BASELINE RESEARCH

HUMAN WILDLIFE INTERFACE

BASELINE SURVEY ON THE HUMAN WILDLIFE INTERFACE IN THE AUTOMOMOUS REPUBIC OF AJARA

AUTONOMOUS REPUBLIC OF AJARA, NOVEMBER 2015

BLACK SEA ECOACADEMY

THIS RESEARCH WAS COMMISSIONED BY THE SDC FUNDED MERCY CORPS GEORGIA IMPLEMENTED ALLIANCES LESSER CAUCASUS PROGRAMME (ALCP). THE VIEWS EXPRESSED IN THIS REPORT ARE THOSE OF THE COMMISSIONED ORGANIZATION BLACK SEA ECO ACADEMY.

ALCP Alliances Lesser Caucasus Programme

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TABLE OF CONTENTS

Tables

Maps

Figures

Pictures

1. EXECUTIVE SUMMARY & ALCP PROGRAMME NOTE ON THE RESEARCH

The Alliances Lesser Caucasus Programme (ALCP) is a Swiss Agency for Development and Cooperation market development project implemented by Mercy Corps Georgia working in the dairy, beef, sheep and honey sub-sectors in the Kvemo Kartli (KK), Samtskhe Javakheti (SJ) and Ajara (AJ) regions in Southern Georgia, regions all highly dependent on livestock production. The programme has been audited according to the Donor Committee for Enterprise Development (DCED) Standard and is committed to the successful implementation and measuring of Women's Economic Empowerment. The Alliances Lesser Caucasus Program engages in diagnosing key constraints to market systems development.

Disaster Risk Reduction in direct relation to problems facing those reliant on animal husbandry and in Ajara, honey production, is a key area. The development of agro tourism is a strategic goal of the Ajaran Government and the programme seeks to ensure access of farmers to the benefits of a thriving and inclusive market for agro tourism into which local government and communities can contribute and profit. The flora and fauna of Ajara are a unique selling point of the region, as is wild and domestic honey production and traditional subsistence farming methods and lifestyles. It is vital that rural producers and wildlife can coexist and that local communities learn to manage and profit from a resource which could significantly contribute to towards their livelihoods. Market assessment conducted at the outcome of ALCP Ajara revealed a seemingly significant level of wild animal attacks on livestock and the disruption of hives as reported by farmers and key informants at municipal level. It quickly became apparent that it was necessary to corroborate and ascertain the level and extent of these attacks in order to develop the appropriate programme strategy.

The ALCP works with national, regional and local government, local NGOs and private sector actors to enable the livestock market system to function more efficiently for & inclusively of small-scale livestock producers (SSLP's) in Ajara region (as well as Kvemo Kartli and Samtskhe-Javakheti regions) resulting in improved productivity, incomes and resilience to livelihood shocks. The programme has facilitated and is working with Disaster Risk Reduction Working Groups in each municipality to manage DRR issues related to animal husbandry and honey producers. In relation to coping with and developing a strategy to deal with wild animal attacks, a major step in developing this capacity at a municipal level was generating a piece of in depth research which provided an overview and inventory of the situation as it stands at present.

Accordingly, the ALCP issued a tender (see TOR annex 1) on conducting a research into the "Human-wildlife interface in the Autonomous Republic of Ajara" which was won and has been implemented by Black Sea Eco-Academy (BSEA) with backstopping provided by a consultant from Fauna & Flora International who has worked extensively in Georgia on wildlife and human conflict including in protected areas in Tusheti and Vashlovani. An important secondary function of the research, given the concentration of national parks and protected areas in Ajara, the importance of conservation and the growing number of environmental initiatives and stakeholders in Ajara, was deemed to be the capacity building of a local NGO who could go on to contribute to the sphere in Ajara. The research objectives, methodology and approach are detailed in the following chapter.

On undertaking the research it became apparent that concrete data on the nature of the attacks and the damage they cause, was very hard to find, with the research showing that systematic data collection is not

being carried out at local, regional or national levels. The most common type of reporting is verbal and from the local population to the local municipal government. What information is collected is accumulated on different levels and within different departments with no amalgamation and no mechanism to ensure systematic coordination between them. The most pertinent and up to date information about the animal attacks gathered by the research had been recently recorded and generated by Municipal DRR WGs established in all five municipalities of Ajara with the facilitation of ALCP in 2014/15. Official responses to reports of attacks are non-existent or involve cumbersome and lengthy processes with little practical amelioration of the situation.

