

Meeting on Disaster Reduction for the Caucasus and Central Asia

Promotion of Total Disaster Risk Management (TDRM) for Sustainable Development – A Proposed Programme for Caucasus and Central Asia –

Background

The Caucasus consists of three countries, Republic of Armenia, Republic of Azerbaijan, and Georgia, and is situated on the west of the Caucasian mountain range. The region of the Caucasus lies between the Black Sea to the west and the Caspian Sea to the east and its neighboring countries include: Republic of Turkey to the southwest, Russian Federation to the north, and Islamic Republic of Iran to the southeast. The region is prone to most natural disasters such as earthquakes, floods, landslides, rock falls, mudflows, lightning, hail, volcanic eruption, and forest fires. The Caucasus is one of the most active segments of the Alpine-Himalayan seismic belt. At the same time, it is a collision zone between the Arabian and Eurasian and, therefore, is associated with intense earthquake activities in the region. The Spitak Earthquake of 1988, which took lives of at least 25,000 people and destroyed two cities, Spitak and Leninakan (present Gumri), represents recent major earthquakes in the region. The Spitak Earthquake, despite the negative impacts caused, contributed in raising awareness of the people in Armenia and surrounding countries as well as of the governments to pay more attention to reduce seismic risk and to protect people from earthquakes disasters.

Central Asia consists of five countries, Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, and Republic of Uzbekistan, and is situated on the east of the Caspian Sea. Its neighboring countries include: Islamic Republic of Iran to the southwest, Afghanistan and Islamic Republic of Pakistan to the south, People's Republic of China to the southeast, Russian Federation to the north. The countries in the sub-region are also prone to most natural disasters such as earthquakes, floods, avalanches, landslides, rock falls, mudflows, forest fires, outbursts of glacier lakes, and droughts. Major earthquakes in Central Asia can be represented by the 1948 earthquake in Ashkabad (Turkmenistan) and the 1966 earthquake in Tashkent (Uzbekistan), or the 1998 earthquake in Tahar, Afghanistan which affected the people and villages in Uzbekistan as well. The Lake Sarez in Tajikistan was created by a landslide, triggered by a strong earthquake typical of this region, which blocked the valley of the Bartang River. The lake has been a threat to millions of people in the river basin. The Tien Shan mountain range (highest peak at 7439m), which lies in the southern part of Central Asia, holds many glacier lakes, some of which from time to time cause an outburst of water that could lead to major flashfloods or mudflows.

Collaboration exists among the countries in Caucasus and Central Asia. However, it is necessary to further promote the exchange of information and expertise, to enhance capacity of the governments and communities to cope with disasters, and to drastically reduce disaster risk in Caucasus and Central Asia by strengthening cooperation. Especially, neighboring states need to cooperate in forecasting, early warning and capacity building.

Rationnale

Total Disaster Risk Management (TDRM) is a comprehensive approach that embraces all the phases of disaster management cycle, the enormity of the disaster problem today and in the foreseeable future calls for a more proactive approach that ensures effective disaster reduction at all levels towards sustainable development. The Asian Disaster Reduction Center and the United Nations Office for the Coordination of Humanitarian Affairs – Asian Disaster Reduction Unit (OCHA-Kobe) jointly developed TDRM through a series of consultative forums and workshops in the Asian region, in collaboration with major partners in Asia such as the UNDP Regional Disaster Reduction Advisors in Asia and the Asian Disaster Preparedness Center (ADPC).

TDRM builds on the gains of IDNDR and ISDR, and other relevant endeavors. It integrates and complements existing knowledge and techniques on disaster reduction and risk management. Moreover, TDRM promotes effective integration of stakeholders' action and facilitates broad-based participation in policy and programme development in disaster reduction and response as they relate with other development concerns, such as poverty reduction, land use planning, environmental protection, and social security, among others. Through the strengthened cooperation, collaboration and networking among governments, non-governmental organizations, international and regional organizations, and other critical sectors, including the private sector, academia and media, TDRM is expected to become an important strategy for effective disaster reduction and response in the region. TDRM shares the similar concept and approach developed and promoted in other regions such as CHARM by SOPAC in the Pacific and CDM by CDERA in the Caribbean.

ADRC, ISDR and UNESCO, in collaboration with partners such as the International Institute of Earthquake Engineering and Seismology (IIEES) and Asian Seismological Commission (ASC), are currently developing a programme for Caucasus and Central Asia in disaster reduction with an aim to contribute to sustainable development through applying the TDRM approach to the local context. Governments, academic institutions, NGOs, and the private sector of Caucasus and Central Asia are invited to join.

