Surviving Disasters: a pocket guide for citizens

DURATION: 2012 – 2013

TARGET COUNTRIES : Algeria, Azerbaijan, Belgium, Bulgaria, Cyprus, France, Georgia, Germany, Greece, San Marino, Luxemburg, Italy, Malta, Armenia, Moldova, Ukraine, Morocco, Portugal, Romania, Russian Federation, France, Macedonia, Spain, Turkey

PARTNERS INVOLVED :
Coordinating Centre: CEMEC San Marino
Other Centres: TESEC Kiev, Ukraine; GHHD Tbilisi, Georgia; ECRM Yerevan, Armenia ; CUEBC Ravello, Italy

OBJECTIVES OF THE PROJECT

Global objective for 2012-2013 :
Produce and circulate an handbook on emergencies including basic vital information about the main natural and technological hazards

Specific yearly objectives :
2012 :
Publishing English and French versions on the BeSafeNet web site.
2013 :
Publishing multilingual version on the BeSafeNet web site.

EXPECTED RESULTS

2012 :
Publishing English and French versions on the BeSafeNet web site
2013 :
Publishing multilingual version on the BeSafeNet web site.

RESULTS OBTAINED IN 2012

Work package 1 (prepared by CEMEC, TESEC):

Description:
Hazards list definition and Task 1 action plan

The set of hazards already addressed is:
1.1 Urban Fires
1.2 Bushfires
1.3 Earthquake
1.4 Landslides
1.5 Slips
1.6 Floods
1.7 Toxic Gases Incidents and Leaks
1.8 CBRN events
Tsunami, Hurricanes and tornadoes, Extreme cold and Extreme heat will be dealt with in 2013.

TESEC
Being aware of possible natural and technological risks is vital for general population potentially involved in disasters. Although public awareness initiatives about disasters and major risks have been carried out in several countries, knowledge about safety measures, first aid and prevention is still lacking or insufficient. In addition, information material currently available has been produced by local agencies and institutions without taking into account additional and different expertise provided at an international level.
The SurvDis project will produce and circulate a handbook on emergencies including basic vital information about the main natural and technological hazards.
In 2012 the local knowledge (civil protection, civil defence) about already existing handbooks and guidelines has been collected and analysed. Proposals for English version have been prepared.

Work package 2 (prepared by CEMEC, GHHD):

Description:
Gathering local knowledge

Active discussions have been carried out among participating centres both by e-mail and face-to-face.
Participating centres have agreed about three major points:

- Basic information and advices for population in case of disaster can be shared among different European countries.
- Further (more detailed) information and advices for population in case of disaster must be tailored on local realities, laws and legislations.
- Both basic and detailed information for population must be provided in general terms and should not be considered as alternative or substitution of local procedures and protocols.

GHHD

Georgia is prone to all catastrophes, characteristic for mountainous countries (1-12). In the last two decades occurred the following large-scale natural disasters: avalanches in North Georgia, landslides in a mountainous Achara and Racha, flash floods, hurricanes and drought in the West and East Georgia, Racha earthquake of 1991 and Tbilisi Earthquake of 2002. These phenomena are very special both from ecological and from social-economical points of view. By the index of disaster risk obtained by UNDP, Georgia relates to the countries with medium and high level risk. So the natural disasters in Georgia have to be considered as a standing negative factor for the development process of the country. Such approach implies necessity of more active actions to reduce the risk of natural disasters by all possible means at each level to maintain the sustainable economic development of the country.

It is known that Georgia experienced significant losses, due to following natural hazards: earthquakes, landslides, debris flows, avalanches, floods and flash floods, hurricanes, droughts, hail storms.

Average annual economic losses in Georgia: 84% of economic losses come from EQ-s (Push, 2004).
During the soviet time, some handbooks and guidelines, prepared by Institute of Geophysics, Seismic Survey of Georgia and Emergency Department of Ministry of Internal Affairs were issued in Georgia. Significant errors in economic loss assessment by some sources have been discovered.

