REVISED DISCUSSION PAPER

FOR

THE INTERNATIONAL CONSULTATION MEETING

ON THE DEVELOPMENT OF

THE GLOBAL CLIMATE CHANGE ADAPTATION NETWORK

30-31 October 2008, Changwon, Republic of Korea

Contents:

This document presents an overview of the proposed Global Climate Change Adaptation Network ("the Network"), its proposed objectives, structure, functions, and work mechanisms. The document is intended for discussions at the International Consultation Meeting to be held in Changwon, Republic of Korea, 30-31 October 2008. To help structure and guide those discussions, each chapter includes questions for the consideration of the meeting's participants.

A key expected output from the meeting is an ***Implementation Plan*** for the Network covering the various aspects outlined below in Section 1, and (b) a ***Roadmap*** for its implementation building on Section 2, including the tentative division of labour amongst all the collaborating organizations.

1. DEVELOPING THE NETWORK IMPLEMENTATION PLAN

1.1 The urgency, the legitimacy, and the expectations: why such a Network?

The impact of climate change is an unprecedented and increasing global threat to life, livelihoods, and life-supporting systems. Even if the most stringent mitigation measures were put in place today, the impacts of climate change would continue for centuries. There is an urgent need for immediate and adequate actions to adapt to climate change before its impacts become unmanageable. At the same time human beings must prepare for long-term consequences of a changing climate. However, significant barriers and constraints persist for adaptation efforts in developing countries, including a lack of necessary finance and technology. **Even if adequate financial and technological resources were in place, capacity to utilize these resources on adaptation is one of the most pressing challenges for developing countries. Hence a prerequisite for any adaptation effort must be to build essential adaptive capacities rapidly.**

The Parties to the UNFCCC have recognized the paramount importance of promoting adaptive action and have adopted actionable mandates under the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI). In addition, the Bali Action Plan which sets the stage for the evolving negotiations on the post-2012 regime under the Ad-hoc Working Group on Long-Term Cooperative Action has adopted adaptation as one of the pillars of the future regime. The four areas identified for further action in this regard include streamlining and scaling-up resources, adaptation planning, knowledge sharing, and institutional frameworks.

The UNFCCC SBI at its 28th session agreed on the further implementation of decision 1/CP.10 through, inter alia, enhancing national planning for adaptation, including through integrating adaptation into the planning process, and promoting risk management approaches and other appropriate responses to the adverse effects of climate change, building upon the practical experience of international, regional and national organizations and the private sector, including through disseminating information on best practices and lessons learned.

The 28th session of the UNFCCC SBSTA recognized that *"regional centres and networks undertaking work relevant to climate change play an important role in enhancing adaptation through supporting adaptation planning and practices, the application of models and tools, the development of adaptation projects and their regional integration, and through providing other forms of technical support related to capacity-building and information sharing"*. The SBSTA also agreed *"to promote existing networks for impacts, vulnerability and adaptation"* and encouraged *"the establishment of new networks"* as well as *"established networks that are not focused on climate change to consider impacts, vulnerability and adaptation to climate change in their work, as appropriate*".

To this end, a multifunctional **Global Climate Change Adaptation Network ("the Network")** is proposed for mobilizing the resources of relevant regional centers and ground networks to enhance

key scientific, technical and most importantly institutional capacity for adaptation in a synergic and coherent manner. The Network will help meet the increasing demands for climate change adaptation with the growing supplies of the world's best knowledge and technology from existing facilities and institutions. As a result, the capacity of developing countries for monitoring climate change and its impacts, assessing vulnerabilities, piloting adaptation interventions and planning longer-term adaptation efforts will be fundamentally enhanced through strengthened information and knowledge bases, policy-setting, planning and adaptation practices.

It is suggested that the Network be built upon existing networks of ground facilities and regional centers. It would support the adaptation activities in these stations and centers, and provide incentives for them to deliver more to meet the increasing needs for adaptation actions at both local community and government levels. It is proposed that the Network have a strong focus on supporting the implementation of the UNFCCC Nairobi Work Programme (NWP) on Impacts, Vulnerability and Adaptation to Climate Change in its second phase, and other UN-led Climate Change Adaptation initiatives. The Network could support the NWP under each of its 9 areas of work, as well as the integration of these areas. In the inception of the Network, there will also be a need for focusing the Network thematically, for example on the integration of climate change adaptation into national and sectoral planning, ecosystem management, disaster risk reduction and conflict prevention, and their interactive processes. Through its further evolution, the Network can then meet the increasing demands to address the broader linkage between climate change adaptation and development, and help build climate resilient societies.

