the enhanced role and involvement of national meteorological services and regional/global centers, as well as greater participation of other stakeholders and centers of excellence across relevant socio-economic sectors, particularly those in developing countries, Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

To meet its objectives, the Framework would require extensive collaboration among national and local governments, agencies, non-governmental organizations, civil society, the private sector, as well as universities and research institutions around the world and outreach to communities in all socio-economic sectors benefiting from the application of climate data and information in planning, policy and practice. This outreach will be facilitated through participation of relevant organizations and institutions in coordination with governments. Implementing and operating the Framework will therefore require continuation and enhancement of the broad collaboration and partnerships, centered around these entities, which underpin and improve on its technical strengths. As such the Framework will be supported by the entire United Nations System and other organizations.

In this regard, the GFCS is in perfect harmony with the mandate of the Nairobi Work Programme regarding vulnerability assessments and adaptation planning, measures and actions and Mali is proposing that the SBSTA supports during the next phase of the Nairobi Work Programme, the further development and operational implementation of a Global Framework for Climate Services."

.

Paper no. 7: Mexico

Submission by Mexico

Views on the Effectiveness of the Nairobi Program of Work on Impacts, Vulnerability and Adaptation to Climate Change

20 July 2010

Mexico thanks the Secretariat of the UNFCCC and welcomes the opportunity to submit views and information on the effectiveness of the Program in fulfilling its objective, expected outcome, scope of work and modalities as stated in decision 2/CP11. We welcome as well the Progress report on the implementation of activities under the NWP.

We are extremely satisfied to see the tremendous amount of activities which have taken place under the umbrella of the NWP, and how they have played a fundamental role in creating or compiling a knowledge base for adaptation projects, policies and measures at all levels and across sectors. We also acknowledge the engagement in these activities of different sorts of organizations, experts, communities, the private sector, government officials and other stakeholders. We particularly appreciate the role of the Secretariat in helping us to achieve, and even exceed the objectives originally set out in the Program, and the contribution of the many Parties that have supported activities under the NWP.

In our view, we could nevertheless improve the effectiveness of the NWP, especially by bringing its outcomes closer to end-users, and particularly to decision makers. We see, at least in our country, that the inclusion of climate concerns in the planning processes across all relevant sectors is an area of opportunity. This is more the case, particularly, as we move from the national to the state, local and community levels.

For us, the support of the NWP would be very useful in the future for defining, assessing and prioritizing adaptation needs identified in planning documents and by practitioners who have worked a lot on vulnerability assessments and adaptation studies, and for helping us move more effectively into implementation.

Just to mention some areas that may require further work, we see that although the use of climate scenarios linked to vulnerability assessments has been a very useful tool to raise awareness among decision makers and their constituencies, in many instances we would need to refine these tools and expand their application in order to provide more convincing reasons to mobilize relevant stakeholders into action. In our own experience, pilot projects could be very useful not only to obtain and disseminate information regarding climate impacts and possible adaptive practices, but also to create experience, being both fundamental to scale up project activities.

Another issue in which we still face a lot of limitations, briefly mentioned above, is in the prioritization of adaptation options. We have made some attempts to develop some sort of cost-curve analysis, similar to the one commonly done for mitigation, but still lack objective metrics to assess vulnerability or resilience, especially when trying to compare, for instance, adaptation projects with implications for human health against those aimed at preserving ecosystems or the ones that attempt to protect assets, with some alternatives having social or economic co-benefits. This analysis is very complex for policy practitioners, and yet necessary when decisions have to be made and resources are scarce. To this complication, we add the difficulty of analyzing implementation barriers, an area in which we also face some analytical complexities.

These are only a couple of examples, among many others, of areas in which we see the need for much more collaborative work, and the utility of the NWP in the future.

In summary, thinking of ways in which the NWP and its partners could better assist adaptation work, at the international level, it could be by assisting Parties in developing institutional arrangements to make better use of the NWP and better interaction with its partner organizations. And at the national and sub-national level, by helping build capacity, and by disseminating the findings of specific components of the NWP that may be of relevance on the ground, tailoring those to particular cases, and by helping the identification of needs and ways to meet those needs.

Mexico reiterates its support to the extension of the NWP, with a greater focus on implementation of adaptation, and especially on how to scale up adaptation projects, policies, and measures across sectors and levels, from the regional, to the national, sub-national to the local and community-level.

Paper no. 8: Panama

PANAMA

Programa de Trabajo de Nairobi Sobre los Efectos, la Vulnerabilidad y la Adaptación al Cambio Climático.