The study revealed that attacks on livestock by wild animals is an acute problem faced by small livestock keepers in the rural villages of Ajara. From April-July, 2015, 276[1] cases of wild animal attacks (predominantly bear and wolf) were recorded in the five rural municipalities of Ajara by the programme facilitated Municipal Disaster Risk Reduction Working Groups.

The predominantly negative attitudes of farmers towards wild animals, is another constraint in managing the human-wild animal interface. It is influenced by fear and helplessness with no means or little hope of redress through official channels. They are also not party to a wider view of the benefits that wildlife confer in relation to developing Ajara as a rural tourism destination in which biodiversity and wildlife conservation play such an important part. Consequently farmers try to deal with the problem themselves and carry out some preventive activities independently without notifying government authorities, which in turn exacerbates the lack of data and sense of isolation.

Recommendations drawn up by the research team and summarized in Table 4[2] at the end of the report are divided into four parts: prevention strategy, mitigation strategy, governance and information and institutional mechanisms. They include raising farmers' awareness and technical know-how of protection measures, improved institutional coordination and remit, including data collection and other potential tools such as compensation and livestock insurance. Perhaps most important are the recommendations related to governance and information, such as conservation education for the local population and quantifying the level of threat through data management and analysis. Analyzing data will highlight patterns in the attacks showing where key areas are and what the critical times of year are. This can feed into a mitigation strategy and help reduce the fear and sense of helplessness among the population by reducing the threat to its proper size. As the authors of the research note, the most important facet of managing the human wildlife interface and reducing conflict is to work primarily with the attitudes of people. Given that the relevance of the attacks and the agency to deal with them is primarily at the municipal level, the efficiency of the DRR WG's in collecting data is a good first step in developing a concrete strategy and capacity at the municipal levels whilst advocating to and working with regional and national government where required.

[1] Total number for all five municipalities of Ajara. source: Municipal DRR WGs

[2] The recommendations listed in Table 4 at the end of the report represent the findings of the BSEA project team and do not represent the views or strategy of the ALCP programme. Recommendations will be taken into account when forming the programme strategy.

2. GENERAL INTRODUCTION

2.1 Research objectives

The main objective of the research was to assess the interface between the livestock/honey producers and wild animals in the Autonomous Republic of Ajara and develop a wild animal attacks reduction mechanisms based on the local and international practices. To reach the main objective of the proposed research, the following tasks were performed:

1. Inventory of fauna in the target municipalities of the Autonomous Republic of Ajara;
2. Analysis of the local people's attitude towards wild animals;
3. Collecting and analyzing the information on nature of the wild animal attacks, damages and problems caused;
4. Analysis of the existing legislation related to the hunting and biodiversity monitoring;
5. Developing the recommendations for the practical management solutions.

2.2 Research approach and data collection

The conceptual outline of the main approach used in this research is presented on the Figure 1.

	BASELINE SURVEY ON HUMAN - WILD ANIMAL CONFLICT IN THE AUTONOMOUS REPUBLIC OF ADJARA					
Chapters Title	Chapter 2: General Introduction	Chapter 3: Inventory of fauna in the target municipalities of AR of Adjara	Chapter 4:Review of the legislation and institutional framework related to the hunting and biodiversity monitoring	Chapter 5: Wildlife and the local people attitude towards it	Chapter 6: Nature of the wild animal attacks and problems caused	Chapter 7: General findings and Rrecommendations
Information Used	Existing reports, documentations, materials, spatial and non-spatial (tabular) information, legislative documents, results from interviews/ questionnaires, analysis from primary and secondary information					
Methodology used	Literature review; Open ended interviews with local municipality representatives and other local organizations; Semi-structured interviews with local communities; Workshops; Using GIS software and Excel for processing the information					

Figure 1: Research conceptual outline

The data collection process used in this research is divided into three stages: 1. Central level; 2. Local level and 3. Field surveys.

1. Data collection on central level includes gathering of the records of wild animal attacks from the national institutions and other relevant documents (Legislative and regulatory documents, environmental monitoring report, official statistics on wild animal attacks, etc.). Official letters were sent to the Agency of Protected Areas (APA) and Environmental Supervision Department (ESD) of the Ministry of Environment and Natural Resources Protection (MoENRP), National Center for Disease Control and Public Health (NCDC) of the Ministry of Labor, Health and Social Affairs (MoLHSA), National Food Agency (NFA) of the Ministry of Agriculture (MoA) by the Black Sea Eco Academy project (research) experts team members. The results of the information collected on the central level are presented in the chapter 4 and chapter 6.

