



Global Network
of Civil Society Organisations
for Disaster Reduction



Views from the Frontline 2011 (VFL 2011)

Country Report

Georgia



The Regional Environmental Centre for the South Caucasus (RECC) 2011

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DRR (Disaster Risk Reduction) - minimizing vulnerability and risk of the population towards disasters, for avoiding negative impact of the hazards (prevention) or reducing them (mitigation and preparedness), within the wider context of sustainable development.

GNDR (Global Network of Civil Society Organisations for Disaster Reduction) – is a major international network of non-governmental and not-for-profit organisations committed to working together to improve the lives of people affected by disasters world-wide. Leaders and implementers of the project “Views from the Frontline” at the global level.

HFA (Hyogo Framework for Action) – was adopted by the governments of 168 countries at a World Conference in Disaster Risk Reduction in Hyogo (Japan) in 2005. The conference focused on building resilience of nations and communities towards disasters. More detailed information can be obtained online at: <http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>.

VFL (Views from the Frontline) – is a participatory multi-stakeholder engagement process designed to monitor, review and report on critical aspects of “*local governance*” considered essential to building disaster resilient communities.

Introduction

Almost on daily basis multiple media sources broadcast information regarding natural disasters taking place in various parts of the world and their impact. Every year natural calamities claim lives of tens of thousands of people and affect 200 million people on average. Natural and man-made disasters entail socio-economic losses; threaten stability of the nations and achievement of development goals.

Having recognised the need for better preparedness and resilience of nations and communities to disasters, representatives of the world community gathered at World Conference in Disaster Reduction first in Yokohama in 1994, and later in Kobe (Hyogo, Japan) with the aim of developing joint policy and strategy. Major outcome of Hyogo Conference was the adoption of Hyogo Framework for Action 2005-2015 *Building the Resilience of Nations and Communities to Disasters*, which demonstrated international community's commitment to the substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries. To attain the defined outcomes, the Conference has adopted the following five priorities for action:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.
2. Identify, assess and monitor disaster risks and enhance early warning.
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
4. Reduce the underlying risk factors.
5. Strengthen disaster preparedness for effective response at all levels.

These set of priorities show that along with the need of adequate response to disasters, Hyogo Framework for Action (HFA) places special importance on the preventive measures aimed at disaster risk reduction, such as better management (both at national and local levels), development of the systems for monitoring disaster risks and early warning, increasing public awareness, and sustainable use of natural resources. The document places special importance on the fact that risks to disasters arise when the population is vulnerable and unprepared to natural calamities.

Regrettably, Georgia is among high risk disaster-prone countries. Annual floods, landslides and mudflows, droughts and other disasters pose risk to health and well-being of thousands of people. Only in 1995-2009 natural disasters like landslides, mudflows, floods, droughts, hurricanes, avalanches and hail resulted in the loss of lives of 134 people, and the damage incurred came to GEL 2,281 million¹. Georgia is one of 168

¹ Source: National Report on the State of the Environment of Georgia, final draft:
<http://soegeorgia.blogspot.com/>

countries which adopted HFA in 2005. Despite the fact that HFA is not a legally binding document, its adoption by the countries means that disaster risk reduction becomes a priority area for the Georgian Government, especially in terms of coordination of disaster risk reduction at the national level.

This report reflects the results of the first assessment of the implementation of the first priority of HFA at the national level. The assessment was carried out by The Global Network for Disaster Reduction (GNDR) within the framework of the *Views from the Frontline* (VFL) initiative. VFL is a process of independent monitoring of HFA implementation, which is conducted by GNDR every two years with the wide participation of interested parties.

The first chapter of the report covers information on the goals and objectives, expected outcomes and methods of the VFL.

The second chapter of the report reviews disaster risk management issues in Georgia, namely natural disasters and their impact; disaster risk management policy, legislation and responsibilities of various State agencies, state of risk assessment and international cooperation in this field.

The third chapter of the report gives analysis of the progress achieved at the local level in the implementation of the HFA. The effectiveness of disaster risk management at the local level is assessed according to 20 indicators referring to the following areas: participation of the local population, responsibilities of the local governance bodies, capacities, resource allocation, transparency, reporting, cooperation and coordination with other interested parties.

The fourth report offers specific examples to illustrate progress achieved in the disaster risk management locally and the remaining gaps.

The fifth chapter introduces conclusions and recommendations, reflecting problems encountered and successes achieved during the project implementation, as well as recommendations for supporting further progress.

I. Project 'Views from the Frontline 2011' and its Objectives

When the UN established a ten year programme for improvement of Disaster Risk Reduction (HFA) in 2005, many NGOs were concerned that the high level policy would not be matched by effective implementation at the 'frontline' in the millions of communities round the world exposed to natural disasters.

In 2007 they formed the 'Global Network for Disaster Reduction' (GNDR) based on the global platform for Disaster Risk Reduction (DRR). It is aimed at supporting effective implementation of the DRR policy at the local, national and international levels, as well as fully reflecting the needs of communities at risk in the DRR policy and practice. Currently the global network covers 300 organisations from 90 countries, including communities, national and international organisations and research institutions.

The Network's key action has been 'Views from the Frontline'- a project in which the assessments of stakeholders at the local level are gathered in order to assess their views of progress. By doing so, the project highlights the areas where more action is needed, and also builds local level partnerships between local governance bodies, civil society and communities at risk to mobilise more effective action.

In 2009 The 'Views from the Frontline' (VFL) project initiated one of the largest independent assessments which garnered participation of 400 organisations from 48 countries and of 7000 respondents from the local communities of African, Asian and South American countries. The assessment evidently revealed the fact that progress achieved in the integration and development of DRR in national policies and legislation is not yet resulting in notable changes at the local level. The most efficient DRR programmes are implemented in the countries where local governance is empowered to use the knowledge, experience and capacities of the local population and closely cooperate with the civil society and communities at risk. The assessment results had a considerable influence over the DRR Global Platform in 2009 and facilitated linking DRR policy at the international and national levels to its implementation at the local level. DRR Global Platform statement noted that it is necessary for central and local governance bodies to cooperate and partner with the civil society to provide at-risk communities with required resources.

GNDR members agreed that its focus in 2010-2011 would be local governance, which is critical to effective implementation of policy on the ground. Main outputs envisaged by VFL in 2011 were preparation of global independent review of the progress achieved in HFA implementation, baseline data and facts; improved understanding of the role and importance of local governance to support effective implementation of the HFA at the local level; and identification of obstacles to improve DRR capacities at the local level and development of the relevant recommendations. In 2011 VFL was designed to support the establishment of linkages between at-risk communities and national/international decision-makers, present evidence and create grounds for advocacy. Georgia was among 70 countries that has taken part in VFL 2011 survey. The South Caucasus Region joined

VFL at the second stage of its implementation. In Georgia implementation of VFL 2011 survey was coordinated by RECC in close collaboration with Oxfam.

At the local level (among at-risk communities), the survey was conducted by the following organisations: Caucasus Environmental NGO Network (CENN), Black Sea Eco-academy, Georgia Red Cross Society, Georgian Nature Lovers' Club, Abkhaz Intercont, CiDA. The Survey was carried out by methodology elaborated by GNDR, that included interviews with representatives of: local communities, local self-governance bodies and NGOs. Interviews had been conducted by GNDR designed questionnaire. According to the *Methodology* the obligatory number of interviewers of survey participant countries is to be minimum 200 respondents². Local communities *at high risks* under various natural disasters were selected for interviews and those representatives of local self governance bodies and NGOs that were informed and had certain experience in DRR related issues.³ Survey datum *Quantitative analyses* had been made by GNDR Secretariat and results are presented in 3rd Chapter.

The assessment covered 326 respondents in Georgia. The data regarding the respondents is given in Annex I. The survey was conducted in 8 regions of Georgia (Kakheti, Racha-Lechkhumi, Zemo Svaneti, Shida Kartli, Kvemo Kartli, Mtskheta-Mtianeti, Imereti, Ajara Autonomous Republic) and in the following municipalities: Lagodekhi, Dedoplistskaro, Kvareli, Oni, Ambrolauri, Tsageri, Mestia, Kareli, Khashuri, Tetrtskaro, Gardabani, Mtskheta, Tskaltubo, Samtredia, Khulo, Keda and Shuakhevi (total of 17 municipalities).

VFL 2011 survey was conducted only for the assessment of the progress achieved at the local level in the DRR, which is the first priority of the HFA. The progress achieved was assessed according to 20 indicators reflecting changes in the responsibilities of the local authorities, resource allocation, increased capacity, accountability and transparency, inclusion of civil society and local communities, raising awareness. Progress assessment conducted based on these indicators, which is given in the third chapter of the report, relies on the results of the assessment, as well as information provided by the local population and local governance representatives during the conducted interviews.

The results of the survey were processed by GNDR for the analysis of the current state of affairs and trends at the global level, which served as the basis for independent assessment presented at the DRR global platform in May 2011. Independent assessment of the progress achieved was conducted parallel to the preparation of the official national reports by the countries for HFA, and was focused on the progress achieved at the local level, rather than national reforms. This approach should contribute to demonstrating indigenous capacities and gaps, raising awareness on the role and importance of local governance, and enhancement of political obligations over the investments aimed at reducing disaster risks at the local level.

² Additional information on Questionnaire is available in the third Chapter.