Mandato:

El Órgano Subsidiario de Asesoramiento Científico y Tecnológico (OSACT) en su treinta y dos periodo de sesiones "invita a los partes y las organizaciones pertinentes a que presentaran a la secretaría, a más tardar el 16 de agosto de 2010, información y sus opiniones sobre la eficacia del programa de trabajo de Nairobi en cuanto al cumplimiento de su objetivo, resultados previstos, alcance de las actividades y modalidades, según lo indicado en la decisión 2/CP.11. El OSACT pidió a la secretaría que recopilara esas comunicaciones en un documento de la serie MISC que sirviera de base de los debates en la reunión oficiosa mencionada en el párrafo 7".

A través de esta submision, Panamá, desea aportar sus ideas y propuestas ante el OSACT en referencia a los resultados previstos, alcance de las actividades y modalidades del programa de trabajo de Nairobi (PTN).

El Programa de Trabajo de Nairobi representa una oportunidad para que todas las Partes, en particular a los países en desarrollo, mejoren su comprensión y evaluación de los impactos, la vulnerabilidad y la adaptación, y adoptar decisiones informadas sobre actividades y medidas prácticas de adaptación para hacer frente al cambio climático sobre una sólida base científica, técnica y socioeconómica, teniendo en cuenta la variabilidad del clima y el cambio climático presentes y futuros.

En los últimos años Panamá se ha visto impactada por eventos hidrometeorológicos extremos que han dejado una secuela de pérdidas económicas en infraestructuras y la agricultura, además de incrementar el número de poblaciones damnificadas, afectadas y hasta muertos, aunado a esto la influencia que el factor humano ejerce sobre los cambios de las dinámicas hidrometeorológicas. Lo que ha llevado al país a trabajar de una manera imperante en el tema de adaptación ante un clima cambiante.

Por lo expresado en el párrafo anterior consideramos que los resultados previstos en el Programa de trabajo quinquenal del ÓSACT sobre los impactos del cambio climático y la vulnerabilidad y adaptación a éste, que se encuentran en la decisión 2/CP.11 pueden ser alcanzados de una manera más efectiva si se logra llevar a nivel de las comunidades locales toda la información generada a partir de los (i) Call for Actions, (ii) Action Pledges, (iii) Resultados de los Talleres, (iv) Compendio de Métodos y Herramientas (v) Plataformas y redes de conocimiento en adaptación y (vi) los socios y publicaciones.

El alcance de las actividades en cuanto a impacto y vulnerabilidad Panamá, ya tiene claramente identificado sus sectores vulnerables prioritarios (recursos hídricos, zonas costeras y marinas, agricultura, salud y biodiversidad) y se ha venido trabajando en proyectos dirigidos comprender de una mejor manera sus vulnerabilidades en conjunto con las instituciones regentes de la temática. Los principales impactos identificados en cada uno de estos sectores son eventos extremos de lluvias, sequia y deslizamientos.

De acuerdo a las modalidades identificadas para implementar el PTN, consideramos que se hace necesario trabajar en la capacidad de los países para instaurar una arquitectura interna que permita desarrollar estas actividades en las comunidades locales, la divulgación efectiva de los resultados del programa además que se permita establecer una organización permanente que trabaje en materia de adaptación desde la perspectiva de generación de políticas, planes, estrategias y medidas de adaptación que permitan preparar al país para hacer frente a los impactos del cambio climático, reducir su vulnerabilidad y trabajar sobre su adaptación.

Paper no. 9: South Africa

South African submission on key considerations relating to assessing the effectiveness of the Nairobi Work Programme

16 August 2010

Background

South Africa's submission on the above issue relates to its interest in the approach to and scope of current assessments of the effectiveness of the Nairobi Work Programme (NWP). Further work relating to the scientific, technical and socioeconomic aspects of adaptation is currently being considered as the NWP is scheduled to be terminated by the end of 2010, pending the results of an informal workshop on the effectiveness of the program, and a report on its effectiveness in terms of the objectives, scope, expected outcomes and modalities of the program, is due to be tabled at COP 16 in Cancun.

There appear to be two main issues to be considered at COP 16 based on these assessments: 1) Should the NWP be extended into a further phase, or a similar program under the SBSTA be initiated? 2) If an extended or a new program is initiated, how should it advance from the lessons learned and knowledge gained through the NWP? Our view is that the current assessments underway or planned need to provide the information that will enable these two questions, at least, to be addressed.

General views on the effectiveness of the NWP

Despite the accumulation of a substantive body of information, we are concerned that the proposed primary focus of the NWP, expressed in para. 3 of the Annex to decision 2/CP.11 "the programme of work comprises two thematic areas, each with several action-oriented sub-themes" has not reached full fruition in terms of engaging with and learning from actions on 'the ground'. The outreach efforts by the Secretariat have indeed attempted to boost this aspect through the pledging process by organizations and bodies engaged in adaptation action, but we feel that this aspect could be greatly enhanced.