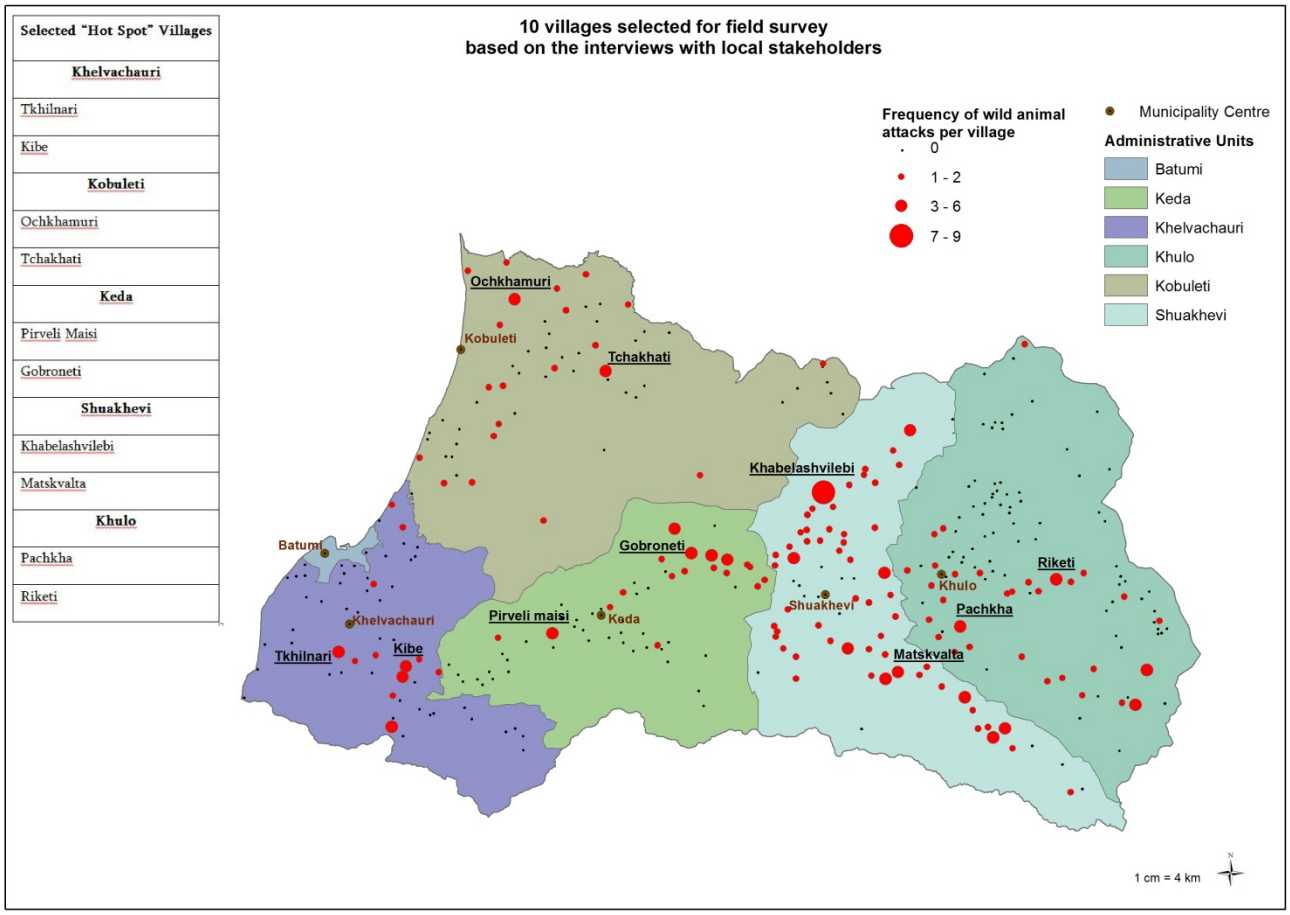
2. Data collection on local level includes collection of the information from the local government (Autonomous Republic and Municipal) as well as local level representatives (e.g. NGO's). For the data collection, firstly the initial open ended questionnaire was developed to get insight of the existing

situation regarding the human-wild animal interface in the Autonomous Republic of Ajara. The local level key stakeholders were identified and interviewed to get the general information about the nature of wild animal attacks, damages and problems caused. The details of the questions asked to the identified stakeholders are presented in the Annex 2. The key local stakeholders interviewed are:

- Head of Ajara division of Environmental Supervision Department
- Local NGO's ("Wetland", "Eco Farm", "Environment, Society, Law")
- International Organization currently working in Ajara on the issues related to protected areas (UNDP)
- Local municipal government representatives/DRR Working Group members
- Forestry department representatives at local/municipal level

The initial findings of the interviews with local level representatives are presented in the Chapter 6. Based on the initial interviews the hot spot villages were identified that were most frequently mentioned by the respondent as the areas that are most often attacked by the wild animals for the last 5 years. The hot spot villages are presented on the Map 1. From the identified hot spot villages in cooperation with the consultant from Fauna & Flora International (FFI) it was decided to select 10 villages (2 villages per municipality) and 100 farmers for an interview.

Map 1: Hot spot villages identified through the initial survey results from the interviews with local level respondents (April, 2015) selected for field survey.



3. Information collection from the field survey includes data from local community members. The detailed questionnaires were developed, with the assistance of the international expert, considering the initial survey findings. The field survey questionnaires are based on the previous studies undertaken in Croatia and in Georgia (Majic, 2007; Rigg, et al, 2010; Majic, et al., 2011) that was edited based on the local needs. In overall, the two types of questionnaires were developed:

I. Questionnaire: Semi-Structured interviews to collect the data on human-wild animal interface in the Autonomous Republic of Ajara (Annex 3). The information retrieved within the first questionnaire is: socio-demographical information for each respondent, farming and livestock information, detailed information about the livestock losses due to wild animal, existing practices of respond and preventive measures.

II. Questionnaire: Written questionnaire to measure community attitudes and awareness towards wildlife (See Annex 4). The information retrieved within the second questionnaire is: the attitude of the local community members towards wild animals, knowledge on wild animals, etc.

In overall the outline of the process of data collection is presented on the Figure 2.

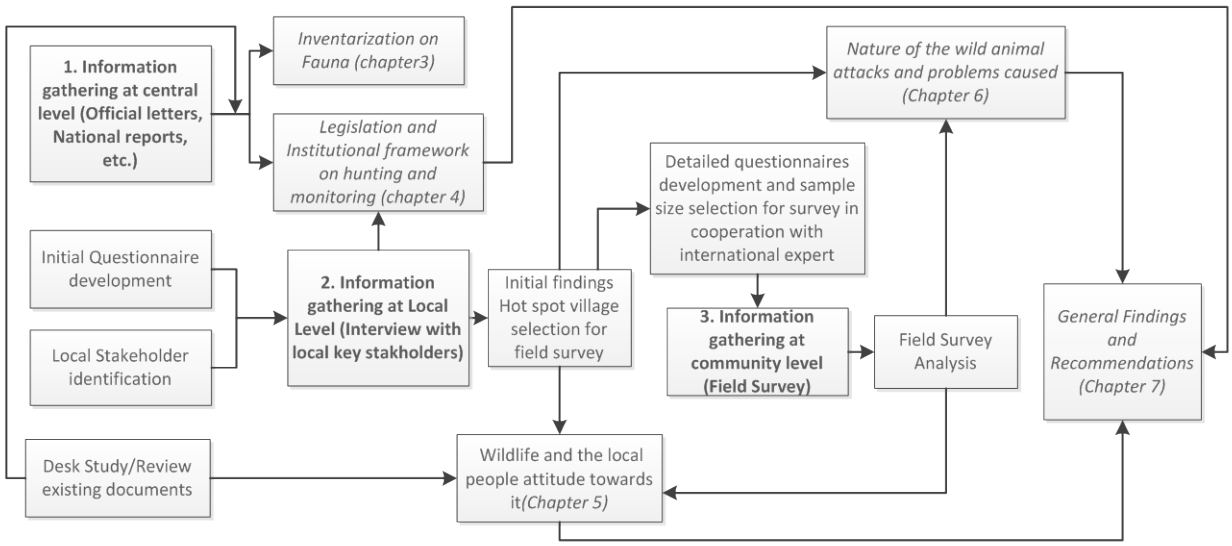


Figure 2: Outline of the data collection analysis and report development process

During the field survey 100 farmers were interviewed in total (livestock owners, honey producers) for the first type of questionnaire. It was decided to conduct a survey according to the random selection method. After the first chosen respondent in the selected village, every tenth respondent was selected (in case the number of farmers was 100 per village) and thus, every district of the village was covered with the support of the local representative. In case the farmer was not available at home the team moved to the neighboring farmer house and continued the survey process as planned in advance. While for the second type of the questionnaire it was decided to interview broader representatives of the community members, included the farmers who filled in the first type of questionnaires as well. Thus, the second type of questionnaire was distributed (about 1000 questionnaires in total) in the villages to get the information about the attitude of locals towards the wild animals. However, only 391 questionnaires were filled in out of 1000. The main challenges during the field survey were:

- Many family members were migrated to the mountains, cities or Turkey for the work and houses were locked (e.g. Pachkha, Chakhati, Ochkhamuri, Matskvalta);

- Some people refused to take part in the survey (one of the main reason was that respondents were busy with their farming duties and due to the large volume of the questionnaires they did not take part in the interviews);
- In some cases, respondents were less interested in the process of filling out the questionnaires. The main reason for this was a lack of trust from respondents. They believed that despite of the importance of the issue, such problems would not resolve by filling out questionnaires and that similar studies had no sense.

More details regarding the field surveys are presented in the chapter 5 and 6.

3. INVENTORY OF FAUNA IN THE TARGET MUNICIPALITIES OF THE AUTONOMOUS REPUBLIC OF AJARA

3.1 Introduction

The first stage of the Project was devoted to gathering and compiling the basic information on fauna. The goal of the survey carried out, was to reveal the species composition of "Large mammal" wild animals and species of their victims, their density, territorial distribution, distribution by natural habitats in the Autonomous republic of Ajara and assess an existing situation (see table 2), the review of wild animal density in other countries is presented in the Annex 5. The term "Large mammals" is introduced for the simplicity; it does not have any taxonomic basis. Under this condition, this group covers all species of wild animals and hoofed animals, despite of their size. For the large mammals the following main characteristics were selected:

1. Conservation Status (International): IUCN status;
2. Conservation Status (national): Georgian Red List;
3. Population size and density (national and International);
4. Population trend;
5. Economic importance (national);
6. Monitoring methods;
7. Research activities: Last 10 Years;

3.2 Study area description

The area to be investigated covers the territory of The Autonomous Republic of Ajara, with the area of 2,900 km^2, the human population, according to the census of 2009, is 389,000. The autonomous republic of Ajara administratively is divided into one self–governing city (Batumi) and 5 municipal governments: Keda, Kobuleti, Khelvachauri, Shuakhevi and Khulo. There are 342 settlements on the territory of the autonomous republic.

The administrative territory of the Autonomous Republic of Ajara has high indices of afforestation and diversity of forests. The forests cover 65% of the whole territory (forests cover around 40% of Georgia's territory), here we can find subalpine as well as colchic mixed deciduous forests, mainly represented by the oak forests, beech forests, chestnut forests, fir forests, spruce forests and pine forests.

The forest resources compile 191,604 hectares in total; among them are managed reserves (13,693 ha), national parks (15,807 ha), green belt forests (6,668 ha), watershed forests (1,990 ha), parts of forests of protecting zones near populated areas (12,421 ha), subalpine forests (7,084 ha), riparian forests (5 869ha), soil preservation and water regulating forests (128,069 ha). The index of afforestation of the Autonomous Republic of Ajara is much higher than the same indices for the whole Georgia (39.1 %), the neighboring Turkey (11%) and globally as a whole (27%).

According to the distribution of the forests by the vertical belts, the first belt consists of humid subtropics (up to 350 meter above sea level-masl), the second belt - mixed, mixed, broadleaf colchic forests (350–900 masl), the third belt - beech forests (900– 1500 masl), the fourth belt - fir and conifer forests (1,500–1,800 masl), and the fifth belt - (1,800–2,300 masl).

The biggest forest areas (61%) are presented at 1,000-2,000 masl. More than half of the territories covered with forests (55.9%), are on the slopes with the inclination grade 31 and more, and this indicates the

tremendous importance of forests as soil preservant and water regulators under the conditions of the high density of rural population and poor land resources.

The first scientific information about mammals of the Ajara region can be met in the works in the beginning of the last century (Динник, 1910) where it is mentioned that Ajara is distinguished by the diversity, as well as by the number of the species. It must be mentioned that the territory of the Republic of Ajara is less studied for big mammals, during the last few years no systematic investigations were carried out. The only exception is the study conducted by Ilia State University in 2012 (Gurielidze, 2012) under funding of the former LEPL the Agency of Natural Resources of the Ministry of Energy and Natural resources. This study gives an important information about the main species (see table 2).

