PROPOSED
CENTRAL ASIA AND CAUCASUS
DISASTER RISK MANAGEMENT INITIATIVE

Draft Concept Note for Discussion
September 2008

Background: Vulnerability of Central Asia and the Caucasus to Disasters

The region of Central Asia[1] and the Caucasus[2] (CAC) is highly vulnerable to natural disasters. Occurrence of natural hazards in all eight countries of the two sub-regions is very high – substantial parts of the territory are covered by mountains and practically all natural hazards, such as earthquakes, landslides, debris flows, avalanches, floods and droughts are present there. Earthquakes are the most dangerous of them. They destroy buildings and infrastructure and result in secondary events such as landslides, rock-falls, and avalanches. The region can provide compelling evidence for this: destructive earthquakes in Almaty (Kazakhstan, 1887, 1911), Ashgabat (Turkmenistan, 1948), Baku (Azerbaijan, 2000), Spitak (Armenia, 1989) and Tashkent (Uzbekistan, 1966), as well as a relatively smaller earthquakes such as in Gissar (Tajikistan, 1989) when most of casualties were caused by landslides, debris flows and rock-falls. In all probability, devastating earthquakes can be expected in any of the Region's countries in the future. Climate change is expected to exacerbate natural disasters associated with hydro-meteorological conditions, with associated damages particularly impacting the rural economy. The region is also exposed to a range a man-made disasters, such as industrial accidents, hazardous mine tailings entering downstream water bodies, and potential downstream impacts resulting from the operation of large water reservoirs.

Geographically and geologically, both regions are not only disaster-prone but also have limited financial resources and physical resilience. Central Asia and Caucasus governments are fiscally unprepared to deal with catastrophic losses. Disasters lead to social, economic and environmental losses. It is often the cumulative effect of high-frequency and low-impact disasters that cause most of the losses, particularly among the poorest section of the community. The social impact of disasters includes loss of livelihoods, assets (e.g. homes and livestock), infrastructure and communication, and results in discontinued development programs. Environmental losses are often the most significant, as the poor very much depend on a well functioning environment for their livelihoods. The number of affected people depends, to a large extent, on the vulnerability level of the population concerned. Disasters tend to hit the poorest in the society most. This group has little or no financial and physical resilience, and therefore, has to struggle to rebuild their lives, livelihoods and assets in the aftermath of a disaster.

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[1] For Central Asia, countries in question include Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

[2] Armenia, Azerbaijan, and Georgia

Rationale and Global Trends

The frequency, magnitude and impact of disasters are on the rise and disasters triggered by natural hazards disrupt the social, economical and environmental status of societies at different levels. The frequency and impact of disasters have been rising dramatically worldwide since the early twentieth century, and with more than 800 per cent[3] over the last 40 years. Various studies underline the fact that disasters erode gains from poverty reduction and socio-economic development. This global trend also reflects the development in Central Asia and the Caucasus and therefore disaster risk reduction must be seen as a key component of development strategies and in these countries. Moreover, climate change has globally become a threat to development and is expected to increase the severity and frequency of weather-related natural hazards such as storms, high rainfalls, melting of glaciers, floods, droughts and heat-waves. Disaster risk reduction and climate change mitigation and adaptation share a common space of concern: reducing the vulnerability of communities and achieving sustainable development.

Disaster response has traditionally been stronger in the countries of the former Soviet Union than disaster risk reduction, as all the countries of the region had disaster response committees/ministries within the governments and disaster response activities in the school curriculum during the Soviet Union era. Of most importance today is the issue of monitoring, forecasting and early-warning of natural and man-made disasters. Unfortunately, preventive measures still do not have the appropriate importance for many countries that still follow response oriented disaster reduction mechanisms. However, there seems to be a gradual shift from solely disaster response to investing in disaster risk reduction. All eight countries participated in the Second World Conference for Disaster Risk Reduction held in Kobe, Hyogo, Japan, in January 2005 and committed to take on the priorities of action outlined in the Hyogo Framework for Action: 168 governments adopted a 10-year plan to make the world safer from the impact of natural hazards. The so called Hyogo Framework for Action (HFA) is a global blueprint for disaster risk reduction efforts over the next decade. Its goal is to reduce disaster losses, i.e., human, social, economic, and environmental assets of communities and countries, by year 2015.

Objectives

Within the context of the Global Facility for Disaster Risk Reduction (GFDRR), the World Bank and the UN/ISDR secretariat in collaboration with international partners has initiated a *Central Asia and Caucasus Disaster Risk Management Initiative (CAC DRMI)* which is in line with the Hyogo Framework for Action and aims at reducing the vulnerability of the countries of Central Asia and Caucasus to the risks of disasters. The CAC DRMI incorporates three focus areas, with the possibility to include new activities: (i) coordination of disaster mitigation, preparedness, and response; (ii) financing of disaster losses, reconstruction and recovery, and disaster risk transfer instruments such as catastrophe

[3] Sources: 2005 NatCat*SERVICE*, Geo Risks Research, Munich Re, EM-DAT: The OFDA/CRED International Disaster Database. http://www.em-dat.net, UCL - Brussels, Belgium

insurance and weather derivatives, and (iii) hydro-meteorological forecasting, data sharing and early warning.

This Initiative would form the foundation for regional and country specific investment priorities (projects) in the area of early warning, disaster risk reduction and financing. While the initiative would initially focus on on-structural measures, it could in a subsequent phase support structural investments aimed at protecting assets, lives and livelihood of communities in disaster-prone areas. Funds could also be provided for adaptation to climate change and streamlining adaptation activities into countries' development programs. It is also hoped that disaster risk management activities might provide new perspectives for constructive dialogue between the Region's countries, by focusing on shared concerns and interests.