³ FL-2011 survey detailed methodology, as well as, survey datum analysis at Global level is available at <http://www.globalnetwork-dr.org/voices-from-the-frontline-2011.html>

II. Disaster Risk Management in Georgia, Background Information

Major Disasters and Their Impact

Georgia is prone to extensive and frequent disasters, such as landslides, mudslides, intensive flooding and inundation, droughts, avalanches, strong winds, soil erosion caused by water and winds. High risk of disasters is caused by complex mountainous landscape of Georgia, as well as climate specifics. Activation of high intensity earthquakes in the Caucasus Region (Spitak in 1988, Racha-Imereti in 1991, Pasanauri-Barisakho in 1992, Tbilisi in 2002) has added to geologic hazards and gave rise to over 30 thousand landslides. The reason of increased frequency and scale of natural disasters, during the recent period, is climate change related extensive meteorological activities⁴. Since 1990-ies above-moderate activation of geologic and hydro meteorological conditions has been observed annually, while intervals between their intense demonstrations has been reduced significantly. As a result, more areas including populated territories and infrastructure fall within hazard zones. Considerable intensification of natural disasters was observed in Georgia in 2004-2005 when 1,035 settlements became at risk of geologic disasters, over 2,070 residential homes were damaged, and up to 2,674 hectares of agricultural land was flooded and devastated by landslides. As of today, hazardous geologic processes threaten over 70% of the country's territory as well as over 3,000 settlements⁵.

The data below on the number of human casualties and economic losses caused by natural disasters in Georgia in the recent years is based on the final draft of the National Report on the State of the Environment of Georgia, which was prepared by the Ministry of Environment Protection and Natural Resources in 2010⁶, as well as annual information bulletins on the impact of the development of geologic processes and forecasts (National Environment Agency of the Ministry of Environment Protection and Natural Resources).

1.5 million hectares (21.5%) of the territory of Georgia is threatened by **landslides**. The landslides have already damaged, or their activation is expected across 53 thousand landslide prone areas, which includes up to 2,000 populated settlements, and 25-30% of roads and pipelines. In 1995-2009 landslides have claimed 28 lives, while the damage amounted to GEL 895.1 million. It is noteworthy that landslides are the main cause of eco-migration. Especially extensive is the migration flow from the high mountainous areas of Ajara (Khulo, Keda, and Shuakhevi). Since 1967 around ten thousand persons have been displaced from the mentioned districts. Catastrophic landslides took place in high mountainous Ajara in 1989 which effected 5,658 families (24, 287 persons). 44 residential houses were completely wiped off and 1,152 damaged. 3,250 hectares of land became unusable for agricultural purposes.

⁴ Georgia's Second National Communication to the UNFCCC, 2009.

⁵ Information bulletin: Impact of Geologic Processes in Georgia in 2008 and Forecast for 2009, National Environmental Agency, The Ministry of Environment Protection and Natural Resources, 2009

⁶ National Report on the State of the Environment of Georgia, final draft: <http://soegeorgia.blogspot.com/>

Mudslides have been observed in up to 3,000 mudflow gorges. 2 million hectares (28,6%) of the country's territory is threatened by mudslides. Permanently at risk of mudslides is the population of the settlements located at the bottom of Kakheti Caucasian Mountain Range. This, in the first place, refers to Kvareli, followed by Racha and Zemo Svaneti settlements. During the last 100 years more than 150 persons have perished due to mudslides in the gorge of the river Duruji, and the population of the town of Kvareli suffered extensive losses. In 1995-2009 the damage caused by landslides amounted to GEL 294 million and claimed 43 lives of 43. Especially tragic was the event of glacial landslide in the gorge of the river Karmadoni in 2002, which resulted in the loss of lives of 130 people.

A landslide triggered by precipitation and intensive rainfall was especially devastating for the village of Glola and tourist base "Shovi" (Oni Municipality). In the gorge of the river Bdgviara transformed landslide destroyed more than 10 cottages of the tourist base, swept away the bridge connecting with Shovi and posed direct threat to the population of the village Glola. In a month's time it became necessary to carry out rehabilitation works again due to repeated landslide of catastrophic nature. The total damage caused by the transformed landslides only in the river Bdgviara exceeded GEL 5 million.

*Tourist center "Shovi" in the village Glola of Racha region.
Photos by **Georgia Red Cross Society**.*



Floods and inundation is characteristic of almost all the rivers in Georgia. Intensive flooding period lasts 6 months for the rivers that originate from the slopes of the Caucasus. In 1995- 2009 there were recorded 146 cases of flooding and inundation, which caused the damage of GEL 415 million and claimed 19 lives. Since 2004 floods resulting in material damage have become regular almost annually. Engineering works for fortifying the river banks are insufficient for the prevention of inundations. For example, in 2008-2010 fortification works were carried out only on 12 installations and near 54 settlements, while along the river banks in Georgia there are over 670 landslide-prone areas registered, of which 100 are considered to be extremely hazardous.

Droughts have been recorded almost over the entire territory of the country. They are especially severe in Shida and Kvemo Kartli, Kakheti, as well as Zemo Imereti. Due to climate change impact the draught disaster became notably severe for the last 50-year period. If the droughts were occurring once in 15-20 years, lately the rate has almost tripled and in 1995-2009 the time span between severe droughts has reduced to six years. In this period damage incurred by droughts reached GEL 381 million.

Over 50% of Georgia's territory is prone to avalanches. **Snow avalanches** are especially frequent in Svaneti, mountainous Ajara, Tusheti, Kazbegi and Dusheti. In 1995-2009 the damage caused by snow avalanches amounted to GEL 47.5 million and claimed 19 lives. In the recent years the winter of 1987 appeared to be most catastrophic, when the snow cover reached 3-5 meters in several villages of Svaneti. Avalanches caused by extensive snowfall damaged 2,000 residential houses, and resulted in death of 85 and evacuation of 16,000 persons from the hazard zone.

Georgia is located in the seismically active region, where there exists the probability of 7 magnitude **earthquakes** with the macro seismic effect of 9. The most extensive for Georgia was the earthquake of 29 April 1991 in Racha, where its intensity in the epicentre reached scale of 9. The earthquake claimed the lives of 200 and caused extensive destruction in Racha and Imereti. 46,000 residential houses and up to 1,000 commercial and other types of facilities were destroyed; over 100,000 persons were left homeless. The damage caused by the earthquake was estimated up to 10 milliard soviet roubles (at the rate of the year 1991). The earthquake was followed by aftershocks, which resulted in additional casualties and destruction. It is noteworthy that territories affected by the earthquake have not been restored to the present day, and not even half of the destroyed houses have been rebuilt. Following the earthquake in Racha, one stronger earthquake was recorded in Barisakho (magnitude 6.5, intensity in the epicentre – 8) in October 1992. Racha and Barisakho earthquakes gave rise to over 20 thousand **landslides and stone avalanches**, which affected up to 1,500 settlements, claimed the lives of 100 people, 332 thousand hectares of land became unsuitable for human habitation, the villages of Khasieti (Sachkhere District) and Chordi (Oni District) were covered by landslides and stone avalanches.

The table below displays data regarding the emergencies caused by natural disasters (geophysical, geologic, meteorological, and hydrological hazards and events and natural fires) in 2006-2010 and the damage incurred⁷.

Years	Number of emergency situations	Number of casualties/injured	Number of temporarily displaced	Number of buildings destroyed/damaged
2006	432	6/6		5 / 266
2007	193	3 / 461	50	2 / 127
2008	348	23 / 10	6	15 / 52
2009	192	2 / 14	0	2 / 185
2010	734	7 / 16	2871	45 / 1104

Increase in the frequency and intensity of natural disasters in the country, apart from natural causes, can be attributed to negative effect of human activities, such as mining, construction of hydrological infrastructure, cutting of forests, overgrazing, un-systemic urbanisation. The damaged resulting from natural disasters is further increased by ignoring construction standards and rules from climatic and hydrological point of view; utilization of territories without carrying out necessary assessment works. People often settle on the old landslide and mudslide prone areas, near the river banks that are subject to frequent flooding. Pictures given below illustrate such cases.

⁷ Source: web-page of the Emergency Management Department of the Ministry of Internal Affairs of Georgia <http://www.police.ge/index.php?m=277>

Population of several villages of Tskaltubo and Samtredia municipalities are under permanent hazard of flooding due to hydro power plants (HPP) constructed on the river Rioni in 1950-ies.

The construction of Gomati HPP reduced the river flow and increased sedimentation, which poses serious threat to the population of Opurchkheti and Zhoneti villages. Following the swelling of the river Rioni in 2000, part of the population of these villages is regularly flooded, damaging both residential houses and agricultural land, causing extensive material losses. School building is also at risk being fully flooded during the swelling of the river. As of now, 19 households have been re-settled from hazard areas, though 58 households remain at risk. The natural disasters have turned their houses unsuitable for habitation. Compensation offered by the State (USD 10,000 equiv. in GEL) is considered inadequate by the population. They also refused to re-settle to Ninotsminda municipality due to remoteness and radically different living conditions. Floods reduce as it is scarce agricultural land of the village, which further reduces income of the affected population.

Village Zhontei, Tskaltubo region



Population of the village of Bashi, Samtredia municipality has been threatened by floods in the last 10 years due to damaged drainage system of Vartsikhe HPP cascade. The village is flooded minimum twice a year and causes extensive damage not only to the villagers, but also to agriculture. The problem is caused by the suspension of drainage of atmospheric and underground waters from the right river bank of Rioni following the construction of derivation channel. The population of the Bashi village is forced to seek new settlement areas and sources of living.

Drainage channel in the village Bashi in the Imereti region.

Photo by **Foundation Abkhaz Intercont**



Diagram of Bashi village derivation and derange channels. Source: Environmental Impact Assessment Report on the Works Carried Out on Vartsikhe HPP Cascade, "Vartsikhe 2005" Ltd, Scientific-Research Firm "Gama", 2009



As a result of increased frequency of natural disasters, migration of the population in Georgia has increased since 1980, especially from the mountainous regions. In 1981-2006 over 11,000 households (60,000 persons) have been displaced from mountainous districts, mainly from Ajara and Svaneti, to the other districts of Georgia⁸. Re-settlement to the new location entails drastic changes in the living environment and problems with employment. Budgetary allocations and resources from reserve funds earmarked for eco-migrants' needs are too scarce. This is second year that funds for re-settlement of population *at high risk* disasters' zones has not been assigned in the state budget. Even already displaced people remain as the most poor strata of society. Part of families experienced re-settlement in 1980s and 1990s still are still at extreme living conditions.