Questions for discussion:

1. ***Why is a Global Climate Change Adaptation Network essential, and what are the key gaps that it must address? What are your expectations from the Network?***

2. ***What should be the key objectives and deliverables of the Network, for best addressing these needs and gaps?***

1.2 Network structure: components, their functions and interlinkages

It is suggested that the Network will have three key components: **a network of selected ground facilities** (which can be defined as the sites for monitoring climate impacts, understanding vulnerability and demonstrating adaptation, or IVA-sites)**, a network of regional centers, and an international support group of technical institutions.** Each Network component would play its unique role at the appropriate scales and will serve different user groups. At the same time each component will be interlinked and mutually supportive to the other Network components. The components of the Network could be linked through the flow of data, information, knowledge, and technology. **A knowledge management system** is therefore proposed to facilitate the flow of data, information, knowledge and technology amongst the Network components, supporting regional and global **policy forums** and delivering services to respective user groups through an interactive website. Below are examples of the proposed functions of each Network component, yet their detailed functions and services (e.g. what items to be monitored etc) can be discussed and agreed during the development phase of the Network.

The network of ground facilities (IVA-sites) is proposed to build adaptive capacity of local communities and to support decision-making at various levels of governance. The core functions of the ground facilities could include, for example[1]:

- Monitoring climate change and its impacts (e.g. rainfall, temperature, soil, hydrological and biological systems) to support the assessment and early warning of climate change impacts, drawing upon existing climate observing stations, enhanced climate networks in vulnerable hot spots, environmental monitoring ground stations and high resolution earth observing systems
- Integrating environmental, climatic and socio-economic vulnerability assessments using dynamic models, community-based methods and participatory risk communication
- Experimenting and piloting the most appropriate adaptation options in line with local and national circumstances and existing assessments and building capacity in community based organizations
- Demonstrating successful adaptation options to local communities and decision-makers and disseminating hands-on knowledge, tools, and best practices for deployment in similar social, economic and environmental conditions

The network of regional centers is proposed to improve the availability and coordination of data and information at the regional/sub-regional level, to provide technical support to policy-setting and planning at national level, and to strengthen regional cooperation. The core functions of the regional centers could include, for example:

- Supporting coordinated monitoring, experimentation, and demonstration activities of ground facilities
- Collecting, processing, and distributing adaptation-related data, information, and knowledge at the regional level (including socio-economic as well as satellite data)
- Serving as regional/sub-regional knowledge centers for adaptation
- Conducting research to support policy-setting
- Contributing to national capacity building efforts and providing technical support to the integration of climate change adaptation into national planning processes
- Strengthening regional cooperation

The international support group of technical institutions, including advanced networks of ground facilities and research centers in developed countries, is proposed for helping build the capacity of the network of ground facilities and regional centers in developing countries and for responding to the needs of global or interregional adaptation initiatives. Its core functions could include, for example:

- Providing the ground facilities and regional centers with methods and tools necessary for conducting their core functions
- Reviewing and updating best practice and guidance on methodologies for assessment of impacts and vulnerability, and the evaluation of adaptation strategies and options
- Leading the development and implementation of interregional projects as international partnerships and supporting regional cooperation
- Supporting training efforts and capacity building in understanding emerging climate impacts, assessment high-risk vulnerabilities and demonstrating successful adaptation policy, strategy and action
- Providing advisory services for adaptation planning and training and for technical input to international adaptation policy processes

[1] Detailed monitoring, experimenting and demonstrating functions will be developed and agreed upon by a specific expert group, and undertaken by selected ground facilities.

Questions for discussion:

1. ***What should be the necessary components of such a Network? Would you propose additional ones? Why?***
2. ***What should be the roles and core functions of the different Network components?***
3. ***How could the Network components best be interlinked to be mutually supportive?***

1.3 Selection of the Network components

This initiative does not intend to develop a network of networks; it is rather to be very selective and specific to ensure close relevance of each individual Network component to climate change adaptation. The selection of the Network components (i.e. ground facilities and regional centers) should be an open and transparent process, using agreed selection criteria and building on existing facilities on the ground and centers of excellence. The selection process should be undertaken by an independent panel, and could be jointly organized by UNEP and its partner organizations.