We believe that the negotiating forum represented by the SBSTA NWP agenda item has provided a useful space for discussion and elaboration even of some vexing issues, such as modalities for addressing the socio-economic impacts of climate change. How might extending or renewing the program allow developing countries with particular needs to pursue these?

Specific issues that require consideration

Based on our understanding of how the objectives, scope, expected outcomes and modalities of the program have been addressed during the course of the NWP, we believe that that while much has been learned on many broad aspects of adaptation, there is a lack of concrete information available particularly on a sectoral basis (e.g. adaptation approaches in agriculture and water sectors). The only "sector" based work has been in the area of disaster risk management and reduction. Sectoral issues were not addressed in the initial design of the program, due partly to concerns about prioritising how these might be scheduled – is there a way of addressing this concern and advancing specific work that has a high probability of achieving concrete advances in adaptation actions on the ground?

We feel that the NWP has generated a degree of momentum in the adaptation practice arena, and this could usefully be enhanced if the program continues, to the great benefit of developing countries if these efforts could address their core needs in a more interactive manner – i.e., if there were a more effective interactive flow of information between Parties, experts and users (those impacted) on the core issues identified. The current arrangements relating to the roster of experts does not address this issue, and the roster remains a potential asset that is under-utilized. Likewise, the adaptation forums arranged during SBSTA sessions currently provide a formulaic discussion space in which pledges are elaborated, but which provide little chance for interactive discussion and feedback on the actual progress in achieving

pledges (e.g. capacity to effect implementation at various levels) , nor discussion between participating bodies relating to the integration and mutual enhancement of these efforts.

Finally, there has not been implementation of the modality of a group of experts. This shortcoming has potentially limited our understanding of how such a group could approach the wide-ranging and multi-disciplinary area of adaptation to climate change, and we feel that this has been a lost opportunity.

This has particularly limited engagement with less well-known areas of adaptation relating to indigenous and local knowledge, which we see as a rich and complex area of knowledge that is not easily accessible through standard scientific knowledge capture processes.

Paper no. 10: United Nations Environment Programme

UNEP SUBMISSION TO UNFCCC SECRETARIAT:

VIEWS AND INFORMATION ON THE EFFECTIVENESS OF THE NAIROBI WORK PROGRAMME (NWP) IN FULFILLING ITS OBJECTIVE, EXPECTED OUTCOME, SCOPE OF WORK AND MODALITIES AS STATED IN DECISION 2/CP.11

UNEP contributes to the work of the UNFCCC and the specific work programmes established under the subsidiary bodies, such as The Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change (NWP). It is in this context that UNEP is making this submission that is in response to the call by the 32nd session of SBSTA to Parties and relevant organizations to submit to the secretariat views and information on the effectiveness of the Nairobi work programme in filling its objective, expected outcome, scope of work and modalities as stated in decision 2/CP.11.

In summary, UNEP is of the view that NWP has been successful in fulfilling its objective, having assisted Parties in improving their understanding and assessment of impacts, vulnerability and adaptation, and in making informed decisions on practical adaptation actions and measures to respond to climate change. Much progress has been made towards achievement the expected outcomes of the NWP, with particular success in the areas of enhancing the development, dissemination and use of knowledge, and enhancing cooperation among actors.

The scope of work has covered the action-oriented sub-themes set in decision 2/CP.11 through the nine work areas of the NWP, through technical workshops, expert meetings, synthesis reports, compendia, and other publications. The NWP has succeeded in engaging a wide range of stakeholders, through various workshops, forums, etc organized in the context of the NWP providing actors and stakeholders excellent opportunities for exchanging information and facilitating cooperation. Further enhancement of the implementation of the NWP could include the facilitation of more coordination among actors, thus encouraging reducing overlaps and improved use of resources. The NWP could also strengthen the provision of targeted information and advice to international and regional policy processes, and further engage in bridging between science, policy and action.

The implementation of the NWP has engaged the various modalities suggested for 2/CP.11. In particular, the innovative modality of Action Pledges has been instrumental in catalyzing action and encouraging NWP partners to get involved in the implementation of the work programme and in sharing information and experiences. The number of partner institutions and action pledges made indicate that NWP has been successful and has met its objective. Through the action pledges, partners, including Parties, IGOs, NGOs and research institutes, identified and committed themselves to undertake activities towards the objectives and expected outcomes of the Nairobi work programme. The organizations then went out and delivered. The success is also demonstrated through the large number of activities that have been catalyzed on adaptation at local and regional levels, bringing together a wide range of stakeholders.

