CONCEPT NOTE

Regional Commissions' Joint Side-Event on Climate Change:

"Regional Initiatives and Strategies in Support of Country Efforts on Climate Change"

Date: Wednesday, 16 December 2009
Time: 11:00 a.m. to 12:30 p.m.
Total duration: 1.5 hours
Venue: Bella Center, in the Victor Borge Room, Center Boulevard 5, DK-2300, Copenhagen, Denmark
For more information visit: www.un.org/regionalcommissions

The five UN Regional Commissions (Economic Commission for Africa (ECA); Economic Commission for Europe (ECE); Economic and Social Commission for Asia and the Pacific (ESCAP); Economic Commission for Latin America and the Caribbean (ECLAC) and; Economic and Social Commission for Western Asia (ESCWA)) are partnering with countries in their regions, with UN system agencies, funds and programs and with other regional and subregional stakeholders to undertake collaborative initiatives and actions to promote both mitigation and adaptation policies and measures at the regional and national levels.

Each region confronts different challenges arising from climate change as result of its particular circumstances and conditions. The side-event will provide an overview of these challenges and focus on the ongoing efforts being deployed in the different regions to confront climate change and point to best practices and experiences. The UN Regional Commissions provide support to their Member States in many ways including technical advice and expertise but they also have an important role to play as catalysts for regional cooperation, in particular for the development and application of policy innovations.

I. Climate change related challenges in the regions

Africa, which contributes a negligible amount of greenhouse gas emissions, will be hardest hit by the impacts of climate change. This is because the economies of African countries depend largely on sectors that are particularly vulnerable to climate change. Scientists estimate that the continent is likely to experience higher temperature increases, changing rainfall patterns, rising sea levels, and increased climate variability due to its proximity to the equator. The severity and frequency of droughts, floods and storms will increase, leading to more water stress. Africa will experience reduced productivity in crops, livestock and fisheries and face increased food insecurity, as well as an increase in water-related diseases, particularly in tropical areas. Furthermore, the nature and extent of climate change will not only hamper human development and ecosystems integrity, but will also constitute a major threat to human security in Africa. Therefore, climate change will exacerbate the current social and economic development challenges of the continent, including progress towards meeting the Millennium Development Goals (MDGs) and achieving sustainable development.

Integrating climate change concerns into development frameworks, policy processes and decision-making across a range of sectors and scales is a critical step in managing climate change and its impacts in Africa. For a continent where so many lives, livelihoods and even whole national economies depend on the climate, it is extraordinary that so far little use has been made of routine climate information to guide management decisions in climate sensitive sectors. Climate risk assessment processes and management practices are inadequate, and most National Adaptation Programmes of Action (NAPAs) in Africa have not adequately incorporated climate science and are not closely linked with national development programmes. At present, little use is made of climate data and information in development processes in Africa due to weaknesses in both demand for, and supply of pertinent climate services. There is therefore a dire need to generate, analyze and assess reliable regional and national scientific data and information to develop climate sensitive policies and practices.

The achievement of sustainable development ***in Western Asia*** *(i.e. the ESCWA region)* faces many challenges, including political instability, acute water scarcity, unsustainable production and consumption patterns, and inadequate financial resources. Responding to climate change should be addressed within the context of sustainable development and integrated into the sustainable management of natural resources.

Despite the fact that the ESCWA region is one of the lowest contributors to greenhouse gas emissions, it is expected to suffer disproportionately as a result of climate change in ways which may undermine national and regional development plans and the achievement of the Millennium Development Goals. Among the implications of the forecast rise in temperatures are an increase in drought (estimated 50% and 15% reduction in freshwater in Syria and Lebanon), an increase in desertification and land degradation, and a projected reduction of 30-50 per cent in the runoff of rivers in the region. In addition, rising sea levels may lead to the loss of agricultural lands (Egypt and Iraq are expected to lose 12-15 per cent of their fertile delta lands), seawater intrusion and a potential increase in natural disasters, such as hurricane Gono in Oman in 2007.