A set of criteria for the selection of the ground facilities and regional centers should be commonly agreed upon, on the basis of the agreed roles and functions of the facilities and centers. The core set of selection criteria could include, for example, the following:

- Strong track record in climate change adaptation or in relevant disciplines that can be extended to cover adaptation
- Competent and productive team
- Secured financial and other resources for core operations
- Geographical coverage and balance
- For ground facilities, it is important to have access to and a strong track record of working with local communities
- For regional centers, it is important to have access to and a strong track record of working with policy-makers and planners at the national and regional levels

Candidate ground networks exist such as those in the ecological, agricultural and climatic networks and botanical gardens. Similarly, most of the regional centers would also be selected from already existing research and policy centers/institutes and universities. The ideal candidates would be fully functional in the area of climate change adaptation. Where fully functional candidates do not exist, partially functional candidates can be selected, yet efforts should be made to complement the necessary functions. Partnerships with civil society and private sector organizations should be encouraged.

Questions for discussion:

1. ***What process should be used for the selection of the Network components? What criteria should be applied to select the components of the Network?***
2. ***How could the selection process be best managed?***

1.4 Network management

To ensure the delivery and maintenance of quality Network services, there is a need to establish an efficient mechanism for quality control and performance assessment, as well as a light Network management structure.

It is suggested that the primary set of criteria for the quality control of the Network component services be agreed at a global level. Secondary set of criteria are flexible and can be agreed at regional level. The mechanism and structure of quality control of these component services need to be discussed and agreed during the international consultation in October 2008.

The performance of the Network components could be assessed on the basis of brief annual reports and comprehensive triennial performance reports. The performance could be assessed against agreed performance criteria, covering issues such as the services delivered by the facilities to communities and governments and the feedback received from these user-groups. The performance assessments could also be used for deciding annual budget distribution, as well as the eligibility of facilities for funding on a triennial basis.

While the first phase of the Network's development can be managed through an Ad Hoc Group involving key partners and stakeholders, eventually there will be a need to put in place a more established management structure for overseeing the Network's evolution and its functions. Given that adaptation activities are different from one region to another, and in most cases site and ecosystem specific, it is suggested that the management structure accommodates an appropriately scaled distributed management pattern and be dynamic and flexible in its functions. The overall management structure could be composed, as an example, of a Board acting as the main decision-making body and a Science and Technology Advisory Panel responsible for the selection of the ground facilities and the regional centers in the Network development phase. Once the Network is in full operation, the Advisory Panel could be responsible for assessing the performance of the Network and its components on the basis of the annual reports and comprehensive triennial performance reports.

Questions for discussion:

1. ***How can the quality of the services delivered by the Network be best ensured?***
2. ***What indicators should be applied to assess and monitor the performance of the Network's components, and that of the overall Network?***
3. ***What kind of structure should be put in place for an efficient management of the Network?***

1.5 Piloting the Network in selected regions

The Network should start delivering its services to address pressing adaptation needs during the first phase of its development, while the overall implementation of further Network development is in process. For this purpose, it is suggested that pilot regional and/or sub-regional networks are initiated as soon as possible, building on the track record and competency of the selected pilot ground facilities and regional centers, and building into the current and planned regional/national adaptation programmes.

The process for the initiation of the pilot sub-regional networks could involve the following steps:

- The identification of pilot sub-regions, and the selection of pilot ground facilities, regional centers, and international technical support institutions
- The strengthening and incentivizing of the adaptation activities of the pilot ground facilities and regional centers to meet the urgent needs of governments and communities
- Monitoring the development and activities of the pilot networks and their components, and learning from their experiences
- Preparing for the next phases towards a full scaled operational Network.