⁸ Tom Trier & Medea Turashvili, Resettlement of Ecologically Displaced persons, Solution a Problem or Creation of a New? Eco-Migration in Georgian 1981-2006, European Centre for Minority Issues (ECMI) 2007

State vision and strategy of solving this problem are not exist in the country. Legal status as such of this type of displaced people is not recognized by state at all.

Policy, Legislation and Responsible Bodies

In the recent years disaster risk management is gradually integrated in the key State policy documents. Several legislative and regulatory documents have been developed and adopted in this field.

In September 2010, the document on the Assessment of Georgia's Risks for the Year 2010-2013 was adopted⁹, according to which natural calamities (earthquake, flood, avalanche, landslide, mudslide, forest fire, drought, hail and erosion processes) are considered as risk-factors, which can have negative impact on country's security. At the same time, in September 2010 under National Security Council of Georgia, a Temporary Inter-Agency Coordination Commission was established, led by the Secretary of the National Security Council. The Commission is a high-level inter-agency body, which is tasked with preparing proposals and recommendations regarding development/amendment of the relevant State policy, concepts and legal acts aimed at reforming the crises management system, as well as coordinating inter-agency efforts during the reform.

Since 2009 disaster risk reduction issues have been to some extent reflected in Georgia's basic data and direction documents¹⁰ in which the civil society took certain active role.

Namely, one of the priorities of the Ministry of Environment Protection has become improvement of the system for monitoring and forecasting and the development of effective early warning system, while training and re-training of staff in disaster response is one of the priorities of the Ministry of Internal Affairs for the years 2011- 2014. At the local level, only several regions have identified river bank fortification and rehabilitation works for flood prevention, as their priority.

State Strategy for Regional Development of Georgia for 2010-2017 (approved by the Georgian Government on 25 June 2010, Resolution # 172) pays relatively more attention to the improvement of disaster risk management at the local level. The document envisages introduction of monitoring and early warning systems, contingency planning, development and implementation of preventive measures, assessment of risks derived from extreme weather events and their impact on the region's economy and social

⁹ Order of the President of Georgia №707, 02.09.2010.

¹⁰ Government of Georgia, Basic Data and Directions, 2009-2012. 2010-2013, 2011-2014. According to the State Budget Law of Georgia, the Basic Data and Direction document is the is "the master plan of the country's development, which includes the information on ... main issue-areas of the development of the central, autonomous and local self-government authorities of Georgia."

sector, as well as their integration in the strategies and action plans for sustainable regional development.

Legal framework for disaster risk management is comprised of the following laws and regulatory acts:

Law of Georgia **on the Protection of the Population and Territories from Natural and Manmade Emergencies** (2007), which is the key legislative act in the field of disaster risk management, defines rights and obligations of the central and local governance bodies in emergency response, sources of funding, and publicity of the information on emergency situations. It also highlights necessity of public awareness and preparedness. The Law is mainly focused on response, and almost overlooks issues of disaster risk mitigation. Although implementation of preventive measures is acknowledged by the Law as one of the key principles for the protection of population and territories from emergencies, it does not define responsibilities for planning and implementation of such activities.

With the aim of mitigating emergencies and reactivation of the common response system, the Presidential Order (#415) approved **the National Response Plan on Natural and Manmade Emergencies**. The document gives details on how to implement and coordinate response and rehabilitation works during emergencies, as well as responsibilities of individual ministries, other State institutions and local administrations. Nevertheless, this document refers to the situation when natural and manmade emergency hazards arise or emergencies occur, and the ways of resolving issues related to the protection of population and territories in these conditions. It does not define obligations and responsibilities for the planning of preventive actions aimed at mitigating the risk of emergencies.

Several ministries take part in the management of natural disasters, including the National Environmental Agency of the Ministry of Environment Protection, Emergency Management Department of the Ministry of Internal Affairs, Ministry of Infrastructure and Regional Development, as well as local municipalities, though none of the State agencies is involved in the full risk management cycle, which includes preparedness, prevention, mitigation, response and recovery.

At the local level Emergency Management Sub-divisions are set up in local administrations for emergency response purposes, while the Emergency Management Centre is set up by the local administration bodies, which is convened by the Head of Municipality when the emergency threat arises or emergency strikes, and which is responsible for emergency response coordination.

Risk Assessment

The state has not yet set-up the early warning system for the natural disasters on the spots. Monitoring system through hydro meteorology stations represents a rare case, since only 13 hydro meteorology stations remain out of 75 that functioned before 90s. It has to be mentioned that the increase of number of hydro meteorology stations is on

agenda of the National environment agency within its ongoing projects. The monitoring system over geological process also takes place in insufficient manner.

Special State programme for implementation of geo-monitoring studies was suspended in 2006. Due to limited funds geologic studies are implemented only at high risk zones, mainly, in response to the local municipalities annual forecasts on geologic disasters.

International Cooperation

Support and assistance of the international community plays a significant role in disaster management in Georgia.

Disaster risk reduction is one of the priorities of Georgia- UN cooperation for 2011-2015. United Nations Development Assistance Framework (UNDAF) highlights that activities should be carried out not only for further development of the emergency response system, but also for the restoration of prevention and mitigation mechanisms.

Disaster risk reduction and recovery is one of the directions of UNDP Georgia. Since 2008 with the support of the Swedish Agency for Development and Cooperation (SDC) UNDP has been implementing the project on *Strengthening Disaster Risk Reduction System in Georgia*, aimed at supporting the Government of Georgia in disaster risk reduction through the establishment of an effective national platform, integration of disaster risk reduction in development policies, programmes and practices, and strengthening of disaster risk management and coordination. In March 2009 UNDP initiated establishment of an informal union of the representatives from Governmental, non-governmental, think tanks and international organisations.

In 2010 Directorate-General for Humanitarian Aid and Civil Protection of the European Commission (DG ECHO) has launched a Disaster Preparedness Programme (DIPECHO) in South Caucasus which aims at building a culture of safety and resilience at the level of communities and countries. The partners of the programme are UNICEF, Oxfam and Danish Red Cross. UNICEF supports government in integrating a child-focused DRR policy and strategic framework into existing education policies and national curriculum as well as contributes to strengthening capacities of the local and national authorities and children services in implementing disaster preparedness and risk reduction. Oxfam provides support to 22 communities in Ajara, to strengthen their disaster preparedness, development of contingency plans and introduction of risk mitigation projects at local level; Danish and Georgian Red Cross organisations are assisting communities of Racha-Lechkhumi and Zemo Svaneti to increase their disaster preparedness through awareness raising activities, trainings and development of contingency plans. Since 2009 the project "Institutional building for natural disasters risk reductions in Georgia" has been jointly implemented by CENN and Faculty of Geo-information Science and Earth Observation ITC at Twente University. Fund for the project is provided by Ministry of Foreign Affairs of the Royal Netherlands within the Social Transformations Programs (MARTA). The main objectives of the project are: Assessment of various natural risks and elaboration of guidance principals for incorporation the *Environmental Impact Assessment* and *Strategic Environmental Assessment* in spatial planning; Capacity building of National

Environment Agency staff in DRR management new methodologies and technologies; Introducing new systems for analysing data information and creation of National web Atlas; Testing and exercising DRR new methodologies and technologies on the concrete cases for further research and utilization; Elaboration of Framework vision for risk communication strategy and yearly notification system.

Also CENN with the support of the EU and USAID implements project “Strengthening local capacity and developing structured dialogue and partnerships for mitigating natural disasters and reducing poverty in Georgia”

III. Hyogo Framework for Action; the First Priority – Improved Governance, Data Analysis

This chapter of the report covers analysis of the data obtained as a result of the study carried out within the framework of the project. Interviews were conducted by GNDR according to a specially developed questionnaire, to identify vision or standing of various population groups at the local level towards changes in disaster risk management. Reports provided assessment of quality of progress through various indicators. Answers of standard questionnaire (see annexes) are consisted of 5-gradation scoring system that describes progress through below given answers:

1 = No, not at all
2 = To a very limited extent
3 = Some activity but significant scope for improvements
4 = Yes, but with some limitations in capacities and resources
5 = Yes, with satisfactory, sustainable and effective measures in place
x = I do not know
In addition to that respondents were given chance for comments, explanations and cases

To assess the progress GNDR has developed 20 indicators referring to the following aspects: participation of the local population in the management of natural disasters, responsibilities of local governance bodies, indigenous capacities, resource provision, transparency, accountability, cooperation and coordination with the other interested parties. One question referred to awareness level of the disaster risks by the population (i.e. how high is the probability of extreme natural or manmade disasters, according to people's point of view). And lastly, respondents were given the possibility to assess the results of the changes in disaster risk management – whether the activities carried out have resulted in the reduction of losses caused by natural/manmade disasters.

Changes in the losses caused by disasters

68% of the respondents believe that in the last 5 years losses caused by disasters have increased, while 21% thinks they have reduced.

Table 1. Changes in the Losses Caused by Disasters after 2005

	Frequency	Percentage	Percentage Total
Significant increase in losses	92	28,2 %	68 %
Insignificant increase	129	39,6 %	
No change	37	11,3 %	21%
Insignificant decrease	52	16 %	
Significant decrease	16	4,9%	
Total	326		

Disaster Risk Awareness

49.7% of the respondents assessed disaster risk as medium, 20.2% - as low, while 30% considered that the risk of disasters is high.