Speaking about the biodiversity of the study area, it should be noted that in general, Ajara is located in the biodiverse region of the Caucasus, which the International Union for Conservation of Nature (IUCN) entered in the 34th list of the world's so-called "Hotspots'', characterized by the highest biological diversity and the abundance of endangered terrestrial ecosystems. At the same time, by the geographical location, this territory is included in the 200 world recognized eco-regions with its richness of species, endemic rates, taxonomic uniqueness, origin characteristics and the rarity of habitats featured in the south-western corridor of the lesser Caucasus. It also appears in the list of the 25 priority regions in terms of the world's biological diversity and the need for protection. This is evidenced by the fact that the World Wildlife Fund (WWF) included Ajara forests in the "100 hotspots of European forests'' which lists forests which are unprotected and which require protection, priority was given to the unique forest ecosystems of Ajara (Manvelidze, 2008).

The highly varied physical and geographic conditions of Ajara and the peculiar geological past together with the floristic composition, led to the formation of a rich and varied wildlife. Ajara, together with other regions of Georgia, represents a certain ''Faunal Node', where apart from the original so-called endemic animals, there are a lot of species of Europe and Asia. According to the available data to date, the diversity of the fauna of Ajara is represented by 4,627 species. Among them there are 4,028 invertebrate (15 species are included in the Red List), and 599 - Chordates (66 species are included in the Red List) (the Ministry of Finance and Economy of the Autonomous Republic of Ajara, 2012).

The territory to be investigated covers five administrative regions: Keda, Kobuleti, Khelvachauri, Shuakhevi and Khulo. The protected areas of the Ajara Autonomous Republic were studied separately from the municipalities. Table 2 details the species of large mammal, present at each municipality.

Khelvachauri Municipality

Khelvachauri municipality is located in the extreme southern part of the Autonomous Republic of Ajara. In the north the municipality is bordered by the municipality of Kobuleti, from the east – Keda municipality, from south and south-east – Turkey, from the west – Batumi and from the south-west – the Black Sea.

The total area of the municipality is 36,711 ha. 15,439 hectares of this territory is covered with forests.

The population of the municipality is 62,828. There are 37 administrative units and 64 settlements. The administrative center is located in the city of Batumi, 23 Didajara St.

Kobuleti Municipality

Kobuleti municipal government is located in the south-west part of Georgia, and in the northern part of the Autonomous Republic of Ajara. It starts with the south-west swampy lowlands of Kolkheti and goes to canyons of the rivers Choloki, Tskhrapona, Achkva, Kintrishi, Kinkisha, Dekhva and Chakvis Tskali. The territory of Kobuleti municipality from the north borders with the municipality of Ozurgeti (the length of the

border with the municipality is 33km). From the south it borders Keda (the length of the border with the municipality is 21.4 km) and Shuakhevi (the length of the border with the municipality is 33 km) municipalities. From the west it has the Black Sea (the length of the seashore is 24 km).

The total area of the municipality is 711.8 km^2. 23,790 hectares of this territory is covered with forests. The administrative center, the town Kobuleti is located on the Black Sea, at 10 masl.

The population of the municipality is 92,900. The administrative center is the town Kobuleti. There are 51 settlements in the municipality.

Keda Municipality

Keda municipal government is located on the middle of the river Acharistskali. To the north, at the length of 38km, it verges with Kobuleti, to the east, on 24km – Shuakhevi, to the west, on 24km – Khelvachauri and to the south on 17km, it borders with Turkey. To the south of Keda region there is the Shavsheti mountain chain, to the north-east – the Meskheti mountain chain and to the north and north –west – the Kobuleti mountain chain.

The total square of the municipality is 452 km^2. 37,570 hectares of this territory is covered with forests.

The population of the municipality is 21,244. The administrative center is Keda.

Shuakhevi Municipality

The total length of the border of Shuakhevi municipality is about 195km. The territory of the municipality from the north borders with the municipalities of Ozurgeti (6.3km) and Chokhatauri (2.5km), from the south it borders Turkey (46km), from the east – Khulo municipality (78 km), from the west – Keda municipality (31.5km) and Kobuleti municipality (29.5km).

The total area of the municipality is 588 km^2. 40,277 hectares of this territory are covered with forests.

The population of the municipality is 22,600. The administrative center is the township of Shuakhevi. There are 44 settlements in Shuakhevi municipality: 1 township and 43 villages.

Khulo Municipality

Khulo municipality from the south borders with Turkey (the length of the border - 20km), from the west - Shuakhevi municipality (the length of the border is 60.5km), from the north – west - municipality of Ozurgeti (the length of the border – 1km), from the north – Chokhatauri municipality (the length of the border – 19.5km), and from the east – Adigeni municipality (the length of the border – 28.8km).