Questions for discussion:

1. ***What would be a suitable process for the initiation of regional and/or sub-regional pilot networks?***
2. ***What criteria should be applied for the selection of pilot countries in the developing regions for the initiation of the pilot networks?***
3. ***What would be an appropriate process for following up on the development of the pilot networks, learning from their experiences and making adjustments to the Network to ensure its effectiveness?***

1.6 Financing Strategy

The existing networks upon which the Global Climate Change Adaptation Network will be built are mostly supported by the Governments of the host countries. However, financing for new adaptation equipment and functions for selected existing ground facilities and regional centers will be necessary for strengthening their adaptation activities. An incremental cost is foreseen for additional activities, such as adaptation monitoring and research, demonstration, and training and awareness-raising. The mobilization of knowledge and expertise from developed to developing countries, as well as between developing countries, will also have cost implications.

Considering the long-term nature of development and operation, financing of the Network should be through a long-term arrangement. A financing strategy should be developed to this end. In order to provide adequate long-lasting support to global adaptation efforts, it is suggested to establish a climate change adaptation mechanism (or a Trust Fund) to support the primary functions of the Network. Possible financing opportunities must be explored with governments, the international community, and the relevant foundations.

The estimated cost of supporting the primary adaptation functions of a ground facility such as an ecological research station is approximately USD 50,000/yr, and the cost of supporting those of a regional centre is approximately USD 500,000/yr. The estimated cost to enable an international technical support institution to deliver its services to regional centers and ground facilities is about the same as the cost of a regional centre. Detailed annual costs of the ground facilities and centers are yet to be calculated. The total estimated budget for a fully functional Network depends on the total number of ground facilities and regional centers to be supported, as well as on the number of international technical support institutions and their specific functions.

Questions for discussion:

1. ***What would be the most appropriate business model for the Network to ensure its sustainability?***
2. ***How would you estimate the financial requirements for the establishment and functioning of the Network in its various phases?***
3. ***What would be a realistic level of balance to be reached between the number and functions of the Network's components, and the related financial implications?***
4. ***What would be the key components of a financing strategy for the Network?***
5. ***What would be the most promising potential sources (and modalities) for funding the Network?***

1.7 Outreach and communication

The process of the initiation of the Network should be widely communicated to reach possible candidate institutions for ground facilities, regional centers, and support institutions, as well as potential partners and interested donors. Some possible outreach activities would include the development of a brochure or a folder on the Network and the organization of Side Events in the margins of at the UNFCCC Conference of the Parties (e.g. COP 14, 15). To facilitate the dissemination of information and the sharing of best practices between the various Network components, as well as between the management bodies and the Network components, a user-friendly website for the Network could be established. A comprehensive outreach and communication strategy could be developed for strategically and consistently communicating the Network throughout the different phases of its development and function.

Questions for discussion:

1. ***What would be the key activities of an outreach and communication strategy for the Network?***
2. ***How would the implementation of the strategy be financed?***

2. AGREEING ON A ROADMAP FOR THE NETWORK DEVELOPMENT

The Network will not only aim at meeting increasing demand for climate change adaptation in the long-term, but must also be able to address the most pressing concerns of urgent adaptation needs. To meet both the urgent and long-term needs, a three-phase development process is proposed, enabling the delivery of services right from the beginning of the Network development. The first phase would be the inception and piloting phase (from now to the end of 2009). The following two phases would then include the expansion of the Network and amendment of the specific functions of its components (Phase 2, 2010-2011), as well as the full operation of the Network (Phase 3, from 2012 onwards).

The first phase of the Network development would start to deliver services to address the pressing concerns on adaptation, through piloting the Network in selected regions, building on the track-record and competency of the selected stations and centers. At the same time, an overall Implementation Plan for the three phases will be finalized, and the Network management structure, financing strategy and communication plan will be put in place.

Once the details of the key components of the Implementation Plan outlined in Section 1 have been agreed upon, there is a need to agree on the timelines and shared responsibilities for ensuring the efficient initiation of the Network and its functions.

The answers to the questions below will result in a Roadmap for the first phase of the Network development.

Questions for discussion:

The Roadmap: How, when and by whom…

1. ***should the detailed roles and functions of the Network components be finalized?***
2. ***should the structures for Network management be established?***
3. ***should the selection of the pilot network components be undertaken?***
4. ***should the pilot networks be initiated in the various regions and sub-regions?***
5. ***should the Financing Strategy for the Network be developed and implemented?***
6. ***should the outreach and communication strategy for the Network be undertaken?***
7. ***should the various stakeholders, partners and potential donors be further engaged in the process of establishing and supporting the Network?***