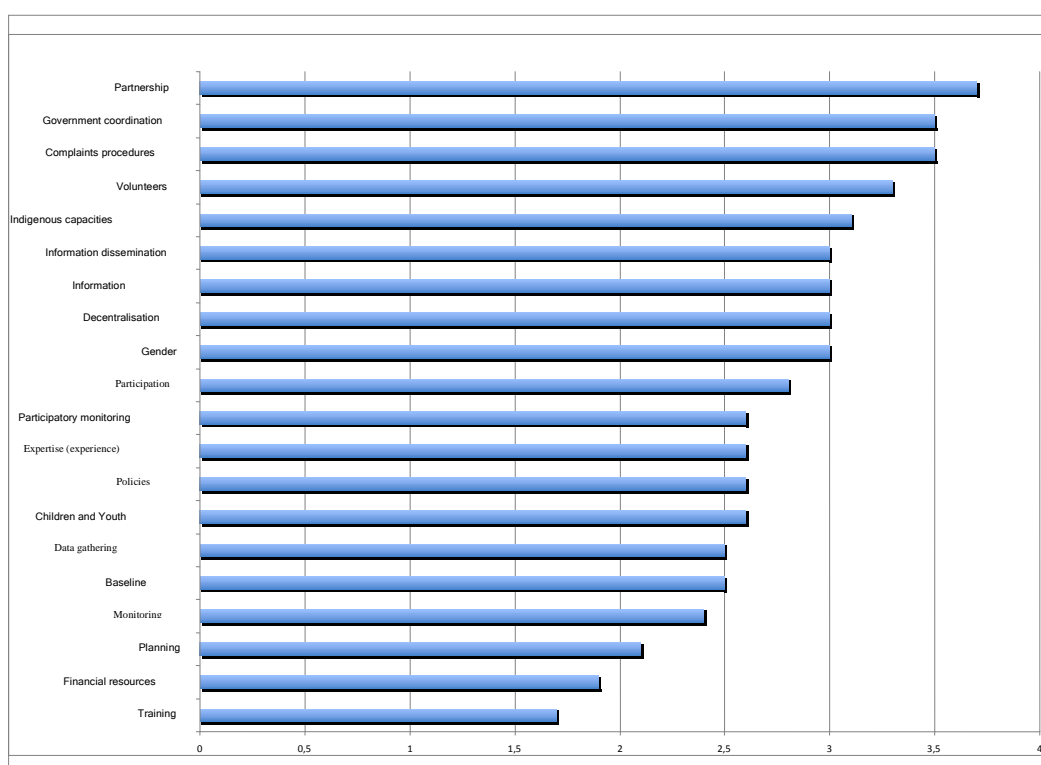
Table 2. Disaster Risk Awareness

	Frequency	Percentage
Minimal	14	4,3 %
Low	52	16%
Medium	162	49,7%
High	65	19,9%
Extremely High	33	10,1%
Total	326	

Progress in Disaster Risk Reduction at the Local Level

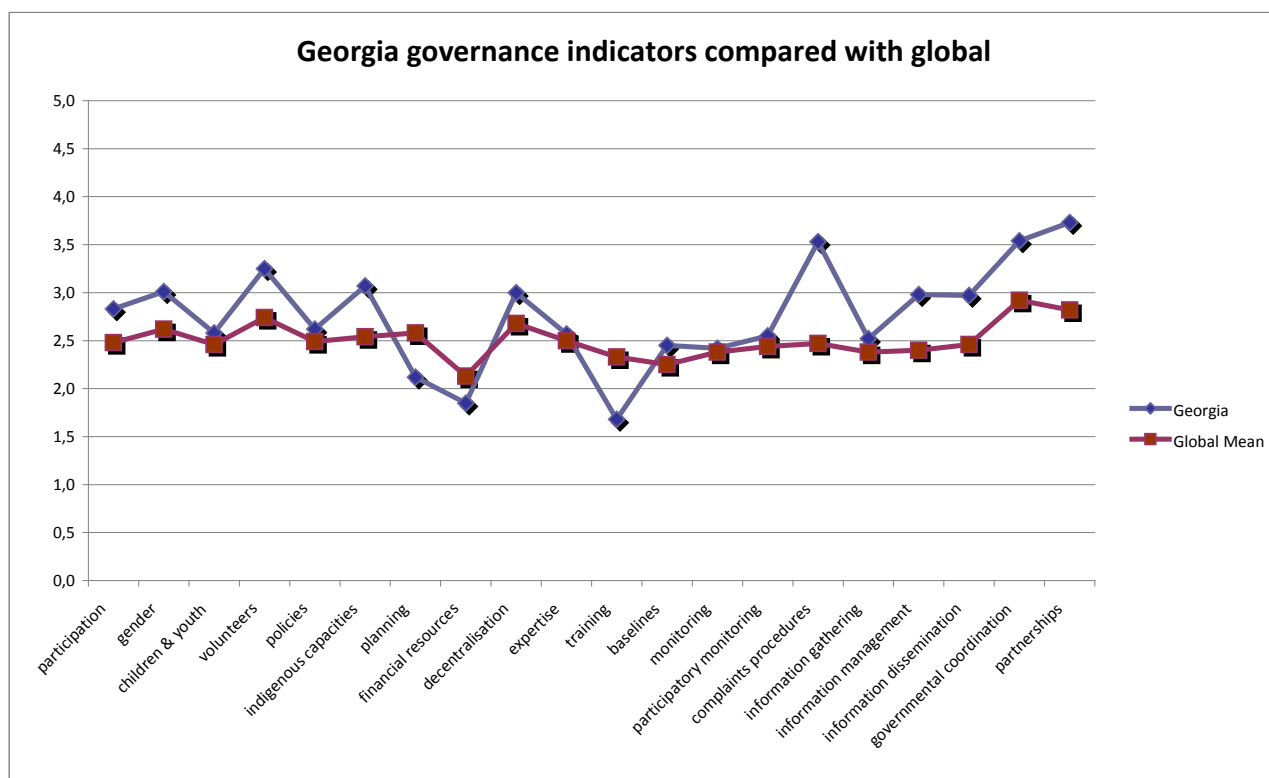
The first diagram shows average scores for all 20 indicators on the progress in disaster risk management at the local level.

Diagram 1. Average Scores according to DRR Indicators at Local Level



The second diagram presents average scores according to risk management indicators in Georgia compared with global ones.

Diagram 2. Average scores in Georgia according to the DRR indicators in comparison to Global level.



As we can see from the first and the second diagrams, some progress in disaster risk management at the local level can be noted according to the following indicators:

- Establishing partnerships between self-governance bodies, communities, NGOs, private sector and academia;
- Coordination among self-governance bodies and State institutions and ministries;
- Creating complaints procedures for the population to claim compensations for the damage caused by natural disasters.

The most acute problems identified in Georgia were:

- Education and training of the staff of the local self governance, population and civil society for improving their disaster preparedness;
- Financial security;
- Disaster prevention planning by local self-governance bodies.

Below is the analysis of the assessments per each indicator received as a result of the survey. The indicator is followed by a question according to which the local self-governance and at-risk communities were assessing the progress; which is followed by the background information and problems identified.

1. Participation (2.8 score)

Does the local self-governance include public, especially vulnerable and marginalised groups, in the decision-making regarding disaster prevention planning and implementation?

At the municipal level at—especially-high-risk communities are identified through contingency plans in the municipalities, where the plans are developed.

At-risk community representatives are given opportunity to engage in the planning of preventive actions by participating in the review of the annual municipal budget. The review day is announced in advance and any interested party can participate in the discussion. At the meeting community representative are given possibility to propose community priorities, prevention measures among them, implementation of which requires immediate action. Decisions of the meeting are reflected in the protocols, based on which funds allocated for the community are distributed.

Other forms of participation is the inclusion of local NGOs and community representatives in Emergency Response Centres (Lagodekhi, Shuakhevi), as well as discussion of Municipal Contingency Plans together with at-risk community representatives.

Despite the existing opportunities, public participation, and especially, of at-risk communities, in the decision-making is extremely limited. Even when their participation is ensured, ideas of the population are rarely given consideration. Lack of awareness and knowledge on the possible hazards and potential prevention measures often affects efficiency of the participation. Lack of skills of effective participation and influencing decision-making is also one of the obstacles identified.

2. Gender Issues (3.0 score)

Does the local governance ensure equal participation of men and women in the planning of disaster prevention measures and decision-making?

In the municipal plans for disaster risk reduction, as well as at the national-level documents gender issues are not reflected. Both community and local governance representatives believe that lack of equal representation of men and women in the decision-making can be derived from the lack of interest/activity of women groups in disaster risk reduction, as well as their little awareness on these issues. In some of the municipalities (Khulo, Keda and Shuakhevi) limited participation of women was explained by women's household responsibilities. At the same time, women's representation in the local governance is also limited. Part of the women respondents also noted that local governance bodies tend to overlook their opinions on DRR issues.

3. Children and Youth (2.6 score)

Does the local governance consider specific needs of children and youth in disaster prevention?

In the municipal contingency plans attention is paid to school security issues. The plans contain information on the number of schools and pupils at schools in the municipality, as well as resources existing in schools (e.g. condition of basements, existence of emergency exits in case of fire, means of transportation). In some of the municipalities Heads of Education Resource Centres are members of the Emergency Centres. School administrations ensure safe transportation of school children to homes in case of drastic deterioration of weather conditions. However, due to lack of necessary resources, practically no works are carried out for improving school security.

Children and youth, especially in the mountainous regions where the risk of natural disasters is high, do not have relevant knowledge and skills, which would ensure their preparedness and enable them to adequately respond to disaster hazards or their impact. Currently DRR concepts are included in the curriculum of all three levels of mainstream education (primary, basic and secondary) and the course is provided under the core subjects (Natural and Social Sciences) in a coordinated way, taking into account the age-related specific features and capabilities of students.