UNEP's Contribution to the Implementation of the Nairobi work programme

UNEP's contribution to the implementation of the NWP has focused on knowledge and policy support, and mainly on the NWP work areas "methods and tools", "socio-economic information", and "adaptation planning and practices". The key activities undertaken by UNEP in support of the NWP outlined below are the development of the Global Adaptation Network, a study on the economics of climate change in Africa

(AdaptCost Africa), the initiation of knowledge-sharing through Adaptation Knowledge Days, as well as supporting Least Developed Countries (LDCs) and developing countries in the implementation of adaptation priorities identified in their National Adaptation Programmes of Action (NAPAs) and National Communications. UNEP has also participated in the technical workshops and other events under the NWP, and contributed to its publications as well as developing a compilation of adaptation strategies across Africa based on the UNFCCC Local Coping Strategies Database.

The Global Adaptation Network

UNEP's Action Pledge to the NWP is on the development of the **Global Adaptation Network (GAN)** whose objective is to meet the increasing needs (both immediate and long-term) of developing countries for adaptation knowledge, technology and policy support. The Network, developed as a partnership, aims to support the mobilization of knowledge in support of adaptation policies and action, through knowledge sharing and delivery of advisory services to different user groups.

Extensive multi- and bilateral consultations have been undertaken with Parties and organizations, and a high-level roundtable on knowledge and information needs organized at COP15. Stocktaking exercises on adaptation actors and initiatives have been undertaken in most regions, providing the basis for the establishment of the GAN. The Asia-Pacific Adaptation Network was officially launched by the Thai Prime Minister in October 2009, and knowledge-sharing activities have started with the guidance of the regional steering committee. Regional Network activities are also ready to commence in Latin America and the Caribbean. At the global level, in order to improve access to adaptation-related information, knowledge and approaches, UNEP and partners are working toward the development of an integrated online knowledge platform, to be closely linked with existing knowledge management systems mechanism to enable a cluster of knowledge suppliers to deliver knowledge services to end users. UNEP is also compiling an interactive database of organizations, institutions, networks and platforms working in the area of adaptation.

The Economics of Climate Change in Africa (AdaptCost Africa project)

The study, which was implemented in collaboration with Stockholm Environment Institute under the UNEP – Norway Climate Change Partnership investigated and built evidence on the costs of adaptation, producing a range of estimates of the financial needs for climate change adaptation in Africa using different evidence lines.

The project has assessed key lines of analysis and commissioned new analysis on:

- Global integrated assessment models,
- Estimates from the global and African investment and financial flow assessments,
- Studies which report continental, national or sectoral Africa costs of adaptation for Africa.

The study also undertook capacity building activities and policy dissemination. This included expert workshops and a roundtable on the economics of adaptation. UNEP proposes to expand the AdaptCost project with additional national and sectoral studies, with a greater focus on the role of ecosystem services, and building a network of excellence in Africa.

Link: AdaptCost Project: Overall Project Report and Summary

Adaptation Knowledge Day

UNEP in partnership with the World Bank, the UNFCCC Secretariat, and SEI amongst others decided to organize a series of events known as Adaptation Knowledge Days to disseminate information on practical adaptation actions and measures, including adaptation projects, short and long term adaptation strategies, and local and indigenous knowledge.

The first *Adaptation Knowledge Day* took place during the June 2010 sessions of the UNFCCC in Bonn. The over-arching theme for this first Adaptation Knowledge Day was: "*Improving the Links between Knowledge and Action for Adaptation*". The themes covered included:

- Bridging from Science to Integrating Adaptation in Development Planning
- Ecosystem-Based Adaptation: Knowledge to Action
- Nairobi Work Programme: The Way Forward

These events will be held on a regular basis on the margins of the UNFCCC meetings.

Support to implementation of adaptation priorities identified in the NAPAs and National Communications

UNEP is currently assisting LDCs and developing countries with the implementation of adaptation response measures identified in their NAPAs and National Communications, through the provision of tools to support decision making, addressing barriers to implementation, as well as testing and demonstrating innovative solutions at national and community level.

UNEP's assistance cover a range of interventions including strengthening of meteorological and climate early warning systems at local and national level, developing and using science-based climate information to support national sectoral policies, as well as building climate resilience through testing and implementation of innovative solutions to sustainable management of ecosystems (river basins, mountains, coasts and dry lands).

SUBMISSION BY THE UNITED NATIONS INTERNATIONAL STRATEGY FOR DISASTER REDUCTION TO THE NAIROBI WORK PROGRAMME ON IMPACTS, VULNERABILITY AND ADAPTATION TO CLIMATE CHANGE

Geneva, 16 August 2010

Subject: Submission on views and information on the effectiveness of the Nairobi Work Programme in fulfilling its objective, expected outcome, scope of work and modalities as stated in decision 2/CP.11.