Earthquakes.

Earthquakes are the most destructive natural events in Georgia. The total economic losses from earthquakes in 1990-2010 years are of the order of 10 billion USD (not 350 USD as erroneously is assessed in (6)). The map of probabilistic seismic hazards for territory of Georgia (for the 2% probability of exceedance in 50 years), accepted as an official document in national building codes is shown in Fig. 3. It is evident that almost whole Georgia, including capital city Tbilisi is prone to Intensity shaking I = 8 and almost 50% - to Intensity I = 9 , which means that population should have a basic knowledge on surviving in case of strong EQ.

Landslides, debris flows

Up to now around 53,000 landslide phenomena and around 3,000 mudflows susceptible water channels and processes have been recorded in the territory of Georgia, where around 3,000 settlement units are considered to be at substantial risk of hazards. Since 1968 he human loss due to these geological disasters exceeded 1000. From 1995 to 2010 occur 5700 landslide events, which caused 39 human losses; corresponding numbers for mudflow events in the same time period are 2016 and 49. The total economic losses from both landslides and mudflows in this period amounts to 650 USD. Fig. 4, 5 present landslide and mudflow hazard for Georgia (http://drm.cenn.org).

Floods and flash floods

The territory of Georgia is characterized by floods and flash floods (Fig. 7). In total, from 1995 t0 2010 there were documented 164 floods/flash floods which caused 270 million USD losses and 24 causalities.

Hurricanes

A map of observed hurricanes in Georgia is presented.

Droughts

In Georgia, drought damages arid, semi-arid and semi-humid lands as the phase of increased consumption of water by plants does not coincide with the phase of increased precipitation. Major recurrence of droughts is observed during July-August in Eastern Georgia, while in western Georgia the same happens during April-May. Days are deemed droughty when the precipitation is less than 5 mm, the relative humidity is less than 30% and the average temperature is more than 25°C. The quality of aridity has been defined on the basis of the difference between the precipitation and water-consumption by plants and the index of humidity within the plant vegetation period (April-September) (NEA).

Hail Storms

In Georgia, hailstorms are observed on a seasonal basis throughout the entire territory of the country. Their intensity and frequency is extremely high in Eastern Georgia. From 5 to 15 cases of this event are annually recorded in Georgia, as a result of which, from 0.7% to 8.0% of agricultural land is destroyed. The years of 1983, 1987, 1993 and 1997 have been notable for the extreme frequency and intensity of hailstorms. According to incomplete data, the damage to the Country caused by hailstorms over the last 13 years exceeds GEL 140 million.

SOS-phones, which you need in case of emergency in Georgia (country code +995 32)

Fire emergency	011
Police	022
Ambulance	- 033
Gas emergency	04
Emergency Management Department, Ministry of Internal Affairs	2411852
Water emergency	2931111
Geological disaster department, Ministry of Environment	2439547

Seismic monitoring centre 2390091

Work package 3 (prepared by CEMEC, ECRM):

Description:
Designing EUR-OPA knowledge

Active discussions have been carried out among participating centres both by e-mail and face-to-face. It has been outlined that a booklet on emergencies preparedness and management is not a news, generally speaking; nevertheless, The "Surviving disasters: a pocket guide for citizens" booklet is the EUR-OPA message and version.
Significant discussions have been carried out among participating Centres and other EUR-OPA centres as well about the appropriate ways to circulate and promote the booklet. It has been agreed to implement an electronic version of the booklet accessible by smartphones and tablets. This will allow people to know local procedures in case of disaster when travelling in Europe.

ECRM
ECRM has prepared some relevant information materials, addressing awareness rising of the population about possible natural and man- made risks. There were created information materials, containing some brief information about the most devastating natural events typical of Armenia, the Southern Caucasus region, as well as of other countries, representing partner-centres of the present Project, however alongside with other country-members of the EUR-OPA Agreement. This brief information concerns such natural events as: earthquakes, floods, landslides, mudflows, avalanches, storms, and hurricanes in line with man-made hazards such as: accidents with the involvement of chemical substances and nuclear hazard. At the same time there were designed more detailed information materials, concerning calamities being the most devastating for Armenia, such as: earthquakes, floods, chemical and radiological (nuclear) accidents.