The area of the municipality is 710 km^2. 37,182 hectares of this territory is covered with forests. The administrative center, the town Kobuleti is located on the Black Sea, at 10 masl.

Population of the municipality is 35,500. The municipal government consists of 1 township, 12 communities and 78 villages. The administrative center is the township Khulo.

Protected areas of the Autonomous Republic of Ajara

The Protected areas of the Autonomous Republic of Ajara cover 39,202 hectares of territory, the Mtirala National Park (15, 806 ha), Kintrishi nature reserve (10,703ha) and the Kintrishi protected landscape (3,190 ha), Machakhela National Park (8,733 ha), Kobuleti nature reserve (331 ha), and Kobuleti managed reserve (439 ha). The protected areas of Ajara are presented on the map 1. The detailed description on the types of

protected areas is presented in the Table 1 and the structure of the Agency of Protected Areas is presented in the Annex 6.

Map 2: Protected areas of Ajara Autonomous Republic

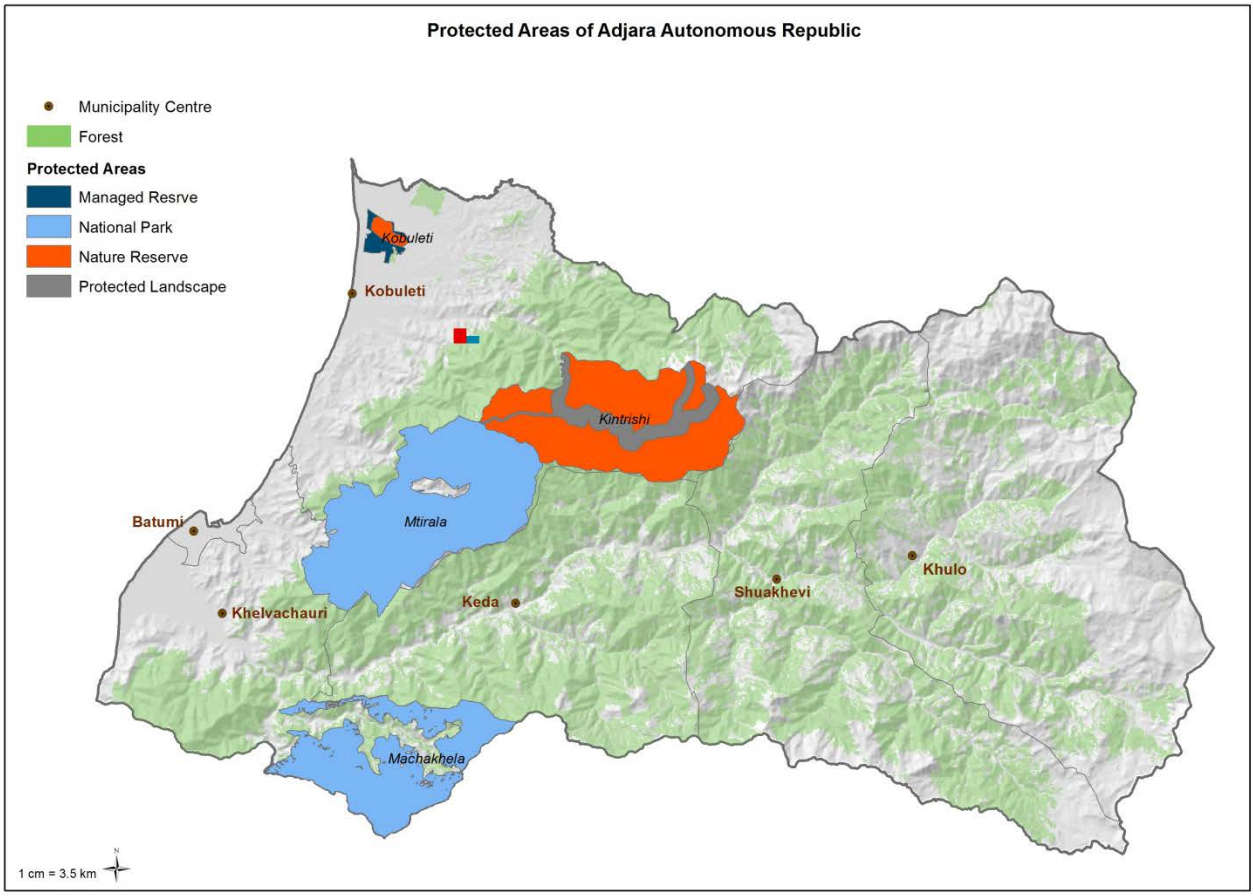


Table 1: Types of protected areas and their description. Source: www.apa.gov.ge

Types of Protected areas	Description
Strict Nature Reserve	Strict Nature Reserves are established in order to maintain nature, natural processes and genetic resources in a dynamic and pristine condition, and to conduct scientific research and studies, with a minor impact, for educational and environmental monitoring purposes. For declaring a Strict Nature Reserve such territory and/or aquatory shall be selected, that will ensure maintenance of natural objects and processes without special care and restoration. Currently, there are 14 Strict nature Reserves in Georgia with a total area of 140.672 thousand ha.
National park	National parks are generally created in order to protect relatively large, natural ecosystems of exceptional beauty that are of national and international importance and to conserve the existing biodiversity. In addition, national parks play an important role in the development of eco-tourism, particularly in the promotion of natural and cultural heritage of Georgia at the international level. Currently Georgia has 10 National Parks with a total area of 276723,7 ha.
Managed Reserve	Currently, at managed nature reserves, where previously forest and hunting farms existed, hunting farms have been established based on the use of special licenses. These are Gardabani, Iori, Chachuna and Korughi Managed Reserves. It is allowed to conduct special restorative and maintenance measures on the territory

	of a managed nature reserve. It is also permitted to use certain renewable resources under strict supervision and control. At the moment, there are 18 managed nature reserves in Georgia, the total area of which is 66.449 thousand hectares.
Natural Monument	Natural Monument is a relatively small area of national importance, represented by ecosystems of rare, unique and highly aesthetic features, specific geographical and hydrological formations, and individual samples of plants or fossils of living organisms. Natural Monument can be a cave, a valley, river deltas, wood groves etc. At present, there are 41 Natural Monuments. According to 2014 the total area of natural monuments is 2257.74 ha.