Background

The ISDR secretariat has contributed to the Nairobi Work Programme's (NWP) development, it has also made multiple submissions to the NWP, contributed expertise and text to NWP technical papers and a report, participated and presented at NWP workshops, and co-sponsored meeting in Cuba on disaster risk reduction and climate change adaptation. Later this year, the ISDR regional office in Latin America will assist with the systemization and rollout of the NWP in the region so that the NWP can disseminate the knowledge it has gathered during the past five years to decision-makers at the national and regional levels. Through activities such as these, the NWP has served as a useful forum for the ISDR to promote the recognition among the Parties to the UNFCCC that disaster risk reduction measures form a core component of adaptation to climate change—they provide the "first line of defense" against the harmful impacts of climate change.

The NWP's nine areas of work correspond closely with the five priorities of the Hyogo Framework for Action, which nearly all of the UNFCCC Parties have also signed. The NWP has facilitated collaboration between the ISDR and UNFCCC secretariats and provided an efficient medium through which Parties can access information on disaster risk reduction technologies and best practices and understand their relevance for adaptation. The ISDR secretariat has found NWP publications so useful that it has translated them from English into other languages such as Spanish and Arabic so they can reach a broader audience. The ISDR secretariat also disseminated these translated publications to Parties' focal points for disaster risk reduction and climate change adaptation to promote closer institutional collaboration within countries.

The NWP has helped the ISDR secretariat function as an "honest broker," ensuring that the disaster risk reduction agenda is not manipulated for the benefit of one group of stakeholders.

Fulfilling its objective and outcome

The NWP fulfills its objective by serving as a credible source of information on climate change adaptation. When the Parties decided to create the NWP, they acknowledged that there existed a knowledge gap with respect to information on climate change adaptation, such as best practices, tools, and methodologies. The NWP has narrowed this gap in adaptation knowledge and it has helped enhance capacity at multiple levels to identify and understand impacts of climate change—particularly climate extremes. By publishing a technical paper on "Potential costs and benefits of adaptation options: A review of existing literature" and convening a workshop on this topic, the NWP has illustrated the research, methodological and data-collection needs that would help Parties identify high-priority, no-regrets adaptation actions.

¹ UNFCCC, 2010. "Potential costs and benefits of adaptation options: A review of existing literature." FCCC/TP/2009/2/Rev.1 http://unfccc.int/resource/docs/2009/tp/02r01.pdf>

In terms of its current form, the NWP provides a forum for the Parties and for organizations to share adaptation knowledge and technical expertise. The numerous contributions to the NWP's online "Compendium on methods and tools to evaluate impacts of, and vulnerability and adaptation to, climate change" and the large number of organizations that have contributed to it indicate that the NWP is an effective means for sharing information and enhancing cooperation among relevant organizations and stakeholders.

Scope of work

With nine work areas, the scope of work of the NWP is very broad. This breadth provides challenges in providing the Parties with effective guidance on the science of every one of the issues in a manner that supports decision making. Looking ahead, the NWP should develop knowledge that will help the Parties prioritize appropriate adaptation actions in context of their complex national and local environments.

Modalities

The current Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) negotiating text underscores the need to "strengthen, enhance and better utilize existing institutional arrangements and expertise under the Convention" to "support" Parties' implementation of climate change adaptation measures. This support is becoming increasingly relevant now that adaption activities financed by UNFCCC mechanisms, such as the Adaptation Fund Board, become more operational.

As a repository of knowledge on issues relating to climate change adaptation, the NWP should help identify existing capacities that Parties can leverage to support their adaptation needs. The NWP is well positioned to play this "honest broker" role and it should therefore strive to ensure that the adaptation knowledge it has collected reaches the decision-makers who are taking action on adaptation at multiple levels of government. Furthermore, the NWP should examine how this knowledge is being used and then tailor future knowledge collection and sharing accordingly. With respect to climate-related risks and extreme events (work area 4), for example, the NWP should continue to collaborate with its counterparts from the ISDR system and build upon the network of ISDR platforms and processes to develop national and regional adaptation initiatives.

The ISDR secretariat is pleased to see that a recent survey of NWP Focal Points reveals a broad consensus that the NWP's mandate be extended beyond 2010. A more accurate assessment of the NWP will be possible after the Parties begin implementing adaptation at scale and have the opportunity to test whether the NWP has met their adaptation knowledge needs. Therefore, the mandate of the NWP should be extended by a minimum of one year at which point a more inclusive and robust review process will be possible—or by which point a new framework for adaptation has entered into effect via the signing and ratification of the AWG-LCA text.