Being more precise, the drafts of these more detailed information materials were developed by support of the EUR-OPA Major Hazards Agreement within the pilot Project: "National and Municipal Campaigns on informing and warning the population at central and municipal levels about emergencies".
In 2012 from a pilot Project there were selected, further worked out and updated three additional information Modules (brochures), assigned for the municipalities at special risks: one for the municipalities at possible radiological risk; second for the municipalities, in whose territories some hazardous substances are being produced, utilized or stored; third one for the municipalities located in flood prone vicinities (with reservoirs adjacent to an inundation area), and at last also an information Module, assigned for the municipalities situated in earthquake prone areas.

Value, usefulness and possibility for these information materials to be used at both: further working on a final variant of the joint Project: "Surviving disasters: a pocket guide for the citizens" (SurvDis), as well as while preparing, on its basis, a pocket guide for Armenia, are based on the facts that:

- information, contained in them, in full corresponds to the aim, objectives and expected results of the SurvDis project;
- these materials have been created by given the both: specifics of Armenia and rich international experience, accumulated by different countries.

These information materials have been collected through involvement of some information sources, concerning:

- hazards of natural, man-made and other nature present in the Republic, its regions and areas, where the citizens live as well as hazards typical of other partner-countries;
- the degree of vulnerability of communities and level of risks, that communities are exposed to;
- likely specific disaster scenarios ;
- mechanisms and tools, used to inform and warn the population about disasters;
- how to prepare beforehand for a likely disaster and to act adequately in times of a specific disaster;
- behaviour patterns when informed and warned about an impending disaster (in the preventive phase) and at the actual emergency situation (in the acute phase), as well as how to proceed in a recovery phase.

At this stage, the Project coordinating Centre CEMEC has sent us an English version of the above draft "Surviving disasters: a pocket guide for the citizens" (SurvDis). At present we are translating it Armenian, with further comparing it with the relevant information materials created in ECRM and available in the Republic of Armenia in the above area, will make some proposals in order to develop a final draft Project, as well to prepare, drawn on its basis, a "Pocket Guide for Armenia". Simultaneously we have submitted to the CEMEC the "BRIEF INFORMATION on information materials for AWARENESS RAISING OF THE POPULATION about possible natural and man-made risks" created by ECRM in 2012 within the framework of the Project "Surviving disasters: a pocket guide for citizens".

Work package 4 (prepared by CEMEC, CUEBC):

Description:
Implementing English and French electronic version

The Graphic Layout of the booklet has included simple comics and vignettes which visually reinforce the concepts included in the text.
The European University Centre for Cultural Heritage has been involved in CEMEC San Marino in the production of the booklet "Surviving Distaters: a pocket guide for citizens - Surviving Disaster pocket guide for citizens - Sopravvivere allle catastrofi: a vademecum per i cittadini" by ensuring the French translation by Centre staff and the revision of the text by a person whose mother tongue is French.
The English and French versions have been presented during the Meeting of the Directors of Centres held in Paris on December 4 and 5. Simplicity, immediacy, originality, legibility of the booklet have been outlined and appreciated.

Several Centres have provided availability for translation in more European Languages (Arabic, Portuguese, Spanish).

ACTIVITIES PLANNED IN 2013 ***(split by partner)***

Working package 1 (prepared by CEMEC, ECRM, TESEC, CUEBC, GHHD)*:*

Description:
Collecting partners able and willing to translate in their own native language

Associated deliverables:

Work package 2 (prepared by CEMEC, TESEC, ECRM, CUEBC, GHHD)*:*

Description:
Implementing multilingual electronic versions

Associated deliverables:

Work package 3 (prepared by CEMEC)*:*

Description:
Publishing multilingual versions on the BeSafeNet web site

Associated deliverables: