



Humanitarian Aid
and Civil Protection



Frontline - 2015

Country Report – Georgia



Prepared by the Regional Environmental Centre for the Caucasus (RECC)

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Glossary and Acronyms

DRR or Disaster Risk Reduction

Minimising vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

GNDR

The Global Network of Civil Society Organisations for Disaster Reduction, responsible for the global implementation of the 'Views from the Frontline' project.

HFA

The Hyogo Framework for Action - adopted by 168 governments at the World Conference on Disaster Reduction, held in 2005 in Hyogo, Japan, focusing on building the resilience of nations and communities to disasters

VFL

Views from the frontline – A participatory monitoring process conducted biennially by GNDR

WCDRR

The United Nations Conference on Disaster Risk Reduction

Introduction

In 2014, Oxfam and Red Cross have started the third phase of a regional program “Supporting Community Resilience in South Caucasus” (Oxfam) and “Regional Programme for Building Resilient Local Communities” (Red Cross).

Both interventions are implemented under the umbrella European Commission’s “Supporting Disaster Risk Reduction amongst Institutions and Vulnerable Communities in the South Caucasus” DIPECHO programme.

One of the DIPECHO-funded activities, had been be the Frontline survey conducted to bring communities feedback in Georgia (Adjara, Racha, Kvemo-Svaneti, Imereti) and Armenia (Vayots Dzor, Shirak, Tavush) on how they are prepared for responding to disasters. The survey is a part of a global process supervised by the Global Network of Civil Society Organizations for Disaster Risk Reduction (GNDR) and outcome of the South Caucasus Survey will be combined into one feedback and database.

The survey was conducted by Regional Environmental Center Caucasus (RECC) in Georgia and Armenia.

Frontline survey is to develop detailed local knowledge of threats, their consequences, the capacities they have to address them and the barriers of underlying risk factors they face. This knowledge is the starting point for action at all levels – local, national and global – understanding and strengthening the resilience of communities; enabling communities and households to protect and enhance their lives, livelihoods and assets. It is also to bring knowledge on the regional context and resilience of communities that participate in Oxfam and Red Cross programs funded by the DIPECHO program.

I. Frontline Project

1.1 Background

Frontline has been developed by The Global Network of Civil Society Organisations for Disaster Reduction (GNDR); the largest international network of organisations committed to working together to improve the lives of people affected by disasters world-wide. GNDR's purpose is to enable civil society to connect local to global and speak with a collective voice that drives action that reduces risk and increases the resilience of the most vulnerable. The growing network engaged in a shared action, *Views from the Frontline* (VFL) providing a local perspective of progress of the Hyogo Framework for Action on Disaster Risk Reduction by undertaking interviews with community members, civil society organisations (CSOs), and representatives of local government. It reported in 2009, 2011, and 2013, and gathered over 85,000 views based on the work of hundreds of civil society organisations. Reviews of the process highlighted that local knowledge is an important but missing component in understanding and strengthening resilience. Drawing on the experiences of VFL, *Frontline* has been developed as a means of gathering and sharing local knowledge to strengthen resilience. *Frontline* has been piloted in Latin America during 2013-2014, engaging 13,000 respondents in 15 countries.

The South Caucasus started participating in the VFL programme in 2011. The Regional Environmental Center for the Caucasus (RECC) carried out the survey in Georgia and Armenia with Oxfam's coordination in 2011 and 2013. Based on the information gathered within the survey VFL - Country Reports were elaborated, which can be found at following link:

www.rec-caucasus.org/publications.php?type=3&ref=1316778415&lang=en.

GNDR launched *Frontline* at the WCDRR 2015 in Sendai, Japan. *Frontline* is a global participatory action research programme of work, funded by OFDA that gathers local risk knowledge and priorities, supports and strengthens local action and learning, provides national dashboards for policy making to support effective implementation, and sets national and global baselines as well as monitoring mechanisms for all post-2015 frameworks.

The program finds out from local people what threats they face; People across the world face multiple threats of all kind, both extraordinary and everyday, that affect their lives and livelihoods, many of them are poorly understood and documented. Local communities are mostly facing the threats alone with self organization and self reliance. They have good understanding and local knowledge of threats, their consequences, the capacities they have to address them and the barriers of underlying risk factors they face. This knowledge is very important to start action at all levels – local, national and global, for understanding and strengthening the resilience of communities; enabling communities and households to protect and enhance their lives, livelihoods and assets. The program *Frontline* is uniquely able to gather and share this knowledge, which next will be used for different levels, encompasses risk reduction, sustainable development and adaptation to climate change. *Frontline* starts with individual interviews about risk and resilience with representatives of local communities; it gathers thousand of individual views together through a qualitative analysis methodology by analysing what people say and then combines local knowledge at local, national and even global level.

1.2 Project Objectives

The goal of the *Frontline* is to capture local knowledge of all threats, collect data which can be analyzed by age, gender and other socio-economic factors. The data can be used to inform local, national and global policies, plans and projects, this information can also be used for local monitoring of progress of all post-2015 frameworks, including for disaster risk reduction, development, and climate change adaptation. Frontline will establish baselines during 2015-2016 as a basis for ongoing monitoring during the currency of these frameworks. The assessment provided by Frontline provides a unique and valuable perspective drawn from local experience and reality of those at the Frontline. Frontline also supports and strengthens local actions and learnings regarding natural disasters.

1.3 Project Approach and Methodology

Within the survey 70 interviews have been conducted with representatives of local communities, civil society organisations and local government officers in 7 municipalities of 4 regions of Georgia. The interviews were held based on questionnaire which was drawn out by GNDR (see Annex 1. Frontline Survey Form). The questionnaire contains three components; General Profile of the Community, Personal Characteristics of the Individual and Resilience Profile.

The questionnaire allows learning views and positions of different groups of local communities regarding local disasters. Targeted regions and communities were selected with consultations with Oxfam and Red Cross.

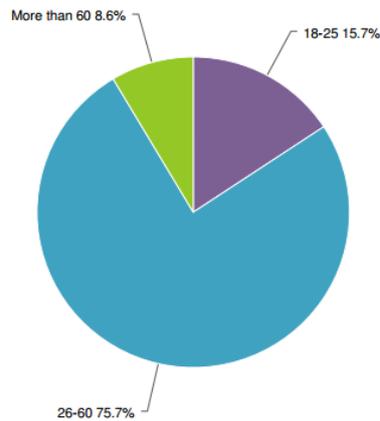
Each interview was based on four basic questions:

- 1. Threats:** What are the threats you face in your community? Frontline studies highlight many threats of environmental, social, economic and political origins, for example storms, floods, fires, landslides, earthquakes, crime and violence, pollution, conflict and poverty.
- 2. Consequences:** What impacts do these threats have on the lives and livelihoods of you, your household and your community? At local level these threats have consequences on lives and livelihoods: education, health, family stability, social cohesion and local business for example.
- 3. Actions:** What capacity do you and your community have to take action against these threats? Frontline respondents highlight community coordination and self-organisation, action and learning, partnerships, strengthening local governance, and access to resources as the main means of building local resilience
- 4. Barriers:** What factors beyond your control lead to these threats? Unplanned and unmanaged development at national and local level; poor planning, short term business decision making, poor infrastructure, economic decisions and political instability all generate threats which have to be tackled beyond local level.

Respondents estimate their socio-economic conditions, changes in losses and damages caused by natural disasters since 2005; they name five priority natural disasters, which their community faces and their consequences, determine actions to address the threat and identify barriers to addressing the threats.

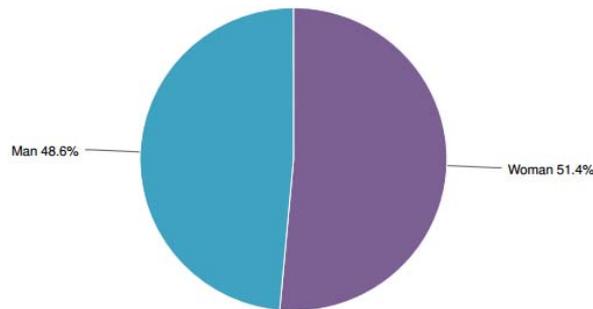
Representatives of vulnerable communities and local authorities made up 68,6% and 18,6% of respondents respectively. Age group of 18-60 years made up 76% of respondents, while those, whose age exceed 61 years, made 9% and whose age was between 18-25 years, made 15% (Figure 1).

Figure 1. Age of respondents



The percentage of female and male respondents was 51,4% and 48,6% respectively (Figure 2).

Figure 2. Gender



Interviews were held in Imereti, Racha-Lechkhumi-Kvemo Svaneti Regions and Adjara AR. The 7 communities which are under the most danger from natural disasters took part in the survey. None of the respondents took part in Survey which was held under the program “Views from Frontline” in 2011 and 2013.

Table 1. Respondent data

Region	Municipality	Representative of Local Government		Representative of Local Community		Total	
		Quantity	%	Quantity	%	Quantity	%
Imereti	Tkibuli	2	25	6	75	8	11
	Chiatura	2	25	6	75	8	11

Racha	Ambrolauri	1	12,5	7	87,5	8	11
Lechkhumi	Cageri	2	18	9	82	11	16
Adjara	Khulo	2	18	9	82	11	16
	Keda	3	25	9	75	12	17
	Shuakhevi	2	20	10	80	12	17
Total		14	20	56	80	70	100

70% of respondents said that they have steady income (Figure 3), but this income is very small. 75% of them owns house (Figure 4), 67% of the houses are in a good condition (Figure 5).

Figure 3. Steady Income

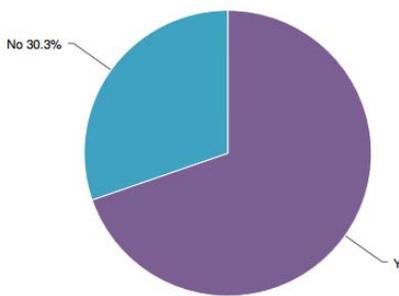


Figure 4. Owns House

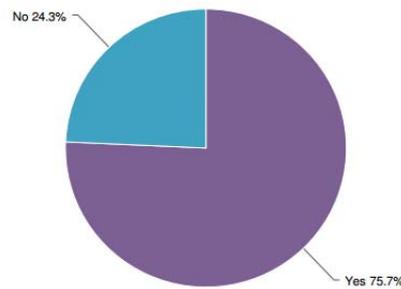
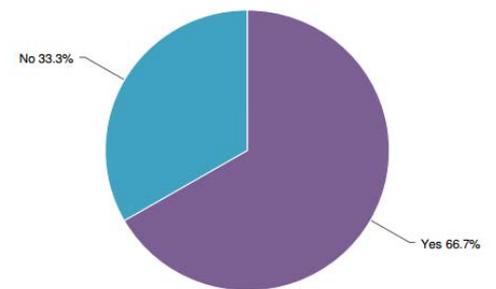
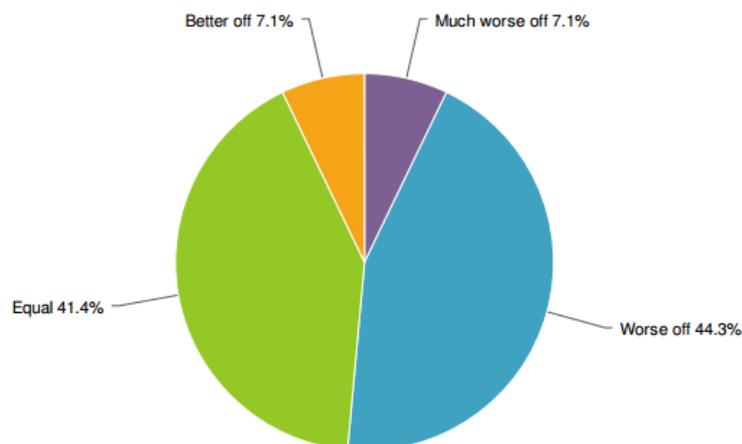


Figure 5. House in good condition



In every municipality in which the survey was held, population complains about the lack of livelihoods. On the question: what is your socio-economic status in relation to the rest of your country 44.3% answered that it's worse off, 41.4% answered that it's equal, 7.1% - better off and the same amount 7.1% answered that it's much worse off (Figure 6).

Figure 6. What is your socio-economic status in relation to the rest of your country?



II. Disaster Risk in Target Regions

There is a high risk of erosion and landslides in the region of Adjara, furthermore, because of human irregular agricultural activity, as well as soil pollution, degradation and climate change, the republic losses lands. Due to complicated area and climate conditions, high precipitation is typical for the region of Adjara, 33% of agricultural lands suffers from erosion. Most part of alpine and sub-alpine lands of Adjara are used for pastures, overgrazing of course has negative impact on the ecology of alpine and sub alpine zones, because of overgrazing the number of erosions, landslides and mudflows are increased. In alpine and sub-alpine areas soil decomposition and damage, and uncontrolled wood-cutting are remarkable. During last years the unique green cover of spruce, fir, pine and beech stand, in alpine and sub-alpine zones was almost chopped off, only small populations of this plants is remained, which is thinned out, degraded and doesn't have natural ability of self renovation. Because of overgrazing and uncontrolled wood-cutting sub-alpine zone has lowered for 200-250 meters, that also caused decomposition and damage of soil, bogging and reduction of soil fertility. The landslides became more frequent during last years. There has been more than 5 000 landslides and mudflows in the region of Adjara by 2010. 75% of 330 settlement areas in Adjara are under the high level of risk, according to National Environmental Agency, under the high risk level there are 126 settlements, middle – 129, low-40, and only 39 settlements are localized in non-hazardous districts.

Frequent avalanches are typical for Adjara, which cause some problems for inhabitants, because of avalanches there are road traffics, sometimes the villages are cut of regional centers for a long time. In 1970-1971 there was especially high number of avalanches registered, because of avalanches only in one village of Khulo municipality 22 people died, many buildings were demolished, including houses. In all 5 municipalities of Adjara there are avalanche zones registered; The most number of such zones are in Khulo municipality – 45 zones, in Shuakhevi there are 21 avalanche zones, in Keda – 14, the fewest avalanche zones are registered in municipalities of Kobuleti (3) and Khelvachauri (4).

Disasters characteristic to the region of Imereti are Landslides, floods, stone slides and erosion. Landslides are most frequent for this region. It has to be noted, that for Imereti Region earthquakes of 8-9 magnitude, that increases the risk of formation and activation of above mentioned geological processes. According to National Environmental Agency, 71 inhabited areas from 544 in this region are under the high level of risk, middle-146, low-148, in nonhazardous zones there are 179 inhabited areas. The causing factor of natural disasters in Imereti Region is engineering-geological conditions of geologic, hydrologic and geomorphologic rocks and climate factors. The main factor, which causes disasters, is high precipitation in the little period of time. In case if atmosphere precipitation is high, frequent mudflows are possible. During spring time, when the snow is melting stone slides are also possible.

Because of geological complexity inhabited areas in the region of Racha-Lechkhumi are in river gorges. Geological complexity also is reason for frequent landslides, mudflows and erosion. Stone slides, floods and flashfloods in case of strong rain are also typical for the region on Racha-Lechkhumi. The main reason for causing natural disasters is high precipitation in the little period of time, if sediments are more than usual, the risk for natural disasters rises. Frequent seismic activity also causes natural disasters. According to National Environmental Agency, in the high risk level areas there are 73 settlements, middle-64, low-33 and in non-hazardous zones there are 84 settlements.

III. Data Analysis

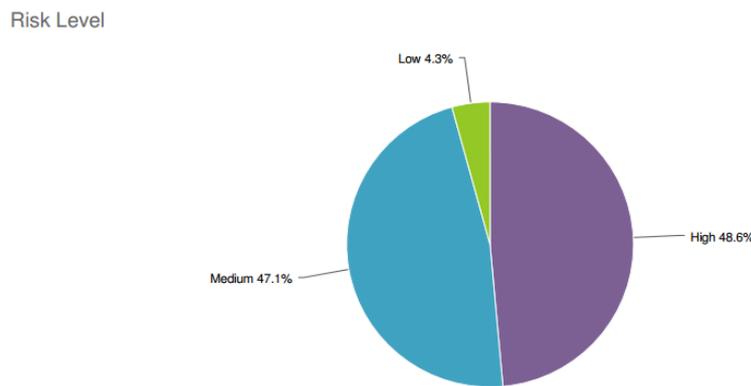
3.1 Local communities' awareness on disaster threats and impacts

This part of the report contains results of analysis of interviews with representatives of local communities and local authorities conducted within the project.

Respondents were offered to assess disaster risk level and changes in disaster-caused losses after 2005 in order to reveal changes in perception of disaster risks and aftermaths and aftermaths by local communities.

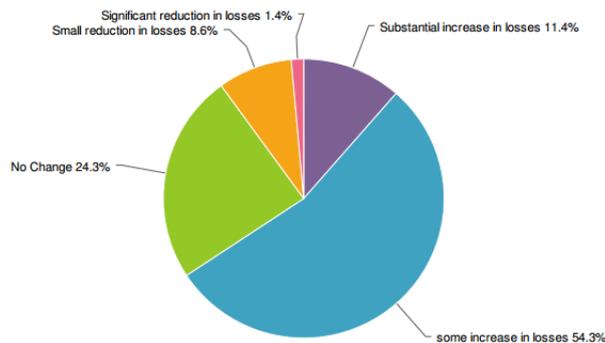
The survey showed that 48,6 % of the respondents evaluate disaster risk level as high, whereas 47,1% think of the risk as medium (Figure 7).

Figure7. Awareness on Disaster Risks



11.4% of the respondents believe that since 2005, the losses and damage (human lives, property, income source) substantially increased, while 54,3% think that there was some increase in losses (Figure 8). Taking into consideration survey results of 2011 and 2013, approximately the same number of population (60-65%) believes that there was increase in losses and damage.

Figure 8. Changes in the losses caused by disasters



Generally speaking, representatives of local communities, as well as representatives of local authorities are quite informed and have good understanding of natural and man-made disaster risks, which their community or municipality faces.

27.1% of respondents in 7 municipalities named landslide as the most important threat, 20% drought, 11.4% floods and earthquakes, 10% avalanche, 8.6% air pollution, 5.7% mudslides and hail.

Priority 1 Threat (Major)

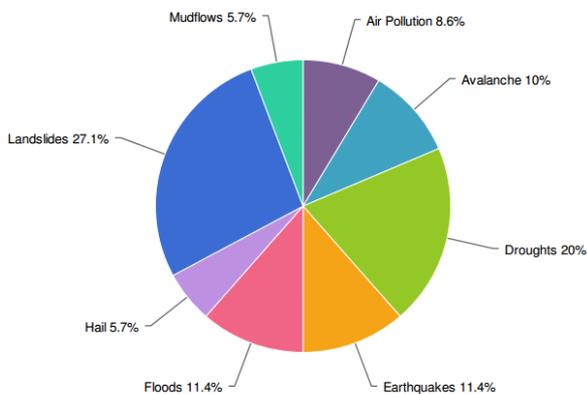


Figure9. Threats of the first priority

32.9% of respondents of all seven municipalities named again landslide as a threat of second priority, 17.1% drought, 12.9% flood, 10% avalanche, 8.6% hail and other disasters. 1.4% of the respondents named deforestation as the second priority threat.

Consequences of threat 1

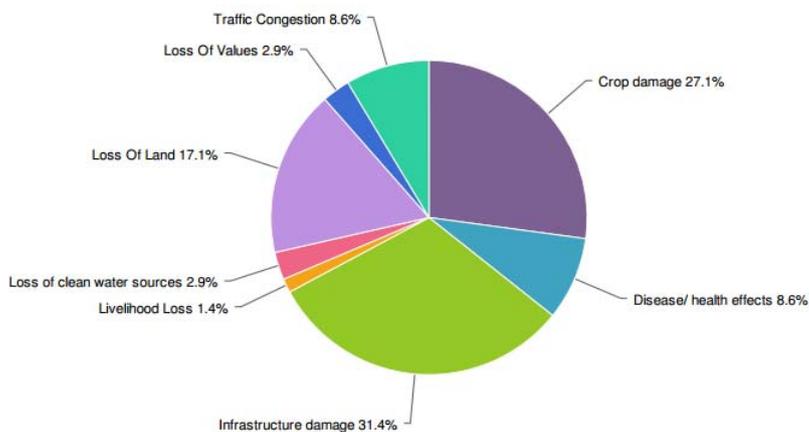


Figure10. Threats of the second priority

31.4% of respondents mentioned the consequence of the priority threats is infrastructure damage 27.1% of respondents named crop loss as major consequence and 17,1% - loss of lands. Only 8,6% of the respondents believes that spread of diseases and health problems is the result of the major threats.

Priority 2 Threat

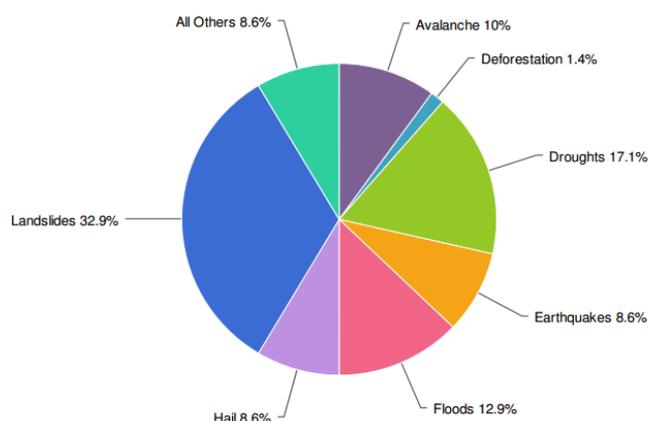


Figure 11. Consequences of priority threats

According to the municipalities, natural disaster threat due to their acuteness, were divided as follow:

Table 2. Priority of threats by municipalities

	Tkibuli	Tchiatura	Ambrolauri	Tsageri	Khulo	Keda	Shuakhevi
Earthquake	2	4	1				
Landslide	1	3	3	1	3	1	1
Mudslide					2		
Flood			2	2			4
Drought	5	5	4	3	1	4	3
Hail			5	4			5
Strong winds				5	5	3	
Avalanche	4				4	2	2
Stone fall		2				5	
Air pollution	3	1					

Tkibuli municipality

The population of Tkibuli municipality is well informed and conscious of natural disaster risks that occur in their region, as well as their respective outcomes. They consider their municipality to be a high-risk area of natural disasters. Apart from the priority risks (see table 2), the population experiences harm from flooding and increase in strong winds. Major threat to Tkibuli municipality is from landslide, which causes damage to homes, agricultural lands, bridges and roads. The landslides cause particular damage to the city of Tkibuli, some neighbourhoods of which are built on landslide danger zones. The landslide

activity was increased by last years' earthquakes. The main source of economical gain in the municipality is the mining and processing of coal. Mining for coal in Tkibuli started in 2006, however since 2009 the plant for enriching coal has been put into work. The above mentioned is very important to the employment of the local population. However, the population is concerned about the environmental impacts of the mining-processing, like air pollution for example through dust and airborne pollutants that cause various diseases. There are alarming statistics about accidents (at times fatal) in the mines. The cause of these accidents tends to be poor working conditions. Large volume of snowfall is another concern for Tkibuli municipality, which can cause isolation of villages and damage to buildings. In the last few years there has been a sudden increase in drought.

Chiatura municipality

Air pollution is considered the main ecological risk in Chiatura municipality, the main cause of which is considered to be manganese mining operations. Here as well the mining and processing operation is the main source of employment and income as well as a major concern for environmental impact and health. According to the statement of participants of a study, the employment of local population in the mining shafts has been decreasing through the years due to a lack of qualified workers. In addition, there are recorded respiratory, oncological and cardiovascular diseases as well as instances of tuberculosis, all of which the population blame on air and water pollution caused by improper mining operations. The increase in landslides in the municipality of Chiatura has also been connected to the mining operations. Dangerous geodynamical processes can occur during active mining as well as after the fact in case of neglect of recultivation. River Kvirila is polluted by runoff of water that is used for washing the mined material. Currently none of the factories have an active wastewater treatment plant, the majority of sediment traps are out of order. The water used in ore enrichment factories flows into the river without any kind of filtration. Another source of pollution of the river Kvirila is agglomerate disposal place, which is placed on the left side of the river and has no protective wall in between. During each flood, a washout occurs, as a result of which large quantities of agglomerate gets washed into the river. Chiatura is also has a threat of rockfall, which according to the participants of the study have been known to claim lives, as well as harming livestock and roads. Landslides (number three in priority on natural disaster risks in Chiatura), causes damage to buildings and agricultural lands. The population consider deforestation the cause of the increase in landslides. The municipality of Chiatura was significantly devastated by the 1989 earthquake, specifically the village of Bakhioni. According to the participants of the study, droughts have been causing significant damage to agricultural lands in the last few years, especially to the corn and bean harvest, which to many in the municipality is the only source of income. The droughts cause a decrease in water, which is a big problem for the municipality as it gets a small supply of water as it is.

Ambrolauri municipality

The representatives of Ambrolauri municipality are well aware of the risks connected with natural disasters. The population considers earthquakes and floods are priority risks. The population remembers the earthquake that occurred in 1989, which caused significant harm to the local population. By calculation of Ambrolauri municipality, 30% of families harmed by the earthquake in 1989 have yet to be compensated. Flooding is the second biggest risk for the Ambrolauri municipality. River Rioni floods agricultural lands when water level increases. Floods cause major harm to the population, as they damage buildings, roads and bridges, there have also been instances of human fatality. On 3 of September 2014, the municipality was flooded and all harvest was destroyed across 11 villages. Roads were closed off to the villages of Joshkha, Chkvisi, Joshari and Tsakhi. Landslides are a significant threat to the municipality of Ambrolauri. In the late 80^s, the landslide in the villages of Jokhebalo and Joshkha claimed human lives, as a result of which, 15 families were relocated from Joshkha.

An increase in droughts and hailstorms cause significant harm to the agricultural sector. Drought is especially harmful to vines, walnuts, hazelnuts which are the main source of income for the local

population. Both drought and hailstorms cause damage to viticulture, an important sector for the Racha region. The hailstorm in 2014 destroyed almost all vines, which for most families is the main source of income. The population was in outspoken discontent due to poor compensation fees.

In addition to these natural disasters, the region is under threat of forest fires. In the spring of 2015, due to high temperature and drought, where 38 instances of forest fire.

Tsageri Municipality

Level of natural disaster risk awareness is low in Tsageri. The population is especially worried about deforestation, which was occurring at an alarming rate in the 90s. The population believe the deforestation to be the cause of increase in natural disasters such as landslides and strong winds. Landslides have been increasing since the 90s and today, 1500 families live in danger zones. In way of flooding, the population is under threat from the river Tskhenistskali. The floods damage buildings, roads, bridges, agricultural lands, livestock, as well as occasional human casualties. During large flooding, the river puts the local school under threat. The flooding danger happens after water is periodically let out of the Lajanuri hydroelectrical reservoir. The warning system in case of water getting through the dam is in place but it is still not efficient enough to eliminate all human casualties. Like in other municipalities, drought is a significant problem here, it causes large losses in harvest. And because of the decrease in water level, the population is getting a limited amount of water. The loss of harvest is also caused by an increase in hailstorms and strong winds.

Khulo Municipality

The municipality of Khulo is well informed on the risks of natural disasters. They consider droughts and mudflows to be the primary threats. The population is worried about the construction of a nearby dam and considers the loss of creeks and decrease in water level to be connected to it. The vilige of Vashlovana considers droughts to be its main problem. The lack of water prevents them from keeping their harvest and forces them to look for the products in markets. Mudflows and landslides represent a significant problem for the Khulo municipality, which cause destruction in crops, roads and buildings. A number of families have been left with ough homes due to landslides. Because of this, a portion of the population has been relocated from the territory and others will follow in the future as well. Large snowfall and avalanches are also a problem in Khulo. The roads are being cleared but some villages are inaccessible to the machinery. Freezing temperatures and strong winds are a risk factor as well.

Shuakhevi and Keda Municipalities

Representatives of Shuakhevi and Keda municipalities were less informed on the subject of natural disaster risks, however they where still able to name the primary risks, which where landslides, large snowfall/avalanches, drought and strong winds. The biggest risk in the view of the population of both municipalities is landslide, which causes damage to buildings in the villages of Chvana, Tsekva. Large snowfall and avalanches harm building in the mountainous regions. Avalanches cause road obstructions to villages, and damage to power lines. Strong winds and drought, which causes damage to agricultural lands, the population blames on deforestation. Stonefall is a present danger in the villages of Chvana, Tskhemlisi and Khabelashvilebi. The municipality of Keda has also named floods as a major risk, in the last year, they have destroyed the entire harvest.

3.2 Actions to address the threats

The people involved in the survey named the following activities to address the abovementioned threats:

Threat	Action to address the threat
Earthquake	<ol style="list-style-type: none"> 1. Construction of seismically resistant houses 2. Repairing of the existing houses 3. Awareness rising of population and their information how to act in case of earthquake
Landslide	<ol style="list-style-type: none"> 1. Taking into consideration threat of landslide while planning cutting forest 2. Reforestation 3. Construction of drainage and storm water prevention systems 4. Eviction of population from high-risk zones
Mudslide	<ol style="list-style-type: none"> 1. Periodic cleaning of riverbeds of mudflow rivers
Flood	<ol style="list-style-type: none"> 1. River bank protection 2. Drainage system improvement
Drought	<ol style="list-style-type: none"> 1. Improvement of irrigation system 2. Using underwater resources (bore-hole arrangement)
Hail	<ol style="list-style-type: none"> 1. Agriculture insurance implementation 2. Compensation of the damage to population
Strong wind	<ol style="list-style-type: none"> 1. Reforestation
Avalanche	<ol style="list-style-type: none"> 1. Mobilization of appropriate techniques 2. Prompt cleaning of roads 3. Compensation of the damage to population
Stone fall	<ol style="list-style-type: none"> 1. Artificial throw down of disintegrated rock layers 2. Covering disintegrated layers of rocks with wires 3. Construction of retaining walls
Air pollution	<ol style="list-style-type: none"> 1. Street watering 2. Transportation of the ore by closed cars or by cable cars 3. Watering of the ore while transportation 4. Processed coal waste removal from the residential zones

Representatives of local communities, as well as local authority representatives consider it necessary to carry our activities in order to inform and raise awareness of local population on environmental problems and disaster risk reduction activities.

Representatives of local communities assume reforestation as one of the main causes of activated landslides and droughts. Therefore, reduction of pressure on forests is considered as one of the prevention measures. In turn, deforestation is mainly caused by firewood need, as far as there are no alternative sources of energy. Consequently, provision of gas supply was named as one of the action to address the threats.

One of the main barriers in planning of disaster risk reduction and prevention is absence of knowledge and experience at the local level. Risk assessment and prevention measure planning should be done by experts of appropriate qualification.

As the most important action to address the threats 27.9% of respondents declared that is dam/dyke building, 19.1% answered that building of drainage channels is very important, 16,2% consider reforestation as the most important action addressing the threats, 11.8% said that important action is building of irrigation systems, the same amount said that nothing can be done. 10.3% of respondents answered that distribution of emergency equipment/Survival kits is needed, 1,5% considers community awareness rising as an important action and the same amount said that ecosystem management and restoration should be improved.

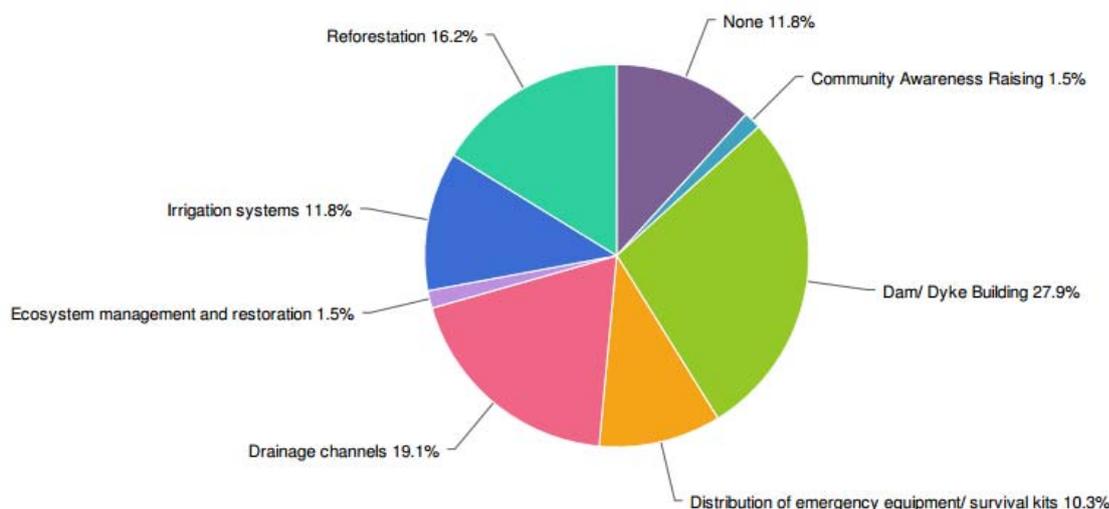


Figure11. Actions to address threats

3.3 Barriers to Addressing the Threats

Lack of financial resources in all municipalities was the main barrier to addressing the threats, in all regions the representatives of local government noted that the financial resources available on municipal level, aren't enough for the actions of prevention and for compensation of losses and damage caused by natural disasters. Also according to local government it is very difficult to allocate funds for prevention measures. Communities believe that the scarce resources given for post-disaster damage compensation are misused; they said that this money should be better spent for reasonable prevention, which would minimize the damage. There are no available funds for disaster reduction in local budgets, but it has to be noted that in Adjara local government stated, that they have funds available for building drainage channels in 2016.

According to respondents lack of national government commitment is also a barrier to addressing the threats in all regions; representatives of all communities participating in survey believe that their region isn't a priority for national government and there is no will to support this communities. They also noted

that there is lack of local government commitment; population believes that active cooperation and broader powers of the local government would help in addressing many problems faster and easier.

Community believes, that if natural gas is supplied to municipalities and villages, the problem of wood-cutting would be solved, because the population relies of firewood, and in most of the villages of Georgia natural gas isn't distributed.

58.3% of respondents declared that the main barrier is lack of financial resources, 21.7% said, that there are no barriers, because Oxfam and Red Cross in cooperation with local government lead the actions addressing to threats, 6.7% of questioned consider lack of environmental awareness as a barrier addressing to threats, 5% said that the barrier is lack of community commitment and 3.3% said that the barrier is lack of government commitment (Figure12).

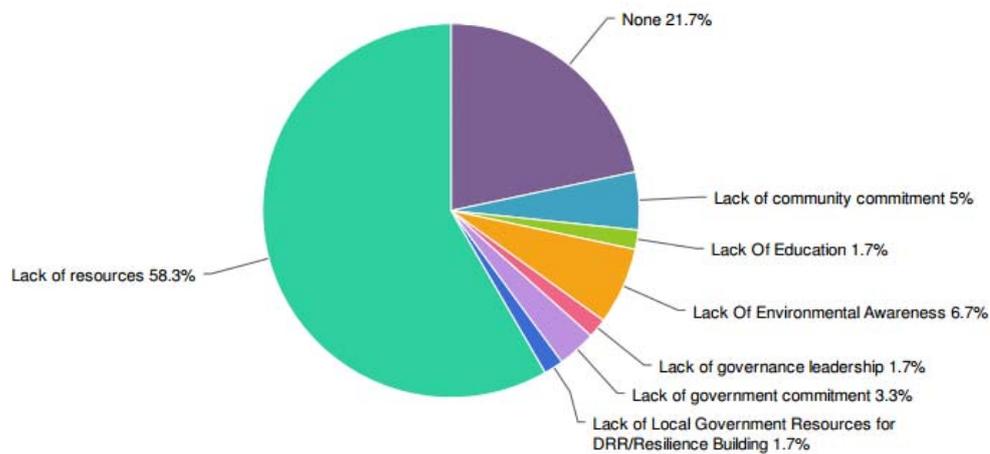


Figure12. Barriers to addressing threats

IV. Case Study

Inspired communities and local governments mitigate disasters in Keda Municipality, Adjara

Oxfam and partners – Black Sea Eco Academy (from 2010) and Rural Communities Development Agency (from 2012) - have been working in Adjara since 2010 under the programme *Supporting Community Resilience in the South Caucasus* financed by the European Commission (DIPECHO).

Up-to-date there have been several small-scale mitigation projects developed as a part of the programme in local communities and supported by partner municipalities and communities themselves.

Governments in Khulo, Keda and Shuakhevi are making efforts to integrate DRR and CCA into their development agenda to ensure the functioning of coping and adaptive capacities of communities in all relevant development sectors such as agriculture, infrastructure, rural planning and housing, education, health and environmental and natural resources management.



Oxfam and partner (BSEA) developed 15 small scale infrastructure projects mitigating potential disasters and making local communities livelihoods more resilient and less exposed to potential natural catastrophes, like floods, landslides or heavy rains. The projects included drainage channels and a water reservoir. The Keda authorities co-funded the projects at the level of 20% and a community provided in-kind input by their hard work and people's engagement in development of the projects. Communities of Merisi, Kvashta, Tskhmorisi and Kharaula were so engaged in developing these mitigation infrastructure projects that constructed around 15% more of each mitigation project than was initially planned.

These constructions resolved many everyday problems of the local communities, like Vaio, Kvashta, Kharaula or Tskhmorisi. As Tskhmorisi village school director Jemal Ananidze underlines: *The new mitigation projects will prevent not only potential floods, landslides and damages of the road in the community but also will make easier for children to reach a local school during winter months when sometimes because of the weather it is simply not accessible.*

Municipalities in Khulo, Keda and Shuakhevi already see the high value of the joint preparedness work for people's lives, livelihoods and economics that the projects offer. Inspired by mitigation projects



already developed committed additional funds to construct mitigation projects, jointly the three municipalities – Keda, Khulo and Shuakhevi – on the amount of around 700.000 GEL. In addition Keda local government has successfully applied to the regional Adjara budget and gained additional 2.000.000 GEL for years 2015-16, just in Autumn 2015 to implement around 120-130 mitigation projects within communities. As David Dumbadze, Gamagebeli of Keda highlights: *Only through this kind of approach, joint work and learning from each other, we can ensure sustainability of our mitigation and preparedness work and in practice to safe lives in case a disaster hits our communities.*

Photo 1. Vaio village community members dig jointly a drainage channel



Photo 2. Kvashta village, drainage channel under construction



The growth is evident in Georgia

The Disaster Risk Reduction Programme (DRR III) in Armenia and Georgia, supported by the European Commission's Humanitarian Aid and Civil Protection department (ECHO) has been lead by the Danish Red Cross for the past four years. Throughout the previous years of the programme there have been such a number of unplanned successes that the implementation team gave them the name 'agents for change'. Before the third phase of the programme commenced this month more of these 'agents for change' stories continued to flow to the Georgia Red Cross Society Disaster Management Team desk. The theme of the recent 'agents for change' activities is tree planting. As reported by the Georgia Red Cross Society: In Oni region on 29-30th of April 2014 was carried action of planting trees (150 overall) in place where was landslides and vulnerability of further landslides, we Georgian Red Cross Society's Oni branch was invited to take part in this action with the local Governor (gamageoba) employers, our volunteers took part also and were very actively taking part to plant tree and avoid further disasters. It was great moment and our Governor sad that they are going to make this like activity and to call us.

In a nearby location of Ambrolouri, with blessing of our Patriarch Ilia II (Ilia the second) and with the Premier Minister's order in Ambrolauri municipality territory was planted trees (1500 overall). Regional Governors' deputy contacted to us to take part in this action of planting trees. This action took place where was possibility of landslides. We were very happy to take part in it and it was the first time for us

to be called on such activity. this happened while was Red Cross week (1-8 of may 2014) our volunteers actively took part in this action and were very pleased.

V. Conclusions and Recommendations



According to Frontline 2015, local populations perceive that some progress has been achieved in DRR since 2005, but the lack of financial resources for disaster risk reduction still remain the main problem. Because of poor financial resources of local governments there is no budget for disaster risks reduction, but it has to be noted that in some municipalities local government found finances for building of drainage channels.

The financial problems are aggravated by the lack of knowledge and experience in planning and implementation of cost-effective preventive measures, inertia and low awareness of local government and communities.

The national government is focused on recovery of disaster-caused damage, instead of preventive measures, which was clear in case of Tbilisi flooding, June 13, 2015. Most of the financial resources for disaster risks are directed to recovery; only a small portion is intended to preventive measures.

Low level of awareness of local communities and inactivity in building up their disaster resilience was noticeable in targeted regions, which was caused because of insufficient civil society development at the local level, lack of necessary resources and difficult socioeconomic situation of the communities. Local communities don't have influence on decision making on development project, because they lack sufficient knowledge and experience, which is caused because representatives of local community don't participate in decision-making procedures, they noted that the procedures are open for population, but inhabitants aren't interested to attend them.

Despite last years it has to be noted that there is DRR monitoring and reporting at the municipal and regional levels, but still local authorities lack experience and knowledge for risk assessment, strategy planning and implementation of DRR system.

It also has to be noted that Red Cross and Oxfam lead trainings about disaster risks, but they don't cover whole population of the regions, only a part of the community is informed about the risks and has necessary information about how to act in case of natural disasters.

In March 2015, at Third UN World Conference on Disaster Risk Reduction Georgia became the Parties of the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) which is the first major

agreement of the post-2015 development agenda. It aims for the following outcome: *The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.* The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015. Recommendations given below are linked with Four Priorities of Actions defined by the Sendai Framework focused on needs of local communities revealed through the survey.

Recommendations:

Sendai Framework Priority 1. Understanding disaster risk

- Update information about natural and anthropological threats typical for the region/municipality, including information about the districts under high risk, and spread the information in local communities and local governments in conformable format.
- Raise awareness of local communities about the prevention of threats, mitigation of the results and adequate response to threats, that are typical for their region/municipality, prepare informational materials for awareness rising for different target groups indicating their possible roles. Raise awareness of local media and civil society through trainings and small grant programs.
- Systematic assessment of losses caused by natural and anthropological threats on the level of region/municipality. E.G assessment of effect of air pollution on diseases and health in Tkibuli and Chiatura municipalities and assess conformable losses.
- Raise the mobilization level in local communities and improve their engagement in decision making processes. With the help of different kind of media inform the local communities about their right to have access to information and engaging in decision making processes.
- Improve the ability of local self-government to spread the information and engage the representatives of local community into decision making process. Engage representatives of local communities in the events for mitigation of natural and anthropological threats.
- Improve teaching of disaster risks, risk mitigation, readiness for risks, responses to risks and eradication of the results of risks at schools, especially in schools which are located in the communities which are under the risk.

Sendai Framework Priority 2. Strengthening disaster risk governance to manage disaster risk

- Under the municipality structure establish the institutional system for DR
- Strengthening capacity and capability of local self-government bodies (municipalities) for prioritization of prevention measures for mitigation of anthropogenic threats and mainstreaming into the regional development strategies and action plans
- Assess the disaster risks at municipality level due to different natural hazards and vulnerabilities at different levels and different scales; and develop a system to periodically update and make it publicly available
- Enhancement of the role of local self-government bodies in disaster risk reduction through enactment of policies, rules, regulations and legislative changes.
- Assessment of local self-government bodies' capacities (technical and financial) at the municipal level in identifying, assessment, prevention and response to natural and anthropogenic threats.
- Strengthening local civil society and community-based organizations, particularly organizations focusing of gender mainstreaming and encouraging their involvement in participatory disaster risk reduction management process, including decision-making and monitoring of natural resource use licensing.
- Integrate disaster risk reduction consideration into Infrastructure development planning and implementation at municipality level

- Update of environmental and technical safety standards, especially those applied for construction safety norms considering local conditions of different regions and secure compliance of such standards.
- Creation of local platforms for disaster risk management, involving all stakeholders for improvement of coordination and experience exchange at the regional level.
- Implementation of appropriate measures at national and local levels, including legislative changes and land use respectful planning, in order to avoid cultivation of threatened areas; in addition ensure gradual eviction of population from such places;
- Prepare land use maps focusing on urban and urbanizing areas, and develop a system for periodically updating and using it for land use planning.

Sendai Framework Priority 3. Investing in disaster risk reduction for resilience

- Establish a national system of hazard/risk monitoring and early warning to specific hazards;
- Establish and institutionalize an authentic, open and GIS based Disaster Information Management System (DIMS) at municipal level to cover all disaster-related information.
- Mobilization of necessary financial resources in local (municipal) budgets for implementation of natural and anthropogenic threats prevention and response activities. Strengthening local self-government bodies' capacities for this purpose.
- Strengthening participation insurance companies in reduction of threats caused by natural disasters and climate change and promotion of public/private partnership.
- Standardization of design and construction, including construction materials, taking into consideration local conditions (including seismological, avalanche) for disaster risk reduction.
- Taking into consideration natural disasters in land utilization planning, and especially forest utilization planning. Planning and implementation of reforestation and renovation activities in appropriate areas.
- Feasibility study for gasification of high mountainous regions (Adjara), in order to reduce pressure on forest ecosystems. It should be considered that in some villages which are already gasified, population still uses mainly firewood as fuel (heating and cooking), since they can't afford paying gas fee. The locals prepare firewood on their own efforts; consequently, the cost is cheaper. Availability of alternative energy sources (biogas, solar energy) should be discussed.
- Planning and implementation of activities, mitigating mineral resources extraction and processing process impact on environment for pollution reduction (Tkibuli, Tchiatura).

Sendai Framework Priority 4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction

- Regular update of the Municipality Emergency Response Plans with participation of the at-risk communities. Raising awareness of the at-risk communities regarding the existing plans. Capacity building of local self-government bodies on emergency response.
- Introduction of early warning system in high risk zones; improvement of information dissemination system in case of emergency;
- Reconstruction and rehabilitation of existing infrastructure, houses and public buildings in high risk zones; establishment of draining systems in landslide risk zones. Regular cleaning of riverbeds of mudflow rivers and implementation of river bank protection activities, restoration and arrangement of irrigation system considering climate change results.
- Regular training of emergency response local groups and volunteers and renovation of their technical equipment.

Annex 1. Frontline Survey Form



Humanitarian Aid
and Civil Protection



DANISH
RED
CROSS



GNDP
Global Network of Disaster Preparedness
City and solutions for disaster situations



OXFAM

Part A: General profile of the community

1. Survey date	Day	Month	Year	2. Name of Organisation doing the survey				
3. Risk Zone								
4. Name of the community				5. Total Population	M	W	Boys	Girls
6. Coordinates (UTM)				7. Altitude (msnm)				
8. Location	Region		Municipality	Village				
9. Type of Community	Rural		Urban	10. Risk level				
				High	Medium	Low		
11. Participation in previous VFLs/AFL/DRR activity	VFL 2009		VFL 2011		VFL 2013		DRR project: Basic Basic with resilience component Forming organising response for DRR	
	YES	NO	YES	NO	YES	NO		

Part B: Personal characteristics of the individual

1. Survey reference number						Date Day / Month / Year					
2. Types of survey		Government			Community		NGO		Other		
3. Age		Less than 11		12-17		18-25		26-60		More than 60	
4. Gender		Woman		Man		Other					
5. Knows how to read and write?		Person with disability		Part of an ethnic group		Steady income		Owns house		House is in a good state	
Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
6. How long have you lived in your community		1: 1 a 3 years		2: 4 a 6 years		3: 7 a 10 years		4: 11 a 20 years		5: more tan 21 years	
7. What is your socio-economic status in relation to the rest of your community		1: Much worse off		2: Worse off		3: Equal		4: Better off		5: Much better off	
8. What is your socio-economic status in relation to the rest of your country		1: Much worse off		2: Worse off		3: Equal		4: Better off		5: Much better off	
9. What has happened in with relations to losses and damage since 2005		1: Substantial increase in losses		2. : some increase in losses		3 No Change		4. Small reduction in losses		5. Significant reduction in losses	

Part C: Resilience Profile

Priority of threat	Threats
1 Most important	
2	
3	
4	
5	

Threat 1	Consequences of threat 1	Actions to address threat 1	Barriers to addressing threat 1

Threat 2	Consequences of threat 2	Actions to address threat 2	Barriers to addressing threat 2

Threat 3	Consequences of threat 3	Actions to address threat 3	Barriers to addressing threat 3

Threat 4	Consequences of threat 4	Actions to address threat 4	Barriers to addressing threat 4

Threat 5	Consequences of threat 5	Actions to address threat 5	Barriers to addressing threat 5