The socio-economic implications of such changes are likely to be seen in higher levels of political conflict, population displacement, mass immigration and unemployment. The economic implications for the region are expected to be significant, especially in the agricultural and tourism sectors. Costs associated with addressing issues of water scarcity and deterioration in the quality of the limited resources that are available will be considerable, and the rising prices of dwindling food supplies will provide an additional challenge. Climate change repercussions in the Nile delta, Shatt al-Arab and the Gulf peninsula could lead to significant economic losses in terms of infrastructure, housing and construction, and natural disasters would have severe financial consequences.

Asia and the Pacific, comprising Central Asia, North-East Asia, South-East Asia, South Asia and the Pacific, is highly vulnerable to extreme climate variability. The vulnerability varies according to the geographical and socioeconomic conditions of each country. However, population densities, high concentrations of poverty and low levels of social protection amplify the consequences of climate change for the region at large. During 1975-2006, the region experienced 44% of the global economic losses from natural disasters, 57% of the fatalities and 88% of the population affected. Nine of the 10 worst natural disasters around the world in 2008 occurred in the region, resulting in an overwhelming 98.75% of the deaths from natural disasters globally.

Most developing countries in the region lack sufficient capacity to respond effectively to the projected impacts of climate change as they face persistent development problems, such as high levels of poverty and huge unmet basic services, including modern energy services. The region is home to 4.2 billion people, more than 60% of the world's population. In 2006, 980 million people lived in extreme poverty and over 40% were still without electricity. Satisfying the needs of these people poses a formidable challenge for both development and climate change goals. It implies a substantial increase in energy consumption in the coming decades. The focus on expanding intraregional trade in the wake of the global financial crisis can escalate energy demand and GHG emissions further by boosting consumption within the region.

The challenge for the region is to address its social and economic development priorities while minimizing the adverse effects of climate change. Such a congruence requires a shift to low-carbon development pathways. As the urban, industrial and transport infrastructure in many developing countries is still evolving, there are opportunities to build it on a more sustainable energy base. Improving energy efficiency in all economic sectors, lowering the carbon intensity of primary energy and electricity by mainstreaming renewable energy options, greening infrastructure, and enhancing the assimilative capacity of natural sinks are vital to achieve this. Strategies that have a high prospect of success will be those that carry co-benefits for development as well as mitigation of GHG emissions.

The ***Latin America and Caribbean region*** contributes only 8% of the global green house gas emissions, however it is highly vulnerable to climate change related impacts and effects. According to the IPCC Fourth Assessment Report on Adaptation, by mid-century, increases in temperature and associated decreases in soil water are projected to lead to gradual replacement of tropical forest by savanna in eastern Amazonia. Semi-arid vegetation will tend to be replaced by arid-land vegetation. There is a risk of significant biodiversity loss through species extinction in many areas of tropical Latin America. In drier areas, climate change is expected to lead to salinisation and desertification of agricultural land. Productivity of some important crops is projected to decrease and livestock productivity to decline, with adverse consequences for food security. In temperate zones soybean yields are projected to increase. Sea-level rise is projected to cause increased risk of flooding in low-lying areas. Increases in sea surface temperature due to climate change are projected to have adverse effects on Mesoamerican coral reefs, and cause shifts in the location of south-east Pacific fish stocks. Changes in precipitation patterns and the disappearance of glaciers are projected to significantly affect water availability for human consumption, agriculture and energy generation. Some countries have made efforts to adapt, particularly through conservation of key ecosystems, early warning systems, risk management in agriculture, strategies for flood drought and coastal management, and disease surveillance systems. However, the effectiveness of these efforts is outweighed by: lack of basic information, observation and monitoring systems; lack of capacity building and appropriate political, institutional and technological frameworks; low income; and settlements in vulnerable areas, among others.

Climate change will have a significant impact on the weather pattern in ***the upper latitudes of the Northern hemisphere*** *(i.e., the UNECE region)* and this will produce significant economic costs and benefits for the region. Due to the fact that the region is in the temperate part of the globe and in the Northern hemisphere which has a higher concentration of land mass, the temperature increases which have occurred, and are likely to occur in the future, are higher in this region than the world at large. In addition to temperature changes, there are also likely to be significant changes in precipitation with the drier areas becoming drier and the wetter areas becoming wetter. The different changes in weather across the various sub-regions of the ECE are discussed and their implications for various economic activities are highlighted. More

specifically, the implications for agriculture and food security, water resources, ecosystems, human health and human settlements are outlined.

The 56 economies of the ECE, which currently account for approximately 51 per cent of global GDP, also account for 49.5 per cent of global green house gas (GHG) emissions. As such these economies bear a significant responsibility for the accumulation of GHG emissions in the atmosphere and their efforts towards mitigation will be central in limiting global warming over the coming century. Due to higher energy prices and technological progress, some progress is being made in that emissions per capita and emissions per dollar of GDP have been declining (in some cases significantly) over the last 25 years in all three of the major sub-regions of the ECE – North America, Western Europe and the transition economies. Within the region there is tremendous variation in the levels of emissions which is due to several factors but primarily reflects the importance of economic policy in correctly pricing the costs of carbon emissions. There remain significant opportunities for reducing emissions from increasing efficiencies, sometimes with actually negative long-run costs.

II. Examples of Regional Initiatives and Strategies in Support of Country Efforts on Climate Change

Africa: Jointly developed and implemented by the African Union Commission (AUC), ECA and the African Development Bank (AfDB), the ***Climate for Development in Africa (Climdev-Africa) Programme*** is a regional response to need to generate, analyze and assess reliable regional and national scientific data and information to develop climate sensitive policies and practices. It aims at addressing the need for improved climate information for development in Africa and enhancing the use of such information in decision-making by improving analytical capacity, knowledge management, dissemination activities and capacity building. The ultimate beneficiaries of the Programme are rural and urban communities with climate-sensitive livelihoods. ClimDev-Africa sets out to achieve results in four areas: (i) Widely available climate information, packaging and dissemination, (2) Quality analysis for decision support and management practice, (3) Informed decision-making, awareness and advocacy, and (4) Evidence-based value of mainstreaming climate information into development through implementation of pilot adaptation practices.

Political leadership for the programme is provided by the AUC, which coordinates the regional policy response to, and global negotiations on climate change. The ECA-based African Climate Policy Centre (ACPC) serves as the knowledge-management, policy and project-facilitation arm. And the AfDB-based and managed ClimDev-Africa Special Fund (CDSF) provides a channel for demand-led funding of field-level operations by implementing institutions across Africa.

***Western Asia*:** Arab countries have adopted and implemented policies and programmes linked to climate change in the areas of energy, water and land. In the area of energy, Egypt, Jordan, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic and the United Arab Emirates have worked on improving and promoting the sustainable management of natural resources; in the area of water, Egypt, Jordan, Lebanon, the Sudan and Yemen have made significant advances in managing water resources; and Lebanon, Jordan and the Sudan have worked on fighting desertification. ESCWA has actively supported member countries in adopting policies, designing programmes and building capacity in each of these fields. However, the results achieved to date are neither consistent between countries, nor sufficient, and considerable further efforts are needed. ESCWA is therefore continuing to support member countries in promoting the sustainable management of natural resources and integrating climate change issues through

normative activities, building strategic partnerships with the League of Arab States and the United Nations Environment Programme Regional Office for West Asia, and by establishing a number of networks and mechanisms to promote regional cooperation on sustainable resources management, including the Arab Integrated Water Resources Management Network (AWARENET) and the Arab Countries Water Utilities Association (ACWUA) in the area of water resources, and the Regional Mechanism on Energy for Sustainable Development (RMESD).