A network of disaster managers and experts will be developed to discuss, whenever possible (mainly by e-mail), how to enhance the awareness and capacity in disaster reduction among various sectors of the society and how to integrate TDRM into the national planning and development process in Caucasus and Central Asia. On the occasion of the International Conference on Total Disaster Risk Management which is organized in Kobe, a special meeting on DISASTER REDUCTION for CAUCASUS and CENTRAL ASIA will be held to launch the proposed network and initiative for Total Disaster Risk Management (TDRM) for Sustainable Development of the two regions. The participants in this meeting to be held on 3 December 2003 at 18:30-20:30 at Portopia Hotel will be part of the network.

Meeting on Disaster Reduction for Caucasus and Central Asia

3 December 2003, Kobe, Japan
(18:30-20:30, Room Matsu, Portopia Hotel)

Participants:

- Disaster managers and experts from Caucasus and Central Asia
- Disaster reduction experts interested in Caucasus and Central Asia
- Organizations interested in promoting disaster reduction activities in the regions

Objectives of the meeting:

1. To introduce the basic concept of TDRM to be promoted in the Caucasus and Central Asia.
2. To discuss how better to apply TDRM in the Caucasus and Central Asia and how ADRC, ISDR and UNESCO could encourage the process.
3. To establish a collaborative network of participants from the Caucasus and Central Asia and of those interested in the region for information sharing.

Agenda:

18:30-18:45 Opening by the organizers

18:45-19:10 Self introduction

19:10-20:20 Discussion

The discussion was focused on the following issues.

- 1) What are the current trends and impact of disasters in your country?
- 2) What are the major obstacles and major challenges in disaster management based on your experience?
- 3) How can we apply TDRM with the context of the Caucasus and Central Asia?
- 4) What are the concrete actions that we should take after this meeting for the adaptation of TDRM in the Caucasus and Central Asia?

20:20-20:30 Conclusions

Languages:

The session was conducted in Russian, Japanese, and English.

Session Outline

A frank and constructive discussion was conducted among the participants throughout the session.

Mr. Satoru NISHIKAWA, Executive Director of ADRC, welcomed the participants and invited them to contribute to the discussion on the needs and opportunities of introducing the TDRM approach in dealing with the problems of disaster risk reduction and emergency response planning in the Caucasus and Central Asia. He talked about the possibilities of promoting TDRM as a tool to deal with disasters in a comprehensive or holistic way and a key to disaster reduction in the countries of the region.

Dr. Feng Min KAN, Senior Regional Officer, Nairobi, ISDR, talked on the adaptation of TDRM to the regional context, and reminded the participants of the 3 elements of TDRM, notably, 1) multidisciplinary collaboration, 2) necessity to create enabling mechanism, in terms of policies and organizational structure in each participating country, and 3) sustainability of efforts. She pointed out the needs to create a) a basis for south-south collaboration, to set up national platforms in each participating country, and b) the necessity to put emphasis not on the amount of money, but on the creation of the appropriate will and attitude towards TDRM.

Dr. Badaoui ROUHBAN, Chief of Section, Disaster Reduction, UNESCO, informed the participants that UNESCO is always ready to serve the interest of the participating countries and would address all concerns in its fields of competence. He also reminded them that each individual has an important role to play as many of the UNESCO programmes were initiated by individuals. He said, "One plus one is always greater than two". Hence, it is necessary to develop a network so as to create a possibility of learning from one another and to develop synergy among the countries in the region.

A round of self-introduction followed the opening remarks. Then, each country representative made a report on the status of disaster management in their respective problems. The following framework was chosen:

- Current trends and impact of disasters in each country
- Major obstacles and major challenges in disaster management based on the experience of the participant
- Possible ways to apply TDRM with the context of the Caucasus and Central Asia
- Concrete actions that should be taken after this meeting for the adaptation of TDRM in the Caucasus and Central Asia

The following tables capture the major points presented by the country representatives. Table 1 presents a summary of natural and technological hazards faced by the countries, and Table 2 discusses the major obstacles for effective disaster risk management.

Table 1: Types of natural and man-made disasters faced by the countries

Country	Types of Disasters										
	EQ	Flood	LS	DF	AV	GLOF	DT	HS	VOLC	TD	ED
Armenia	√	√	√	√				√			
Azerbaijan	√	√	√	√	√				√	√	√
Georgia	√	√	√					√			
Tajikistan	√	√	√	√	√	√	√				
Uzbekistan	√	√	√	√	√	√	√			√	√

Note: EQ=earthquake, LS=Landslide, DF=Debris Flow, AV=Avalanche, GLOF= Glacier Lakes Outburst Flood, DT=Drought, HS=Hailstorm, VOLC=Volcanic Eruption, TD=Technological Disaster, ED=Environmental Disaster

Table 2: Major obstacles identified

Country	Major Obstacles to Effective TDRM
Armenia	<ul style="list-style-type: none"> ❖ Lack of preparedness ❖ Lack of financial resources ❖ Lack of experience in risk reduction ❖ Passive approach of the government ❖ Not enough knowledge about the risk ❖ No advocacy group ❖ Lack of international cooperation
Azerbaijan	<ul style="list-style-type: none"> ❖ Problems are similar to other countries in the region ❖ Problem with government system ❖ Need for monitoring network ❖ Not appropriate arrangements with equipment (instruments are not in good shape) ❖ Lack of financial resources ❖ Russia provided assistance worth \$ 1.5 million which helped solve 20 % of the problems; however, 80% of the problems of disaster management still remain unattended ❖ There are 1 million refugees from the neighboring country
Georgia	<ul style="list-style-type: none"> ❖ Lack of capacity of the government ❖ Lack of active interagency government organization for systematic standing ❖ Forms on post-disaster ❖ Lack of preparedness and mitigation effort ❖ Lack of financial resources for effective and swift disaster response
Tajikistan	<ul style="list-style-type: none"> ❖ Lack of power and coordination of the government ❖ Bad situation of communication in remote areas due to malfunctioning of equipment (communication is very important) ❖ Lack of energy ❖ Lack of coordination among the central and local governments and donors
Uzbekistan	<ul style="list-style-type: none"> ❖ Lack of instruments, equipment, and special outfit ❖ Lack of financial resources ❖ Mitigation/preparedness should enable better relief, early warning, and reconstruction ❖ Not enough school programmes ❖ Early warning system lacking for GLOF ❖ Lack of monitoring for disaster mitigation ❖ Need for international cooperation

Possible ways to apply TDRM with the context of the Caucasus and Central Asia

It was discussed that lack of awareness and preparedness is a common problem in the Caucasus and Central Asia. In order to raise awareness of societies and communities, the adoption of TDRM, taking the local context into consideration, would be the key. Another problem shared in the region seems to be lack of coordination mechanism and enabling instruments at different levels, for which TDRM advocates. A need for the enhancement of collaboration among all sectors and disciplines was also stressed. However, not many concrete measures to apply TDRM in the regional and local context were proposed during the meeting. This would be the area that needs to be further discussed. ISDR, UNESCO and ADRC would be able to assist in this area. Recognizing the problems is a starting point of implementing TDRM. It would be important to further discuss among concerned bodies to find the best way in each country to introduce and adapt TDRM in the pursuit of sustainable development of the region.

Concrete actions that should be taken after this meeting for the adaptation of TDRM in the Caucasus and Central Asia

The following table shows the important issues pointed out by the country representatives.

Table 3: Actions to be taken for the adaptation of TDRM in the regional context

Country	
Armenia	<ul style="list-style-type: none"> ❖ Develop reliable hazard maps (include the use of GIS) ❖ Organize training courses for communities using TDRM materials ❖ Distribute TDRM materials to local organizations ❖ Establish cooperation with neighboring countries
Azerbaijan	<ul style="list-style-type: none"> ❖ Establish cooperative relationship ❖ Develop monitoring networks ❖ Develop effective early warning systems ❖ Create an expert group to identify what needs to be incorporated in the national plan
Georgia	<ul style="list-style-type: none"> ❖ Establish a regional center which includes a pool of instruments ❖ Prepare integrated natural and man-made disaster maps on GIS ❖ Elaborate policy and legislation ❖ Develop a unified plan for emergency situation management ❖ Develop a unified communication system ❖ Develop manuals, TV programmes, school programmes ❖ Equip rescue teams with modern equipment and provide training
Tajikistan	<ul style="list-style-type: none"> ❖ Promote collaboration ❖ Use ADRC database ❖ Establish a data center ❖ Develop a disaster reduction strategy ❖ Introduce TDRM to state bodies and organizations in the region and to donors ❖ Seek funding
Uzbekistan	<ul style="list-style-type: none"> ❖ Promote collaboration in early warning, emergency response, etc. ❖ Establish good monitoring systems ❖ Develop good communication systems ❖ Organize training workshops for the region ❖ Develop working groups ❖ Define terms and create standards for the region ❖ Develop training and educational programmes ❖ Stimulate funding for disaster reduction

Mr. Amod DIXIT, Executive Director and General Secretary, National Society for Earthquake Technology - Nepal (NSET), mentioned that sharing of experience is vital for effective disaster reduction. The same feeling on the need for fostering cooperation was expressed in November 2002 during the General Assembly of the Asian Seismological Commission (ASC) in Kathmandu by delegates from Central Asia and the Caucasus. From his experience in Central Asia, Mr. DIXIT commented that the countries in the region are advanced in scientific researches but adaptation needs to be further developed. He expressed his willingness to share knowledge and expertise that they have in Nepal with the region.