Following the initiative of the President of Georgia and Order #81 of the Minister of Education and Science a stand-alone course *Civil Protection and Safety* has been introduced from 2010-2011 school year in grades IV, VIII and XII in Georgia. Teaching of the subject is conducted in the following major thematic areas: a) personal safety in everyday life; b) disaster risk reduction and safe behavior practices during emergencies; and c) provision of first aid. Despite the aforementioned, both students and teachers noted that they need much more information and knowledge on DRR and stressed the need of receiving trainings and educational materials.

Within the framework of Supporting Disaster Risk Reduction amongst Vulnerable Communities and Institutions in South Caucasus project, funded by the European Commission Humanitarian Aid and Civil Protection (ECHO) and implemented jointly by the Ministry of Education and Science of Georgia, National Curriculum and Assessment Centre, Emergency Management Department of the Ministry of Internal Affairs and UNICEF, DRR has been incorporated under the mandatory *Head of Class Hour Programme* for grades V-IX. A technical expert group composing of line ministries and key DRR stakeholders has developed a methodological guide/manual for head teachers introducing interactive methodologies of teaching DRR. The piloting of the programme is underway and as of new 2011-2012 school year starting from September 2011, DRR will be taught in schools in grades V-IX all over Georgia as part of the mandatory *Head of Class Hour Programme*.

Within the framework of the project a supporting manual for teachers of the *Civil Protection and Safety* subject for grades IV and VIII have been developed with UNICEF support in collaboration with the National Centre for Teacher Professional Development.

In addition, within the framework of UNICEF DIPECHO project school based disaster preparedness activities in selected eight pilot schools in six regions of Georgia and Tbilisi, are implemented by the Caucasus Environmental NGO Network (CENN) in collaboration with the Ministry of Education and Science of Georgia and the Emergency Management Department of the Ministry of Internal Affairs (EMD).

The package of school based disaster preparedness activities encompasses the establishment of school disaster management boards, development of school based disaster preparedness and response plans, implementation of non-structural mitigation activities, supplying schools with basic school disaster preparedness equipment, conducting disaster preparedness exercises/simulations for various types of disasters, etc.

Integration of DRR in the core subjects of the National Curriculum, *Civil Protection and Safety* subject and the *Head of Class Hour Programme*, as well as implementation of school based disaster preparedness activities secures recognition and understanding of natural hazards, including the potential impacts on environment and sustainable development, not only among students, but also among families, schools and communities at large, hereby contributing to building of a culture of safety and resilience at all levels.

4. Volunteers (3.3 score)

Does the local governance support participation of volunteers in the disaster prevention?

Law of Georgia **on the Protection of the Population and Territories from Natural and Manmade Emergencies** stipulates the right of the population to form volunteer rescue units and study main methods of civilian and territory protection during emergencies.

According to the National Response Plan against Natural and Manmade Emergencies, participation of NGOs in emergency response is voluntary, and in case of their involvement, their activities are coordinated by Georgian Red Cross. Organisations, which are mandated by their Statutes to engage in rescue operations, have the possibility to join volunteer groups according to their profile and competencies.

In some of the municipalities (e.g. Lagodekhi, Mtskheta) vulnerable communities have created Initiative Groups (comprised of 10-15 persons), which are given relevant instructions on their actions if the threat of natural or manmade emergency arises or the disaster strikes. In such cases local governance bodies also mobilise persons who have undergone training as army reservists. Local governance representatives are aware of the

importance of volunteers' enthusiasm and experience in emergency response operations.

In some of the municipalities (Mtskheta, Tetritskaro, Gori, Samtredia, Lagodekhi, Kvareli) population is actively involved in the emergency response, though, in some cases it was noted that the number of persons who are willing to go through training and instruction before their possible engagement in prevention and response measures, is limited.

5. Policies (2.6 score)

Does the local governance regularly review DRR policy to ensure protection of the vulnerable part of the population (elderly, ethnic minorities, children and youth, persons with disabilities, migrants)?

Municipal level DRR policies are not documented. Though, like at the national level, principle attention is paid to preparedness to response, rather than contingency planning and implementation. Population believes that there is no progress in local governance policies in terms of incorporating interests of the vulnerable groups. Like in prior years, local governance policy is mainly focused on the resettlement of the population from the risk-areas when hazard increases, and on timely basis notification of population.

6. Indigenous Capacities (3.1 score)

Does the local governance consider knowledge, skills and resources of the local and indigenous population in disaster prevention?

According to the information by local self-governance bodies knowledge and experience of the local population, especially elderly, are taken into account at the community level for identification of hazards. The population does not consider that they are involved in DRR. It was often earmarked that recommendations provided by the communities had not been taken into consideration and therefore measures taken were less effective.

7. Planning (2.1 score)

Does the local governance have an action plan developed based on the disaster prevention policy?

Local level DRR planning (e.g. river bank fortification works, aiding disaster affected population, rehabilitation of damaged infrastructure) is conducted on annual basis, based on the available financial and technical resources. As noted above, consultations are held with the population to discuss the planning of the budget allocated for communities. Population can thus direct financial allocation to community priority needs, including to the implementation of prevention and response measures. At the local level there is no long-term planning in place. At the same time, financial allocations for communities are limited and they are mainly spent on small-scale preventive activities.

As already mentioned, currently the main attention is focused on ensuring preparedness to natural and manmade disasters. With this purpose Emergency Department of the Ministry of Internal Affairs and CENN, jointly started elaboration of Municipalities' Plan of Emergency Response, last year, which form the part of the national response plan. As of now, disaster response plans have been adopted by 14 municipalities; have been prepared by 22, while other 23 municipalities have not yet developed them (see more detailed information in Annex 2). Diagram3. State of Condition March 2011 - Elaboration of Municipalities plans of Emergency Response

These documents are aimed at ensuring swift and coordinated response at the municipal level in case of hazards or natural and manmade emergencies. The documents do not envisage preventive actions. Though, in itself, the fact that municipal leadership has an emergency response plan indicates to the some degree of readiness. Disaster response plans also include assessment of the main hazards and identified at-especially-high-risk communities and hazard areas. Disaster response plans also specify composition and contact information of the Emergency Centres (response management centre at municipal level), as well as services, organisations, and specific persons responsible for specific response actions, and their obligations. Response plans also describe resources existing at the municipal level (transportation, healthcare institutions, shelters), which can be used if natural or manmade disasters strike.

Even when disaster response plans are in place, both population and the local self-governance representatives have little information regarding these documents.

8. Financial Resources (1.9 score)

Does the local governance have adequate budget for disaster prevention?

Activities for the protection of the population and the territories against natural and manmade disasters and recovery are funded from the State budget of Georgia, budgets of the autonomous republics and local self-governances, as well as reserve funds (in the budget of the local self-governance body these are envisaged under contingency and special costs, as well as budgetary allocations for funding activities of local importance).

Representatives of all local governance bodies, and at-risk communities unanimously stated that financial resources available at the municipal level are absolutely insufficient both for prevention, as well as emergency response activities following disasters. Limited resources of local self-governance bodies (partly from reserve funds and partly within the framework of the "Village Support Programme") can be sufficient only for carrying out small scale rehabilitation works, or temporary works. Funds for major response activities are not included in the municipal budgets. Reserve funds are only directed to small scale response and aid to disaster affected population.

9. Decentralization (3.0 score).

Are the responsibilities of the local governance officials clearly defined in the prevention of natural disasters?

Responsibilities of central, regional and local governance bodies in the emergency response are defined by the Law of Georgia **on the Protection of the Population and Territories from Natural and Manmade Emergencies** (2007). The Law sets 4 levels of emergency response (national, autonomous, regional and local), as well as persons responsible for the response actions at each level, their rights and obligations. According to the Law, responsibility for emergency response **at the regional level** in administrative-territorial units of Georgia rests with the President's Representative – Governor and includes coordination of fire and search and rescue teams, oversight of emergency rescue works, evacuation of the population and distribution in temporary shelters, distribution of humanitarian aid, oversight of local governance activities, coordination of the territorial units of the ministries, requesting aid at the national level when local capacities are not sufficient to respond to an emergency. At the **municipal level**, municipal authorities are tasked to set up emergency response units of modern standards, ensure their training and permanent preparedness. Municipal authorities take decisions on the evacuation of the population and their provision with temporary shelter, distribute humanitarian aid, organise emergency rescue works, finance activities for the protection of people and territories, receive and process relevant information.

Local governance representatives believe that technical and financial resources available to them are absolutely inadequate to exercise the responsibilities described above.

At-risk communities consider that local governance bodies act quite effectively and are quite mobilised in case of natural hazards or emergencies, as well as in the assessment of the damage incurred by the population. Nevertheless, they think that population should be more informed regarding the rights of the local governance bodies and responsibilities of specific persons, so that they know who to address on specific issues. At the same time, according to community members, officials of the local governance bodies do not have clearly defined responsibilities and authorities in planning and implementation of disaster prevention activities.

10. Expertise/Competencies (2.6 score).

Does the local governance have enough competence in disaster prevention?

One of the major obstacles to planning prevention measures is the absence of relevant technical expertise at the local level. Representatives of local Sakrebulo (Elected Councils) and Gamgeobas (Local Administration) said that they require specialists of relevant qualification. Sometimes existing problems can have simpler and relatively cheaper engineering solutions, but due to their lack of knowledge and experience they cannot be identified. Population also agrees that local governance bodies do not have enough experience and technical knowledge to plan and implement preventive actions. The need of trainings in DRR for receiving relevant information and knowledge was highlighted both by the local governance representatives and community members. They

think that having professionals among the local governance staff, as well as improving others technical capacities would considerably facilitate mitigation of disaster risks.

11. Trainings (1.7 score).

Does the local self-governance conduct disaster prevention trainings for civil servants, and community members and NGO representatives?

According to the national legislation, central and local governance bodies must ensure preparedness of the population and public awareness campaigns regarding the protection of the population and the country's territories in emergency situations.

Training and preparation of the Heads and specialists of the local self-governance bodies in emergency response, as well as training and re-training of fire and emergency brigades is the responsibility of the Emergency Management Department of the Ministry of Internal Affairs of Georgia. The Department has conducted trainings for the high level officials of the following municipalities: Kakheti, Samtskhe-Javakheti, Samegrelo-Zemo Svaneti and Racha-Lechkhumi. Trainings were also conducted for the Heads of all the regional Emergency Management Services and their Analysts. Trainings for the local municipality leadership and wider public were conducted within the framework of the projects implemented by international organisations. For example, in 2009 SDC supported the training of fire brigades and rescuers in Tsageri and Lentekhi Districts. The same year CIDA-funded trainings were conducted for the population and officials of Racha-Lechkhumi and Kvemo Svaneti regions in mitigation of the risks of floods. CENN supported trainings were launched in 2010 and are ongoing for municipality officials on the development of contingency plans in response to natural or manmade emergencies. Since 2008 Georgian Red Cross has been implementing First Aid Awareness Programme for the population with the aim of developing relevant practical skills and gaining knowledge. Over 2,100 community leaders were trained in the six regions of Georgia within the framework of this initiative.

Nevertheless, representatives of at-risk communities, Sakrebulo and Gamgeobas have noted the need in the trainings on DRR and educational/public awareness raising materials, as well as the necessity of conducting trainings on regular basis. Sakrebulo and Gamgeobas do not have relevant human and financial resources, or educational materials to provide trainings for at-risk communities, though they acknowledge their importance and express keen interest in them.

12. Baseline (2.5 score).

Has the local governance defined the baseline, according to which it defines progress in disaster prevention?

Local governance bodies have not defined the baseline situation in terms of disaster risk prevention and the progress achieved. There are no objectives and indicators for their achievement set.

However, one can consider situation description given in the emergency response plans as a baseline, based on which the needs for the improved human, technical and financial resources can be identified and relevant objectives set.

13. Monitoring (2.4 score).

Does the local governance regularly monitor and prepare reports on disaster prevention?

A separate report on the measures taken to prevent disasters has not been developed. Information regarding the activities carried out (if such information exists) is given in the annual reports of Gamgeobas, which is discussed at Sakrebulo sessions.

Monitoring of especially-high-risk areas is conducted on regular basis. In some cases there are commissions set up with the participation of Gamgeoba and Sakrebulo representatives, which assesses hazards and presents the monitoring materials to local self-governance bodies. Inspection of the preventive measures carried out is also conducted out on regular basis, as well as preparation of respective protocols.

Nevertheless, municipalities do not have data regarding the damage caused by natural disasters. It is difficult to obtain information regarding financial expenditures incurred for prevention and response measures, or the number of persons in the municipalities who have undergone trainings in disaster risk management.

14. Participatory Monitoring (2.6 score).

Does the local governance allow community members and NGO representatives to monitor disaster prevention activities?

Local governance bodies do not ensure involvement of the population and local NGOs in the monitoring of disaster prevention activities. Few local NGOs do not have necessary experience to request and effectively get involved in the activities aimed at disaster risk reduction.

15. Complaints Procedure (3.5 score).

Does the local governance create possibilities for the local population to submit complaints and receive feedback?

Disaster affected population can apply to Sakrebulo or Gamgeoba and request compensation of the damage incurred. Local self-governance has formed commissions which study the cases and based on their conclusions the compensation amount is defined. Information on the damages to residential houses and household plots is sent to the Ministry of Internally Displaced Persons from the Occupied Territories,

Accommodation and Refugees of Georgia, which is responsible for the re-settlement of eco-migrants.

Even though there the clear and transparent mechanism of estimation of losses and its compensation are not yet elaborated.

The allocated compensations are often considered inadequate by the population. Criteria for defining compensation amounts also seems unclear to the population, which causes discontent.

There are frequent cases of inappropriate use of monetary compensations allocated for the population, it is not spent on fortification works, or purchasing new housing.

16. Data Gathering (2.5 score).

Does the local governance regularly collect, discuss and map the data on natural hazards and climate change?

Gamgeobas is conducting data gathering works to identify most critical areas. Community members must on regular basis report data to municipality Sakrebulo and Gamgeoba on the hazards existing at community level. For example, Gamgeoba of Kvareli twice per month conducts surveillance of the river Duruji to timely obtain information on pending hazards. At the request of the Government of Ajara, municipalities of Ajara Autonomous Republic submit information on the situation in the villages and roads on daily basis.

On the other hand, Gamgeobas receive information on the pending natural hazards from Regional Administrations. As soon as such information is received, Gamgeoba immediately ensures its dissemination among the population.

There is no mapping of natural hazards developed either at the municipal or regional levels.

17. Data Management (3.0 score).

Does the local governance consider both traditional as well as scientific knowledge for informed planning of the activities at the local level?

According to the representatives of self-governance bodies for identification of risk areas at community levels the consultations are being conducting with local population, nevertheless, representatives of local communities consider that less attention is being paid to their views.

When hazards intensify, municipal Gamgeobas address the specialists of the National Environmental Agency for carrying out relevant research, and advise on necessary activities. Invited specialists assess the territory at-risk and prepare relevant conclusions, however, often consultations are formal, recommendations of the specialists are not

implemented due to lack of financial resources and low coordination between governmental structures.

Nevertheless, it should be noted that possibility of utilizing extensive data kept at the National Environmental Agency is limited. Most of the information is not stored electronically, which is difficult to update. The absence of centralised and permanently updated database and hazard maps at regional and municipal levels considerably limits timely access to reliable scientific data, as well as limiting the possibility of planning the measures aimed at disaster prevention and mitigation.

Annual bulletin on forecasting geologic hazards of the National Environmental Agency is disseminated among Government agencies, Heads of regional administrations, Emergency Management Department of the MIA; it is also published at the websites of the Aarhus Centre and National Environmental Agency. Nevertheless, Heads of Gamgeobas are not sufficiently informed that such document exists and seldom use it for planning preventive activities.

18. Data Dissemination (3.0 score).

Does the local governance provide most up-to-date and clear information regarding natural hazards and prevention measure to vulnerable population?

According to the Law of Georgia on the Protection of the Population and Territories from Natural and Manmade Emergencies, information regarding emergencies is public. Central Government of Georgia, as well as regional and local self-governance bodies and administrations of legal entities must promptly and clearly provide information to the public on pending or ongoing emergencies through mass media, including internet. Such information covers data on the emergency situation and engineering, radiation, chemical, bacteriological, fire fighting, and ecological conditions on the concerned territory, as well as protection of the population and territories during emergencies and activities carried out to ensure their security.

When forecasting of natural hazards is available, information regarding this should be provided to public without delay. However, population is practically uninformed regarding geological hazards existing at the municipal level, as well as planned and/or completed preventive activities. In addition, community members think that if they had access to information regarding expected hazards and factors causing them, they would have been able to more actively be involved in the planning and implementation of preventive actions. Community members noted that they are not sufficiently informed on the actions to take in emergencies and natural disasters.

19. Coordination (3.5 score).

Does the local governance coordinate disaster prevention activities with the other State agencies and ministries?

Information on the coordination mechanism between various State agencies in the emergency situations is given both in the national, as well as municipal emergency response plans. Representatives of various agencies gather in the special centres set up immediately when disaster strikes or when its threat arises.

Gamgeobas and Sakrebulo organise joint meetings with the representatives of the territorial bodies of the ministries and other institutions, to plan mitigation activities. In case the local capacities are insufficient, Gamgeoba and/or Sakrebulo appeals regional and central bodies, however the planning of mitigation activities is not widespread.

20. Partnerships (3.7 score).

Does the local governance cooperate with communities, NGOs, private sector and academia?

According to the legislation of Georgia local self-governance bodies can contract relevant bodies to participate in post-disaster recovery and disaster mitigation activities, if their own capacities are insufficient. Emergency Centres are represented by the delegates from water management, power distribution, transportation and telecommunication companies that have their specific functions defined by emergency response plans. Cooperation of local self-governance bodies with NGOs and academia is relatively limited.

IV. Specific Examples

This part of the report presents the analysis of several specific cases on the progress achieved in DRR at the local level in Georgia, as well as for illustrating the remaining gaps. Examples given below reflect the gaps existing in terms of contingency planning, limited participation of communities in the decision-making, importance of active engagement of local governance, community and non-governmental organisations in the decision-making on the implementation of disaster prevention and emergency response.

Rehabilitation of Windbreaks in Dedoplistskaro Municipality

Dedoplistskaro Municipality is located at the utmost South-East part of Georgia. 94% of the population is engaged in agricultural activities (growing wheat and cattle-breeding). Dedoplistskaro District is rich in fertile soil and extensive pastures, but poor in water resources and atmospheric sedimentation. In the summer months the temperature rises to 35-40⁰C, which coupled with long-lasting dry periods causes droughts. Frequent droughts and strong winds bring serious damage to the only developed branch of the economy in Dedoplistskaro – agriculture. Population suffers considerable losses due to sharp decrease in the productivity of agricultural produce (crop capacity in the district has decreased from 4 tonnes to 2 tonnes per 1 hectare of land). Municipal economy losses due to natural hazards reach tens of millions of Lari. As a result of the deteriorated socio-economic conditions, since 1990-ies the district was left by 7,000 persons, which is 18% of the total district population.

Intensification of natural hazards is caused not only by natural factors, but also activities of the local population. Due to energy crises in 1990-ies population destroyed nearly all windbreaks on the territory of the municipality (approximately 2 thousand hectares) and forests, to meet the demand on wood. Forests cover only 1.3% of the municipality territory (until 1991 forests covered 5%). 80% of the grazing fields in the municipality are degraded.

The key priority for local municipalities and farmers has become implementation of preventive measures against drought and wind erosion, as threats posed by them to the local economy became evident. Local municipality became actively engaged in the surveys conducted for the Second National Communication (years 2007-2008) within the framework of the Framework Convention on Climate Change, which documented reality of threats to the district caused by natural hazards. Dedoplistskaro District was recognised as the most vulnerable district to climate change in Georgia.

Based on experts' assessment rehabilitation of windbreaks and forest cover was defined as the major preventive measure to stop land degradation, though the municipality did not have relevant resources (technical and financial) for its implementation. Local municipality addressed the Deutsche Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) for assistance, which since 2008 has been implementing a project on mitigating climate change impact in Georgia through the creation of models for the restoration of degraded land, including: rehabilitation of degraded windbreaks;

restoration of degraded forests; sustainable management of pastures. The project was planned with the participation of the municipality, local farmers and GIZ experts. Demonstration plots were selected. GIZ experts developed new models of restoring windbreaks and groves based on German experience; with their support new cutting-edge technologies of growing saplings was introduced. Meetings were held for raising public awareness. For sustainability purposes the project selected the plots of lands the owners of which expressed readiness to share cost-share.

Since February 2009 a demonstrative project was launched, with the participation of six farmers. They provided their own contribution in the project implementation – put up fences along the rehabilitation zones, hired workforce, purchased saplings, and took the responsibility over further management of rehabilitated windbreaks and groves.

As a result of the demonstrative project:

- 38 hectares of degraded windbreaks were rehabilitated only with indigenous vegetation (according to the data gathered in the autumn of 2010, 90% of saplings have survived).
- Model for forest restoration was developed. In November 2010 groves were planted over 100 hectares of land (only indigenous, including endangered species). Rehabilitated plots are owned by different parties, including State Forestry Agency, local communities and individual farmers.
- Educational seminars were conducted for school children, who were also engaged in the restoration of windbreaks and groves;
- Agrarian Committee of the Parliament of Georgia initiated discussions on the legal framework for sustainable management of grazing fields.

Mr. Gela Tetrauli, Chairman of the Commission for the Environment Protection, Agrarian Issues and Property Management of Dedoplistskaro Sakrebulo noted that since 1980-ies (in the last 40 years) this is the first step taken to prevent environment degradation in the district, which has yielded the following results:

- Dedoplistskaro population realised the necessity of actions to prevent natural disasters, saw real opportunities for their implementation and perspective of improving living environment;
- The number of farmers interested in carrying out similar works on their plots of land has increased significantly (up to 40 farmers);
- Local population got employed by participating in project implementation (rehabilitation of windbreaks and groves);
- Interest and inclusion of youth and children increased - with their initiative and GIZ experts' support school trees were planted in school yards.

According to local municipality, one of the other significant results of the project is its positive influence on the migration trends among population and to illustrate this, they bring the example of Kvemo Keda village, where since 2010 local residents practically stopped putting their houses on sale. This, together with the activities carried out by the municipality for improving social conditions of the population, was also facilitated by the

implementation of the project, which convinced the population that there is a real possibility for improving their living environment.

The success of the project resulted in wider cooperation between Dedoplistskaro Municipality and GIZ. Following the first successful project, Dedoplistskaro Municipality and GIZ plan to further expand their cooperation to increase capacities of local farmers in increasing crop production through proper land management practices.

According to the conducted surveys, windbreaks should be restored over 1,800 hectares of land in Dedoplistskaro District. Only 38 hectares (2,1%) were restored within the framework of the implemented project. However, Dedoplistskaro Municipality already has technical-economic documentation on the rehabilitation of windbreaks and groves, as well as model manual, based on which the successful demonstrative project was implemented. The population is now convinced in the possibility of growing vegetation on the territories practically turned into desert, and received relevant experience. Dedoplistskaro Municipality has good grounds and opportunities to attract new resources both from the central budget, as well as donors for the implementation of disaster prevention activities.

Cut (logged) windbreak at the Dedoplistskaro municipality

3. 4. Photos of restoration of wind break lines by local school children within the GIZ project.

5. Restored wind break lines.

Photos by GIZ





Increasing Capacities of At-Risk Communities in Ajara by Planning and Implementation of Preventive Actions

Ajara is one of the most complex parts of Georgia in terms of the intensity of geological hazards and their impact. 70% of the population living in the Municipalities of Keda, Shuakhevi and Khulo are settled over geo-ecologically hazardous territories. Due to annual landslides and avalanches tens of residential houses and plots are damaged every year, while in summer there is a considerable shortage of water resources, which negatively affects the income of the village population. Nevertheless, local budget does not allocate sufficient funds for the reduction of disaster risks, while the existing financial resources are mainly spent as property compensation. Possibilities for the local population to influence the decisions made by the local governance bodies to mitigate disaster risks, is extremely limited.

Since 2010 in 22 communities of Khulo, Keda and Shuakhevi Oxfam GB launched its activities to improve local population's preparedness through institutional model based on community connections. In cooperation with the local NGO "Black Sea Eco-academy", trainings were conducted with community members and school teachers on mobilisation, development of action plans and advocacy issues 22 campaigns lobbyists were officially register in 3 municipalities, representing every village and special emergency response groups were set up in the villages. The implemented activities had positive effect over community actions. Kvashta community carried out risk assessment initiated by the leader of the Emergency Response Group and identified community priorities, among which was the construction of a water reservoir.

Resources of the village and Oxfam were sufficient to build only one reservoir, but the village lobbyist was successful in attracting additional funds from the local self-governance through negotiations. As a result, three water reservoirs were built, which ensured potable and irrigation water supply for the village in the summer months, which is extremely important for the village economy.

This was the first case when a lobbyist elected by the community advocated for a community project and achieved positive results. Population encouraged by this example developed new projects to implement preventive measures, which the lobbyist submitted to the local self-governance. Unusual was the enthusiasm shown by the local self-governance as well in supporting the project, and the community received financial support in very short time, which is also very rare in Georgia. It was very significant too that local governance leader's awareness on the importance of DRR activities and participation was high. For a newly elected Gamgebeli (Head of Gamgeoba) this project was an excellent opportunity to show his effectiveness and motivation to his constituency.

Similar to Kvashta, under the leadership of the local emergency response group leaders, communities of Keda, Khulo and Shuakhevi also prepared several small-scale projects for disaster risk reduction, which will be implemented with the support of the self-governance in the spring of 2011.

Photos of Restoration of water reservoirs in Kvashta community
Photos by Black Sea Eco Academy





Rehabilitation of the Section of the Road Damaged by Landslide in Gudamakari

On 30 July 2010 landslide near the village of Makarta blocked the only road connecting 22 villages (360 households) of Dusheti Municipality Gudamakari community with the rest of the country. The local population was cut off during two weeks. Provision of food and medication supplies were possible only by helicopter. The local governance and population turned out to be unprepared for the event of such scale.

President's Representative (Rtsmunebuli) to Gudamakari Community, Ms. Nelly Bekauri and CENN organised community meetings, and based on the decisions made at the meetings, appeals were sent to Municipal Gamgeoba, the National Environmental Agency, and the Ministry of Infrastructure and Regional Development with the request to study the situation and carry out respective activities to solve the problem. At the same time, CENN organised a press-tour and the information on the community situation was disseminated through central and local media, which was followed by the swift response from the Government.

Dusheti Municipality and Mtskheta-Mtianeti Regional Administrations appealed to the Ministry of Infrastructure and Regional Development for financial and technical support. Based on the request from the local self-governance and the recommendation of the Ministry, by the Order of the Prime Minister of Georgia GEL 959 000 was allocated from the State budget for the rehabilitation of the damaged section of the road. Specialists from the National Environmental Agency studied the geologic conditions, based on which the project for rehabilitation works was prepared. As a result, parallel to the damaged section of the road, a new road was built, and river bank protection constructions were installed along the river Aragvi. However, the rehabilitation works were conducted without informing the population regarding the project and did not take into consideration their opinion when choosing new route for the road. Furthermore, it was suspected that the works were planned and implemented without taking into consideration the conclusions prepared by the geologists of the National Environmental Agency either. All these have brought more problems to the local population following the rehabilitation of the road: the new section of the road runs in the lower part of the landslide damaged area, where the landslide hazard is high. At the same time, as a result of the changed route, steep ascent was formed which is inaccessible in winter months. As a result, movement of the population even on the rehabilitated section of the road is still limited. As a result of the works carried out the problem could not be completely solved due to insufficient participation of the interested parties in the project preparation and implementation.

The analysis of this case reveals several key issues related to disaster risk management:

- At the municipal level natural and/or manmade hazards to the population are not completely identified, as well as vulnerable territories and the population; this

significantly hampers planning of preventive actions and providing justification for their implementation.

- Local governance does not have relevant experience and capacities to deal with such threats;
- Public participation in self-governance is limited; communities are not involved and informed about the planning, implementation and monitoring of specific projects or activities. Decision-making often disregards interests and needs of the local population.
- Considering Georgia's reality, the above-noted example is a step forward in civil society development. Through effective cooperation of the local population, NGOs and media, swift response from the Government and allocation of necessary funds was achieved to solve the problem, which should become a catalyst for boosting citizen participation to create other examples of such cooperation. The population received good experience and knowledge on how to get in touch with Governmental and non-governmental structures, which of the structures have what responsibilities and how to demand their execution.

Restoration of landslide affected road in Gudamakari community.