² UNFCCC, 2010b. "Text to facilitate negotiations among Parties. Note by the Chair of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention. FCCC/AWGLCA/2010/8 http://unfccc.int/resource/docs/2010/awglca11/eng/08.pdf

Paper no. 12: Global Water Partnership

Global Water Partnership submission to the UNFCCC with respect to the effectiveness of the Nairobi work programme

Proposal to establish a Thematic Focus on Water, Climate and Development under the Nairobi Work Programme

The Global Water Partnership (GWP) welcomes the opportunity to contribute views and information on the effectiveness of the Nairobi Work Programme. This is in response to the SBSTA invitation as follows:

The SBSTA invited Parties and relevant organizations to submit to the UNFCCC secretariat, by 16 August 2010, views and information on the effectiveness of the Nairobi Work Programme in fulfilling its objective, expected outcome, scope of work and modalities as stated in decision 2/CP.11.

The Global Water Partnership (GWP) is an InterGovernmental Organisation accredited to the UNFCCC with a particular interest in this matter, because we wish to put forward the need for a dedicated thematic focus on water under the Nairobi Work Programme. In our view this would enhance the effectiveness of the NWP. GWP has made a pledge to the Nairobi Work Programme, under the thematic area "Adaptation practices and planning".

The mission of GWP is to support the sustainable development and management of water resources at all levels, in line with UN resolutions to support integrated water resources management and development. GWP does this through a global Network of 13 regional and over 70 country water partnerships which have been established over the past 13 years to promote and implement better water resources management. The GWP's 2,000-plus Partners come from government institutions, NGOs, professional associations, academic and research institutions, and the private sector.

GWP's Network provides a rich resource of practical experience of the challenges of sustainably managing water resources in many local, national and regional contexts. This experience leads GWP to make the present submission, highlighting key issues regarding the effectiveness of the NWP. GWP makes this submission with expectation that Parties will extend the NWP or take forward the outcomes of the NWP into a successor programme that build on the outcomes of the NWP.

In making this submission, it is worthy restating the UNFCCC work on adaptation and the objectives and expected outcomes of the NWP.

ADAPTATION UNDER THE UNFCCC

The UNFCCC work on adaptation covers a range of issues that are being addressed by Parties under the various Convention bodies, including

• Enhanced action on adaptation as part of the Bali Action Plan under the Ad-hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA)

- Nairobi work programme on impacts, vulnerability and adaptation to climate change, development and transfer of technologies, research and systematic observation under the Subsidiary Body for Scientific and Technological Advice (SBSTA)
- Issues related to implementing, including national adaptation programmes of action (NAPAs), and supporting adaptation through finance, technology and capacity-building under the Subsidiary Body for Implementation (SBI)

NAIROBI WORK PROGRAMME

The Nairobi work programme is a 5 year programme (2005-2010) implemented by Parties, intergovernmental and non-governmental organizations, the private sector, communities and other stakeholders.

Its objective is to assist all Parties, in particular developing countries, including the least developed countries and small island developing States to:

- improve their understanding and assessment of impacts, vulnerability and adaptation to climate change;
- 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.

The expected outcomes of the NWP are:

- (a) Enhanced capacity at international, regional, national, sectoral and local levels to further identify and understand impacts, vulnerability, and adaptation responses, and to select and implement practical, effective and high priority adaptation actions;
- (b) Improved information and advice to the Conference of the Parties (COP) and its subsidiary bodies on the scientific, technical and socio-economic aspects of impacts, vulnerability and adaptation, including facilitating the implementation of decision 1/CP.10, where relevant;
- (c) Enhanced development, dissemination and use of knowledge from practical adaptation activities;
- (d) Enhanced cooperation among Parties, relevant organizations, business, civil society and decision makers, aimed at enhancing their ability to manage climate change risks;
- (e) Enhanced integration of actions to adapt to climate change with sustainable development.

EFFECTIVENESS OF THE NWP

GWP is of the view that the NWP has been successful in mobilising intergovernmental and non-governmental organizations, academia and research institutions. Various organizations have made action pledges to the NWP. The NWP has also convened a number of workshops on specific themes on adaptation and made efforts to involve stakeholders from diverse backgrounds. An online database of institutions that have made pledges with relevant information on ongoing work to support climate change adaptation exists. The UNFCCC secretariat has also made some effort to disseminate the NWP and its associated outputs from the various meetings and workshops. This is a good start.

GWP however feels that more work is required for the NWP to achieve its intended outcomes. Creating thematic focal areas to bring together organizations working on particular themes will be a useful step. We wish to submit the following proposals for consideration

1. Integration of water security actions to adapt to climate change in national development

The impacts of climate change are being felt through increased frequency of droughts, floods, sea level rise, cyclones and others. Through out GWP's work across 13 regions, it is increasingly clear that water is the medium through which many of the impacts of climate change will be felt. Because of this, water resources management will have to be significantly strengthened to ensure that affected communities are able to adapt to such change.

GWP draws the attention of the Parties to some of these impacts and to the way that they will be transmitted. Direct impacts are predicted to occur as a result of floods and droughts and other extreme events. These will impact human security, food security and fresh water supplies. Extreme events (catastrophic floods and droughts) will compound the impact of more general changes in the pattern of rainfall and temperature which are expected to contribute to increased aridity and impact on both demand for and availability of water. This finding is in accord with the conclusions of the IPCC Technical Paper VI - Climate Change and Water [WGII 3.8] which noted that:

"Water resources management clearly impacts on many other policy areas (e.g., energy projections, land use, food security and nature conservation). Adequate tools are not available to facilitate the appraisal of adaptation and mitigation options across multiple water dependent sectors, including the adoption of water-efficient technologies and practices. In the absence of reliable projections of future changes in hydrological variables, adaptation processes and methods which can be usefully implemented in the absence of accurate projections, such as improved water-use efficiency and water-demand management, offer no regrets options to cope with climate change."

In addition, climate change is predicted to have many indirect water-related impacts, which include:

- The additional infrastructure investments required to protect human settlements and industrial activities both from extreme events and increased variability in rainfall and river flows
- the salinisation of groundwaters as a result of rising sea levels; the aggravation of water quality
 problems affecting urban, industrial and agricultural water users as a result of reduced river
 flows and dilution capacity; as well as
- health impacts caused by increased activity of water-related disease vectors in many regions.

These impacts will affect economic growth and development. Climate change adaptation needs to be integrated in national development programmes.

Integration of water security and climate change in development planning and decision making processes through enhanced technical, and institutional capacity and predictable financing for water security and climate change adaptation; is a key step towards climate change adaptation.

After COP 15, GWP conducted dialogues in Africa and in China on Water, Climate and Development. The dialogues in Africa were jointly convened with the African Ministerial Council on Water (AMCOW) and attended by representatives of Parties to the UNFCCC, Non-Governmental Organisations, representatives from UN-Water and other UN agencies such as UNESCO, UN Economic Commission for Africa; academia and research and others. In the context of adaptation,

these dialogues recommended the following areas of focus for continued work on climate change adaptation:

- Supporting countries to integrate water security and climate change in development planning and decision making processes at regional, transboundary, national and sub-national level
- Supporting countries to develop partnerships and capacity of institutions and stakeholders to integrate water security and climate change in development processes and strengthen resilience to climate change through better water management
- Supporting countries in the development of financing strategies for enhancing water security to support climate change adaptation

It is unclear to what extent the NWP recognises water as a key medium through which climate change impacts will be felt and where urgent action is required.

a. Proposed follow up action on the NWP-Thematic Focus on Water

There is need to sharpen the focus on water under the NWP. This is key to ensure that Parties take note of the importance of building resilience through strengthened water management capacities at local, national and transboundary levels.

It is proposed that a Thematic Focus on Water, Climate and Development be established under the NWP. GWP believes that such a focus will help enhance interaction among the Partners of the NWP working on water, help Parties to the UNFCCC by providing a dedicated resource under the NWP on a key area of adaptation, namely water security.

Linking water security, climate and national development is important if the NWP is to achieve its intended objective on 'Enhanced integration of actions to adapt to climate change with sustainable development'.

The NWP needs to provide an opportunity for Parties to consider appropriate responses to many of the impacts of climate change within a broader national and regional development context.

In response to many of these impacts, local communities, national governments and, in the case of transboundary rivers, regional organisations will have to give increased attention to:

- the monitoring of water resources availability in time and space (e.g., by enhancing hydrometeorological networks);
- improving the understanding of the variability and reliability of such resources (e.g., by enhancing water resources assessment and research);
- infrastructural development and other interventions required to address increased climatic variability and to improve the reliability of supply and protection;
- monitoring water use and the efficiency and effectiveness of such use;
- the allocation of water between different users and the mechanisms that are used to achieve a balance between the goals of efficiency, equity and environmental sustainability in such allocations;
- the monitoring of water resource quality and its regulation and management through permitting and other mechanisms;
- the planning of water resources management, development and use with particular emphasis on the linkages between water use and economic and social development, including climate change mitigation strategies.

As illustrated by this list, water resources management comprises an extremely diverse set of activities, which require a high level of professional skill and a range of specific monitoring and regulatory infrastructure and institutions. It also requires extensive ongoing engagement with both high level decision-makers and managers in water using sectors such as agriculture, industry and urban municipalities as well as with communities of water users themselves.