Asia and the Pacific: In response to the necessity of combining economic growth with environmental sustainability, the countries of Asia and the Pacific adopted the ***Green Growth approach*** during the Fifth Ministerial Conference on Environment and Development (MCED) that was held in Seoul, Republic of Korea, in March 2005. The ***Green Growth approach*** aims to lower energy, resource and carbon intensities in both production and consumption as an integral way to improve ecological efficiency and directly supports countries to align their development with action on climate change and, in turn, contribute to mitigating GHG emissions without undermining their development needs. The measures and tools are based on sound normative, analytical, and research work in following five paths as the most important policy measures to enhance green growth: sustainable consumption and production (demand-side management); greening business and markets; sustainable infrastructure; green tax and budget reform; eco-efficiency indicators. As a result of the 2005 MCED, ESCAP has been focusing on advocacy and capacity building for the application of important policy tools that can be applied to enhance the environmental suitability of economic growth and to adapt to climate change. Cambodia, Viet Nam and Bhutan were among the first countries to benefit from ESCAP's policy advice and capacity building activities in support of green growth. ESCAP also worked on designing a training of the trainers capacity development programme in support of green growth, funded by the Korea International Cooperation Agency (KOICA).

Latin America and the Caribbean: The impact of climate change on development was assessed for this region through an analytical document by ECLAC which compiles scientific information published in recent years and illustrates possible economic impacts of climate change on various economic sectors in Latin America and the Caribbean countries. The analysis encompasses challenges to economic development, new constraints linked to adaptation, as well as those stemming from mitigation measures adopted by industrialized countries to combat climate change, such as carbon foot-printing of imports from developing countries and leakage through foreign direct investment flows into the region towards energy-intensive sectors. Additionally, in partnership with the Department for International Development (DFID) of the United Kingdom, the Inter-American Development Bank, the Danish and Spanish Governments and the European Commission, ECLAC is currently preparing the Regional Economics of Climate Change (RECC) studies. These studies analyze climate change impacts on sectors and mitigation potential based on costs and benefits. Sub-regional studies are underway in Central America, the Caribbean and eight national studies are being conducted in South America. These will be incorporated in a regional Latin American and Caribbean report.

The ECE region: Under the auspices of the Global Environment Facility, the ***UNECE Energy Efficiency 21 Project (EE21)*** is supporting the creation of an investment fund to reduce greenhouse gas emissions in Eastern Europe, Central Asia and South-Eastern Europe. The UNECE has received grants totaling US$ 7.5 million. ***The Energy Efficiency 21 Project*** promotes the formation of an energy efficiency market in Eastern Europe so that cost-effective investments can provide a self-financing method of reducing global greenhouse gas emissions. During the last few years, the UNECE has demonstrated that it is possible to identify, develop

and finance energy efficiency investment projects in Eastern Europe. But it has also shown that this is a time consuming and labour intensive process. The market for energy efficiency projects with a payback period of less than five years is estimated to be between EUR 5 and 10 billion. But the capital investment requirements needed to tap this potential are so large that only commercial sector finance on a significant scale can actually deliver meaningful results. This market will need to provide opportunities for the commercial sector to make large investments with low transaction costs that make adequate returns at acceptable risk within a reasonable period of time. The EE21 capacity building activities will be aimed at developing the skills of public and private sector experts to identify, develop and finance energy efficiency investment projects for submission to the Fund Manager. The project will also work with national administrations and local authorities to introduce economic, institutional and regulatory reforms needed to support these investment proposals.

UNECE is aiming to develop an ***Action Plan on Energy Efficiency in Housing*** for the region. Its work contributes towards a better understanding of the challenges of energy efficiency in housing in the region, and how to overcome them. Some key activities that will be necessary to prompt a "green transition" in the housing sector across the region include: first and foremost - mandatory energy efficiency standards. Evidence has shown that mandatory codes achieve much greater improvements than voluntary codes. Awareness of the subject is not sufficient for voluntary codes to work and the cost premium for low energy construction is prohibitive. This transition needs financing. Thus, there is a need to develop a transparent system of subsidies, grants, loans, public investment programmes and leasing. Such instruments should be targeted at appropriate stakeholders, including owners, tenants, builders, technology producers and retailers. Similarly, there is a need for education and awareness-raising about the opportunities offered by energy efficiency in housing. An "energy aware" culture is key to spur energy conscious behaviour. And finally no one country can do this alone. Policymaking will benefit greatly if informed by wider international developments including through exchange of information and best practices. Furthermore, capacities should be established to assist the less developed countries of the ECE region with the transfer of technological and institutional know-how.