Photos by CENN



V. Conclusions and Recommendations

Since 2005 there has been some progress achieved in Georgia in disaster risk management, which is expressed in the adoption of the legal and regulatory acts at the national level, improved system for risk monitoring and forecasting, increased capacity of the relevant structures engaged in disaster management and emergency response. Importance of disaster risk management is acknowledged both at the national, as well as regional and local levels of governance.

However, disaster risk management policy and mechanisms are still in need of considerable development. Currently, reduction of disaster risks as such is seen by Government of Georgia not as a priority, but as a means of poverty reduction or climate change adaptation. Strategic, legal and regulatory acts focus only on the actions taken following the disasters and measures for recovering damage, overlooking prevention and mitigation aspects of disaster risks management. Laws do not envisage mandatory provisions on the establishment of early warning and monitoring systems; there are no standards and parameters set, there is a lack of due attention to major and frequently repeated natural disasters. Development of the State policy and decision-making in this field is characterised by reliance on external assistance and lack of consideration of the possible long-term economic benefits as a result of investing in the disaster risk management filed.

There is a certain progress in the establishment of partnerships between local self-governance, local communities, NGOs and private sector in the field of disaster risk management. Also, at some extent improvements in coordination among local self-governance bodies are observed at local levels.

Population has an access to local self-governance bodies to request compensation of the damage caused by natural disasters. A mechanism for the assessment and granting of compensations is operating at the local level. Nevertheless, the received compensation is often considered by the population to be inadequate. There were cases when the financial resources issued to affected population were utilised for other purposes and the population is requesting additional financial support from the Government. There are cases when the population does not trust the recommendation received from the local self-governance on the relocation due to imminent geologic hazards. Inadequate compensation coupled with the low level of trust often becomes the reason for overlooking the recommendations received from the local self-governance by the population. Hence, there is a need to develop a transparent mechanism for the assessment of the damage and granting of compensations.

Despite various trainings conducted for the Heads of local self-governance bodies and at-risk communities in disaster risk management by the central Government agencies, as well as local and international organisations in the recent 2-3 years, the progress

achieved in this regard by the assessment of the majority of the respondents was insignificant. It was also noted that although the local self-governance is aware of the importance of the trainings in disaster risk management and prevention, due to the lack of financial and human resources, they are not able to organise such trainings.

The main obstacle to planning and implementation of prevention activities is the lack of resources at the local level. Local budget allocations are scarce and barely sufficient for spontaneous, small-scale (targeted) and temporary actions to avert hazardous situations threatening people's lives. Local self-governance has neither financial resources, nor specialists and machinery for large-scale activities, which would eliminate the existing threats and/or their causes.

Despite the fact that in the recent years legal and regulatory acts have been adopted in the area of disaster risk management, the existing legal framework requires further development, especially in terms of clear definition of the rights and responsibilities of the local self-governance in disaster risk prevention.

Given respect to the above, to achieve positive changes and tangible results in management of DRRs following recommendations have been elaborated:

Further development and improvement of legislation:

- Planning preventive activities at the municipal level, monitoring implementation activities and relevant reporting with participation of at-risk communities and civil society should become a legally binding obligation of local municipalities.
- Based on the relevant research, it is necessary to introduce incentive measures e.g. *tax exempt policy* for vulnerable population living at high risk areas, and ensure respective legislative changes.
- Relevant amendment should be made to the legislation on Ecomigrants, with determines rights and duties in compliance with the UN Guiding Principles on Internally Displaced Persons.

Improvement of coordination among stakeholders:

- Within the existing environment, The National Security Council as a mandated coordinator must consider ways of improving existing coordination and consider the current mechanisms in their various profile capacities: Georgian Red Cross Society as leader of Non-State Actor group, UNDP as think-thank group and Oxfam as common tools of working group. These mechanisms must be incorporated into any new national platform development thus preventing any overlap in exercising duties and responsibilities.
- The National Security Council should ensure that any platform developed is truly multi-stakeholder and brings together Governmental officials, representatives of civil society (both local and INGOs) academics, as well as private sector. This platform should outlines roles and responsibilities of members within the formal structure including protocol based responsibilities on decision-making.

- Division of tasks should be clearly defined among National Security Council and line Ministries responsible for DRRs: Ministry of Internal Affairs, Ministry of Environment, Ministry of Infrastructure and Regional Development, and Ministry of Finance.

Planning

- The national government, primarily the Presidential office must identify leadership and ensure support to develop national disaster management plan based on existing national response plan (currently the responsible EMDB is under Ministry of Interior) to incorporate preventive and mitigation activities into disaster management plan.
- Local self-governance bodies should ensure participation of local population in elaboration of Emergency Management Plan at all levels. Based on research analysis on living conditions of Ecomigrants the special action plan has to be elaborated for emergency resettlement, to meet necessary requirements of Ecomigrants in their capacity of displaced persons and, to ensure relevant resources for implementation of the planned activities.
- For preventive measures proper planning is of high importance to develop maps reflecting natural hazards at the regional and municipal levels. Such maps will be supportive for exercising projects and planning the use of natural resources by taking into consideration existing hazards and risks, which will facilitate to better public awareness and necessary inclusion of local population *at risks* in decision-making processes, identification of hazardous spots at the local level requiring allocation resources on priority basis.

Financial resources

- NGO sector should continue to provide support for capacity building of local self-governance bodies, in order, to make, for them, available full information on funds in the state budget and mechanisms of funds distribution for emergency situations. Also to ensure availability of funds allocated for DRRs at local levels to strengthen preparedness and resilience of local population to disaster risks. It is important to support local self-governance bodies to elaborate programs/projects and to ensure funds from budget and various resources.
- Funds for preventive and responsive measures to natural disasters should be clearly reflected in the state budgets, as well as within local level budgets.
- Transplant mechanisms for assessment of losses and compensation should be elaborated.

Information sharing, raising awareness and capacity building

- Conducting trainings on raising awareness and improving resilience and skills of local self-governance bodies and *at-risk* communities on regular basis. Preparation and dissemination of the relevant informative and educational materials should be conducted through joint effort by international and national NGOs along with line Governmental institutions.
- Raising public awareness on participation/inclusion of local communities in the processes of planning activities in due priority order stipulated by legislation of

Georgia. The mentioned activities could be carried out through support provided by international and local NGOs that would target strengthening *Regional Administration Bodies* in their capacity of local authorities.

- Better inclusion of *at-risk* communities in the planning preventive measures and participatory monitoring of their implementation, as well as, improved reporting of the local self-governance bodies, it is important to implement activities aimed at greater civic engagement, such as community mobilisation and the establishment of community coordination mechanisms.

Risks Assessment:

- While international organisations such as Oxfam have been promoting improvements in this area, a unified methodology on risks assessment has to be elaborated further and approved by all relevant levels of government.
- There is a need for further technical and financial support for capacity building of National Environment Agency to introduce and set new methodologies of early warning systems in order to ensure systematic monitoring of risks and vulnerability.
- Issues of risks assessments and risks reductions have to be included in the development plans and programs. Assessment of Environmental Impact should be implemented in full scale activities including planning of risks assessments and measures for risks reductions especially within any infrastructure development programming.

Annexes

Annex 1. Respondent Data

Age group	< 11	12-17	18-25	26-60	60-and above
Number of Respondents		24	47	223	32
Sex	Male		Female		
Number of Respondents	185		141		
Place of Residence	Rural		Urban		
Number of Respondents	247		79		
	Local Governance	Community	NGO	Other	
Number of Respondents	85	212	16	13	

Annex 2. Data on the Status of Contingency Planning by Municipalities¹¹

	Municipalities	Plan Prepared	Plan Approved
Kakheti			
1.	Akhmeta		+
2.	Gurjaani		+
3.	Dedoplistskaro		+
4.	Telavi		+
5.	Lagodekhi		+
6.	Sagarejo		+
7.	Sighnaghi		+
8.	Kvareli	+	
Mtskheta-Mtianeti			
9.	Dusheti	—	
10.	Tianeti	—	
11.	Mtskheta	—	
12.	Kazbegi	—	
Shida Kartli			
13.	Gori	—	
14.	Kareli	—	
15.	Kaspi	—	
16.	hashuri	—	
Kvemo Kartli			
17.	Bolnisi	—	
18.	Marneuli	—	
19.	Gardabani	—	
20.	Dmanisi	+	
21.	Tetritskaro	+	
22.	Tsalka	—	
Imereti			
23.	Tskaltubo	—	
24.	Tkibuli	—	
25.	Chiatura	—	
26.	Baghdati	—	
27.	Vani	—	
28.	Zestaponi	—	
29.	Terjola	—	
30.	Samtredia	—	
31.	Sachkhere	—	
32.	Kharagauli	—	
33.	Khoni	—	
Samtskhe-Javakheti			

¹¹ Source: Correspondence of the Emergency Management Department of the Ministry of Internal Affairs of Georgia to RECC №264042, 04.03.2011

34.	Adigeni	+	
35.	Akhaltzikhe	+	
36.	Akhalkalaki	+	
37.	Borjomi		+
38.	Ninotsminda		+
39.	Aspindza	+	
Samegrelo-Zemo Svaneti			
40.	Zugdidi	+	
41.	Abasha	+	
42.	Martvili	+	
43.	Mestia	+	
44.	Chkhorotsku	+	
45.	Senaki	+	
46.	Tsalenjikha	+	
47.	Khobi	+	
Guria			
48.	Lanchkhuti		+
49.	Ozurgeti	+	
50.	Chokhatauri		+
Racha-Lechkhumi Kvemo Svaneti			
51.	Ambrolauri		+
52.	Lentekhi		+
53.	Oni	+	
54.	Tsageri		+
Ajara Autonomous Republic			
55.	Kobuleti	+	
56.	Shuakhevi	+	
57.	Khelvachauri	+	
58.	Keda	+	
59.	Khulo	+	

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