The cost of measuring and monitoring water use and availability is already high as is the cost of training and employing professionals who can interpret the information and recommend action. In addition, investments are required to build the infrastructure to store and transport water to cope with existing rainfall variability and river flows. These activities will have to be intensified to cope with the increased uncertainty, variability and intensity of extreme events that are predicted to occur by most climate change models. Given the diversity of contexts in which water resources are managed and used, and the difficulty of making reliable predictions of how climate change will impact on each, GWP has concluded that a general intensification of these water resources management activities constitutes an important adaptation strategy in itself. Better water resources management is inherently adaptive, building societal resilience to uncertainty and change

GWP recommends that Parties establish a Thematic Focus on Water as part of future work to take forward the outcomes of the NWP.

2. NWP is unknown beyond the 'climate community'

The NWP is unknown to most players outside the 'climate community'. For instance, it is unclear if policy and decision makers are aware of the NWP as a resource. One of the objectives of the NWP is to help developing countries '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'.

It is not clear how the outputs of the NWP are made available to policy and decision makers to help them make informed decisions on adaptation. More work is required to bridge the divide between providers of climate information and science including academia and research institutions with the users of climate information and practitioners and decision makers in key sectors beyond the 'climate community'. While the basic body of knowledge is there, translating this information into usable 'products' that can aid decision makers and practitioners on adaptation should be the next step.

a. Proposed follow up action on the NWP

To help achieve the NWP objectives, there is need to bridge the divide between the providers of climate information and science including academia and research institutions with the users of climate information and practitioners and decision makers in key sectors beyond the 'climate community' such as economic development and finance, practitioners and policy makers in water, agriculture, health and other key development sectors.

The UNFCCC under the NWP needs to engage partners at global, sub-regional, national and sub national level to convene dialogues and disseminate the lessons, results and experience of the work of partners in the Nairobi Work Programme with a key objective of promoting the uptake and application of information into decision making to advance adaptation to climate change. This action will contribute to achievement of the following outcomes of the NWP:

- (a) Enhanced capacity at international, regional, national, sectoral and local levels to further identify and understand impacts, vulnerability, and adaptation responses, and to select and implement practical, effective and high priority adaptation actions;
- (b) Enhanced development, dissemination and use of knowledge from practical adaptation activities.

3. Link between the NWP and the work under the LCA and the SBI on NAPAs

It is unclear to what extent the NWP has enhanced information and advice to the Conference of the Parties (COP) and its subsidiary bodies on adaptation. While useful outputs and discussions have taken place during the capacity building workshops convened under the NWP, it is not clear how the outputs have informed discussions by the Parties on negotiations under the LCA. The link between work on NAPAs and the NWP is also not very clear.

More coherence is required to ensure that there is less duplication and overlap of efforts on adaptation. There is also a need to create better and stronger synergies between the NWP and the work under the LCA and the SBI on NAPAs.

a. Proposed follow up action on the NWP

Follow up work is required to create further synergies on the UNFCCC's work on adaptation, and to link this to ongoing development initiatives. The UNFCCC should explore avenues for the outputs of the NWP to support work on implementation of NAPAs and also regular information to the Parties on key insights, lessons and experiences to enhance work on adaptation, especially in the context of development.

The Partners of the NWP can provide broad and diverse experiences and it is suggested that future work should explore opportunities to tap into the experience and knowledge of the partners of the NWP to strengthen synergies on work in the LCA, NAPAs and the NWP. This action would contribute to the following outcome of the NWP:

(b)Improved information and advice to the Conference of the Parties (COP) and its subsidiary bodies on the scientific, technical and socio-economic aspects of impacts, vulnerability and adaptation, including facilitating the implementation of decision of decision 1/CP.10, where relevant.

4. Cooperation among Parties, relevant organizations, business, civil society and decision makers

The NWP has been successful in mobilizing various organizations working on adaptation. The NWP online database provides a range of actors and organizations that have pledged to support the NWP. A few informal meetings have also been convened by the NWP Team. More work is required to enhance cooperation among the different organizations who have pledged their support to the NWP.

a. Proposed follow up action on the NWP

A proposed action is to promote partnerships in order to implement joint thematic programmes of action among the different organizations. These partnerships can enhance the ability to manage climate change risks in specific areas of the NWP. Partnerships linked to ongoing practical and

relevant work on adaptation would be essential in helping decision makers and practitioners make informed decisions.

The UNFCCC should encourage and set up initiatives for organisations that have pledged to the NWP to develop partnerships and capacity of institutions and stakeholders to integrate climate change in development processes, and to strengthen resilience to climate change through better water management.

The establishment of partnerships is relevant especially in relevant thematic areas under the NWP. This action would contribute to the following outcome of the NWP:

(d) Enhanced cooperation among Parties, relevant organizations, business, civil society and decision makers, aimed at enhancing their ability to manage climate change risks.

36