Preparing Community to emergency situations through risk culture and sustainability

DURATION: 2012

TARGET COUNTRIES: Turkey, Russian Federation, Kazakhstan

PARTNERS INVOLVED:

Coordinating Centre: ECMHT Baku, Azerbaijan

Other Centres:

Other Partners: Scientific-Research Institute of the Ministry of Ecology and Natural Resources, Academy of Emergency Situations, Seismological Service Centre of Azerbaijan National Academy of Sciences of Azerbaijan,

Azerbaijan Architecture and Construction University, "Fovgal" Association

OBJECTIVES OF THE PROJECT

Global objective for 2012-2013:

Intensified activity of the communities against emergency situations according to Hyogo program.

Specific objectives :

2012:

EXPECTED RESULTS

2012: To prevent and liquidate the results of the emergency situations that intensified year by year, to intensify responsibility of the population, local institutions and communities.

ASSOCIATED ACTIVITIES

2012: International scientific-practical conference "Increasing sustainability in the most affected regions by natural disasters, preparation the community to the emergency situations and increasing risk culture among the population".

RESULTS OBTAINED PREVIOUSLY

The report of the previous International scientific-practical conference was submitted to the Agreement on November 23, 2011.

RESULTS OBTAINED IN 2012

I. "Round table" (May 10, 2012) with the organizers of the project and experts and scholars of this sphere

During the meeting, the preparation of scientific-practical conference was discussed:

- Collection of necessary information related to the conference, specifying the conference hall for the plenary session and sections of the conference, preparation of technical equipment and organization of services to participants;
- Selection and confirmation of the plenary lectures and lecturers;
- Determination of the direction of sections and section's leaders;
- Approval of the preparation and publication of conference materials;
- Implementation of the conference through a committee (5 members) chaired by ECMHT director, prof. H.O.Ojagov. *Work rules of scientific-practical conference:* Plenary reports of conference from 10:00 to 16:00 on November 13; Section meetings on November 13, from 10:00 to 16:00. Plenary reports:
- 1. Prof. H.O. Ojagov, Director of the Centre: "The role of management and development of disaster risk reduction"
- 2. Prof. G. Yetirmishli Director of Seismological Service Center of Azerbaijan National Academy of Sciences of Azerbaijan: "The increase of seismic activity and its features"
- 3. Prof. N. Babakhanov Chief of the Department of Geography, Baku State University: "Development of the risk culture and preparation of communities to possible natural disasters"

Plenary meeting of scientific-practical conference "Increasing sustainability in the most affected regions by natural disasters, preparation the community to the emergency situations and increasing risk culture among the population" (12-13 November2012)

The meeting was opened by H.Ojagov who noted that increasing major hazards are the product of world civilization. Beginning from last century, this process had taken such a scale that the organization of the analysis of these reasons and the struggle against it internationally in each country became reality and demand of our time. Massive need for a quiet life, healthy food, pure water, clean air and clear sky are increased in social concerns day by day not only in the largest industrial centres but in the remote mountain villages too. There is no country in the world that will not face emergency situations and human losses from time to time.

The Republic of Azerbaijan is not an exception as the country is surrounded by Greater and Lesser Caucasus and considered to be the most complex regions of the world according to the intensity of the endogenous or exogenous situations. Almost the whole area of Azerbaijan is a very active seismic area. Earthquakes of magnitude 7-9, large-

scale landslides, heavy streams, floods, volcanoes, etc. cover a wide range of areas in our republic and cause great harm to the economy and losses of people. The intensity of the emergency situations is increasing year by year according to global climate change.

An increasing of seismic activity, its duration, and dramatically expanding of the coverage of it, incredibly high scale of economic damages have caused serious trouble in the country during the last decades, especially in 2012 . Taking into account we have invited well-known scientists and specialists in these areas, the representatives of the relevant ministries and other government agencies . The aim is to discuss and analyse the situations together with the reasons which depend on the nature and direct us, to elaborate appropriate recommendations, to eliminate our shortcomings in against to emergency situations, instructing of the people and to define our opportunities to prevent all these.

In the report of prof. G. Yetirmishli, the director of Seismological Service Centre of Azerbaijan National Academy of Sciences of Azerbaijan was noted that an increase of seismic activity on Earth is connected with globalization in the world and he added that the human factor plays an important role in global climate changes.

The seismic processes in the world differ with the covering of wide areas. For example, the earthquake measuring 7.0 on the Richter scale, occurred in Agdash region ,on June 4, 2009 was covered large area - Oguz, Gabala, Kurdamir, Zardab, Goychay, Ujar and Yevlakh regions (6 magnitude) and 5.0-magnitude covered the cities of Ganja and Mingechevir.

The earthquake occurred on May 7, 2012 started from Zagatala, north-west region of Azerbaijan and covered Balakan, Gakh, Sheki, Tovuz, Ismayilli and Gabala regions with various intervals and was lasted more than 10 days. Residential houses, social facilities and a number of schools damaged as a result of the earthquake. Only in Zagatala region over 500 residential buildings were destroyed, 5807 houses and 166 social facilities seriously damaged and suffered heavy losses in the neighbourhood of Balaken and Gakh regions. Only for people who have lost its properties in Zagatala, 20 million manats (€) were allocated for the construction and rehabilitation of buildings in there.

Such earthquakes covering an area of 100 km are the abnormal events of globalization. The main reason of the destruction scale of earthquakes is the human factor. There is no need to apply experience of the world to compare. It is enough to look at the results of the earthquake occurred of same magnitude (7.0 magnitude) in Baku in 2012. There were no serious damages and no losses, only cracks in some of the old buildings.

The reporter noted that 9 seismic stations and one geophysical station was installed in the Zagatala region to determine seismic process and to evaluate the changes of the intensity state of geomagnetic fields. These systems are the most advanced devices made in the USA. The exact observed information transferred to Seismological Service Center of Azerbaijan in Baku within few seconds.

At the conference, it was noted that, importance of evaluation of the human factor should not be forgotten as the reasons of the damage besides occurrence reasons of the emergency situations. The human factor can be divided into 2 parts.

- I. Human nature: the general development of society as a result of the rapid increase in world population and the urbanization, global climate change, etc.
- II. Neglected in our daily life, negligence: not taking into account the sustainability of buildings and facilities during construction, not paying attention to the rules of normal use of land and water, not taken preventive measures against natural disasters and so on.

Neron Babakhanov, the professor of the Geography Department of Baku State University gave a critical analysis of natural disasters and struggle against them in our country and in the world in recent years. He was noted that the human factor plays great role in occurrence of floods, streams, landslides, forest- field fires, especially in large-scale destruction.

In this case, the anomalous warming in 2010, at the same time strong floods and landslides as a result of heavy rains in the mountainous areas, overflow of the country's largest rivers Kur and Araz basin committed an unprecedented destruction.

In conclusion, southern areas of Kura River ,especially in Sabirabat, Saatli, Imishli, Salyan districts, the areas where Kura receives with the Araz river was a great destruction dozens of towns, villages remained under the water,7500 families become homeless and lost all their properties.

Large-scale floods, landslides and soil flooding caused major losses of the population and inflict damages to the economy of the country. It is impossible to determine the exact extent of this damage.

It is enough one fact that 100 million state funds were spent for the restoration of the destructions in the large areas, construction of new settlements and providing people who lost all their properties with all residential means, foods and water. This process is still going on.

Following natural events happened in the country on decades, scientist came to the conclusion that such claims can be expressed in compact form:

- 1. Not taken into account suspected natural events on the construction of the building and all other construction work.
- 2. Indifferent attitude to the necessary preventive measures in disaster zones.
- 3. The lack of strict control on the implementation of rules centralized by the government on use of the soil, water, forests and selection of settlements

Scientific-practical conference materials were systematized, edited and published. Books (conference materials) after publishing will be first distributed to the emergency commissions and municipal organizations of the more affected regions by natural disasters.

13 November 2012.

Scientific-practical conference continued its work on the 4 sections from 10:00 to 16:00

Sections and section leaders

I Section - "Improvement of the management of disaster risk reduction"

Chair of the Section: senior lecturer G. Hacımatov

II Section - "Preparation to the suspected natural disasters- improvement of the risk culture"

Chair of the Section: senior lecturer Sh. Danyalov

 $\overline{\text{III Section - "Migration of population from destroyed places as the result of natural disaster to hazardous areas as the permanent residences"$

Head of the Section : the expert of the Ministry of Emergency Situations, K. Bagirov

18 representatives took part in discussions on the reports and a recommendation was unanimously adopted.

Recommendation of the scientific-practical conference

Strengthening material and potential base of the struggle system with emergency situations in our country the last decade, an exemplary observation and timely warning organization, reconstruction of Seismological Service Center of Azerbaijan National Science Academy in accordance with modern technical standards, measures, such as widening The Ministry of Ecology and Natural Resources' metrological centre network, starting from the peaks and covering all the territory was highly appreciated by the participants. They noticed minimization of human loss as a result of natural disasters and appropriate offers put forward for realization of necessary measures in this direction:

- Analysis of destruction left behind during emergency situations shows that, the great deal of them occurs mainly due to the human factor. Not taking into account probable natural disasters, not redeeming construction rules, disruption of regulatory rules in construction and use of water, gas, heating, and ventilation systems became common in activity of corresponding organizations. Participants noticed importance of state control on this field.
- The state care to the struggle against intensified natural disasters year by year was highly appreciated. They noticed the importance of involvement of municipalities, private business owners, farmers, business people to the struggle and its legalization by appropriate state orders. One of the points of concern was the non-recognized reconstruction of individual and social buildings at the expense of the state collapsed during the emergency situations and spending millions of manats on it. Although we expressed our comments during our scientific-practical conference last year, the situation remains the same. 20 million has been allocated from the president's reserve fund for reconstruction and removal the results of the Zaqatala earthquake in May of 2012. If continue so we will not be able to achieve insurance of individual properties widely used in the world practice, liability of organizations or persons responsible for sustainability of the facilities for public buildings destruction.
- One of the most important and discussed problem in the conference was the preparation of population to the struggle against the emergency situations and protection from them. Failure to comply with safety regulations brings to damages and losses during emergency situations even human losses. All this requires an increased attention to the development of preparation population to the safety. For this purpose short-term training courses must be organized to train people in regions, free guide books must be prepared and spread, mass media, especially opportunities of TV programs must be used. The active participation of Academy of MES and "Emergency" Association must be noticed especially.
- There were large discussions around the links between global climate changes and emergency situations in lectures and speeches. The involvement of qualified scientists and relevant scientific research institutes for detailed study of the main reasons of these events, and was stressed the allocation of sufficient resources effectiveness to this area.