Mr. Anil SINHA, Disaster Management Consultant and the former executive director of the National Center for disaster Management of India, suggested that an inventory of SWOT (Strength, Weakness, Opportunity, and Threat) should be developed and that an analysis of SWOT should be done in each country. He pointed out that much needs to be done but he also sees that a large amount of opportunity exists to work together and develop cooperation in the field.

Mr. Takashi ITO, Director, Programme Division, JICA Hyogo Center, stressed the need to continue this kind of dialogue to develop effective disaster reduction activities. JICA would be ready to provide training programmes for the Caucasus and Central Asia in cooperation with ADRC. The first training workshop will be held in May/June 2004 in Kobe, which will be conducted in Russian.

Conclusions

Mr. Satoru NISHIKAWA seconded the comment made by Mr. ITO and confirmed that ADRC will develop the training programme for the JICA course which will take place in May/June 2004, taking into consideration what has been discussed during the meeting. He also said that high-level government officials will be invited for the three-week training course. It was asked that the opportunity be used to learn and implement TDRM in the respective countries. Mr. NISHIKAWA took the opportunity to inform the participant that the UN World Conference on Disaster Reduction will be held in January 2005 in Kobe, Hyogo and that the ISDR Secretariat would be contacting each country in this regard. The Conference would provide a platform to discuss and identify concrete actions to take in the future.

Dr. Feng Min KAN, asked the participants to think how to develop cooperation as well as how to participate in the World Conference on Disaster Reduction. She was commissioned by Mr. Salvano BRICENO, Director, ISDR Secretariat, to discuss with the participants to learn how to develop cooperation in disaster reduction and how the participating countries would take part in the World Conference. She said that she learned much from the discussion and will continue consultation with the countries and relevant organizations on the subject.

Dr. Badaoui ROUHBAN endorsed the JICA/ADRC training course for the Caucasus and Central Asia to be held in May/June 2004 as well as the participation of the countries in the region in the World Conference in 2005. He pointed out the importance of developing inventory of existing needs and resources as well as the analysis of SWOT in each country and expressed his hope to mobilize funds to see these activities happen. He emphasized that the process must continue.

Participants

Armenia	Dr. Alvano Shavarsh ANTONYAN	Director, Armenian National Survey for Seismic Protection
Azerbaijan	Mr. Elchin RAHBARLI	Senior Advisor, Cabinet of Ministers, Republic of Azerbaijan
Georgia	Dr. Tamaz CHELIDZE	Director, Institute of Geophysics, Member of Georgian Academy of Sciences, Tbilissi
Tajikistan	Mr. Abdurahim RADJABOV	Ministry of Emergency Situations and Civil Defense
Tajikistan	Ms. Ekaterina Aleksandrovna KLIMENKO	Ministry of Emergency Situations and Civil Defense
Uzbekistan	Mr. Marat Ahmatovich IKRAMOV	Ministry of Emergency Situations
Nepal	Dr. Amod Mani DIXIT	Executive Director & General Secretary, National Society for Earthquake Technology - Nepal (NSET)
UNESCO	Dr. Badaoui ROUHBAN	Chief of Section, Disaster Reduction, UNESCO
UN/ISDR	Dr. Feng Min KAN	Senior Regional Officer, Nairobi
UN/ISDR	Dr. Yuichi ONO	Associate Expert
JICA	Mr. Takashi ITO	Director, Programme Division, JICA Hyogo Center
JICA	Ms. Mayumi SAKAMOTO	Training Officer, Programme Division, JICA Hyogo Center
ADRC/OCHA	Mr. Anil K. SINHA	Disaster Management Consultant
ADRC	Mr. Satoru NISHIKAWA	Executive Director
ADRC	Dr. Tetsushi KURITA	Senior Researcher
ADRC	Dr. Tomohiko HATORI	Senior Researcher
ADRC	Mr. Takuzo ISHII	Senior Researcher
ADRC	Ms. Etsuko TSUNOZAKI	Senior Researcher
ADRC	Ms. Akiko NAKAMURA	Researcher
ADRC	Mr. Shingo KOCHI	Researcher
ADRC	Dr. SriGowri SANKER	Researcher
ADRC	Ms. Maki YOSHIDA	Assistant
ADRC	Ms. Natasha PULIMAN	Interpreter