Partners

The initiative would be coordinated by World Bank, the UN International Strategy for Disaster Reduction (UN/ISDR) secretariat, and (for hydromet) the World Meteorological Organisation (WMO), under the CAREC umbrella. It would be financed by the Global Facility for Disaster Reduction and Recovery (GFDRR) and other interested donors. The Initiative will build on the existing cooperation that already exists in the region, and will complement and consolidate activities of the International Finance Institutions (IFIs), the EU, the Council of Europe, the UN (notably UNDP, the UN Office for the Coordination of Humanitarian Affairs (OCHA) and UNICEF), regional cooperation institutions such as the Economic Cooperation Organization (ECO), bilateral donors such as the Swiss Development Cooperation (SDC), Japan International Cooperation Agency (JICA), and others to promote more effective disaster mitigation, preparedness and response.

Key Activities

The CAC Disaster Risk Management Initiatives includes three main components as per below. These initial components might be updated accordingly based on an initial a desk review risk assessment that will cover the main risks faced by the countries of the region.

<u>Part I: Disaster Mitigation, Preparedness and Response.</u>

The objective of this component is to strengthen the capacity and promote a coordinated approach to disaster preparedness and response in Central Asia and Caucasus. This will include: (i) assessment of the risks of each member state and common vulnerabilities; and (ii) assessment of existing capacities; and (iii) identification of needs, means of cooperation, and investment priorities to promote preparedness and to upgrade emergency response capabilities. This Initiative will build on and amplify the existing initiatives on disaster mitigation, preparedness and prevention which were launched through the World Bank, CAREC, the DIPECHO program in Central Asia, Asian Development Bank, SDC, UN/ISDR, UNICEF and other actors. The goal is to work through these existing partnerships to identify the opportunities and any gaps, and work together towards filling these gaps.

Initial Studies and Timeframe: Desk review risk assessment is expected to be completed around April 2009 and to be presented to a high-level regional meeting to be held in April/May 2009. This meeting will be held in connection with the CAREC Senior Officials Meeting (SOM) in the spring of 2009. Agreements will be sought then on the prioritization of the next steps, including the in-depth assessment of regional cooperation in disaster mitigation and preparedness, and country specific needs assessments.

Part II: Disaster Financing and Risk Transfer.

The objectives of this component is to assist the Region's countries in developing disaster risk financing (both for public infrastructure and private properties) and risk transfer mechanisms (such as catastrophe insurance and weather derivatives) to reduce the burden on government budgets and on the population's assets, and promote the development of affordable insurance to cover losses, especially in rural areas. Despite the formally available insurance systems, populations of the region are hardly covered by insurance and have to cope with the consequences of disasters on their own. Along with other initiatives, the assessment should look for a powerful instrument for the protection of population's assets, especially in rural areas. The insurance system, guaranteed and supported by strong legislation would eventually contribute to the reduction of vulnerability and thus to poverty reduction.

Initial Studies and Timeframe: A disaster financing and risk transfer study will be undertaken in two stages. Stage one will include assessment of the current policies, strengths, weaknesses, opportunities, and options for reforms. It would include in particular an assessment of: (i) disaster risks for each country in terms of financial losses, (ii) current practices to finance damages resulting from disasters and the adequacy of these practices in terms of government financial capacity, (ii) the state of the current private insurance market in providing catastrophe insurance, and (iv) the viability of creating a regional disaster insurance mechanism through risk pooling that will result in diversification of risks and reduced insurance premiums. This phase is expected to be completed in April 2009. Consultation with all concerned parties will be undertaken between January and March 2009 to identify the pros and cons for various options and most feasible options. A more detailed assessment of the chosen options, including detailed design of any potential regional risk insurance pool, would be undertaken after the CAREC Senior Officials Meeting (SOM) in the spring of 2009.

Part III: Hydromet.

The objective of the component is to strengthen hydromet services, data sharing and early warning system in Central Asia and Caucasus. This will be achieved through: (i) undertaking feasibility assessment of the existing capacity and data sharing procedures; and (ii) identifying the needs, both in capacity terms as well as equipment and facilities. The feasibility assessment will include: (a) identifying the economic benefits that could be achieved by an enhancement in weather forecasting, particularly of severe events; and (b) identifying the capacity of the agencies to undertake forecasting required to achieve these benefits, considering the current level of data available from other countries in the sub-region and aiming to identify key gaps in data gathering/sharing. Once this is completed, regional and country specific investments priorities can be identified, to enable the establishment of modern, sustainable and coordinated weather forecasting in Central Asia and Caucasus.

Initial Studies and Timeframe: A feasibility assessment of the existing capacity and data sharing procedures will be undertaken by (i) identifying the economic benefits that could be achieved by an enhancement in weather forecasting, particularly of severe events, and (ii) identifying the capacity of the agencies to undertake forecasting required to achieve these benefits, considering the current level of data available from other countries in the sub-region and aiming to identify key gaps in data gathering/sharing. In addition, an identification of needs will be carried out, both in capacity terms as well as equipment and facilities. The cost-effectiveness study as well as the capacity assessment is expected to be completed around April 2009 [to confirm]. Specifications for the regional and country investments would also be developed. The main partner for this component will be the World Meteorological Organisation (WMO). Also, contribution from the EU and other partners will be sought in the coming months.

The findings and information collected while exploring the different components of the highlighted above, will allow the development of the Central Asia and Caucasus Disaster Risk Management Programme.