Protected Landscape	The first ever Protected Landscape in Georgia – Tusheti Protected Landscape was established in 2003 (31.518 thousand ha), and in 2009 - Kintrishi Protected Landscape (3.190 thousand ha). This type of protected areas allows sustainable use of natural resources and development of eco-tourism in order to contribute towards conservation objectives. According to the 2013 information, the total area of protected landscape in Georgia amounts to 34.708 thousand ha. Protected landscape is managed by the Administration established by a local Municipality, which governs the area in cooperation with the Agency of Protected Areas.
Multiple use areas	According to current Georgian legislation, it is allowed to establish multiple use areas; however such protected areas do not currently exist. Multiple use areas are established for economic activities that are organized in accordance with the requirements of environmental protection and for use of renewable natural resources. Multiple Use Areas require a relatively large area or/and aquatory, which represents natural foundation for accumulating water, productivity of forests and pasture, hunting, fishing, spread of flora and fauna, as well as tourism. It is acceptable for the areas to be partially modified and to include populated areas. The area should not include unique natural formations of national importance.

It must be mentioned, that Kintrishi nature reserve and the Mtirala national park have been operational for several decades, and in these places the density and the number of wild animals is high when compared with other forested territories of Ajara. The forests cover about 35,000 ha of the territories of protected areas of Ajara.

The photos of the animals made by trap camera within protected areas of Ajara Autonomous Republic (Mtirala National Park) are presented in the pictures 1-5.

Picture 1: chamois

Picture 2: Wild boar

Picture 3: Wolf

Picture 4: Roe Deer

Picture 5: Bear

The information on fauna per municipality of Ajara Autonomous Republic

Table 2: Inventory of fauna per municipality of Ajara Autonomous Republic

		Khelvachauri	Kobuleti	Keda	Shuakhevi	Khulo
Golden Jackal (lat. *Canis aureus*)	**Conservation Status (Georgian)**	**N/A**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	It is met on lowlands, in some cases it was seen at the altitude of 1100 masl (Gurielidze, 2012).				
	Quantity/Density	Common species, though exact number is not established, the density can be evaluated as high. During the last 10 years a considerable increase in the quantity is seen. The density in spring, before breeding, varies between 1 jackals / 0.5 - 2.5 km^2. (Bukhnikashvili & Kandaurov, 2002; Gurielidze, 2012).				
	Pop. trend	**Increasing** (Gurielidze, 2012).				
	Economic importance (national)	Occasionally hunted, but not a popular hunting object in Georgia (Gurielidze, 2012). They benefit agriculture by preventing increases in the number of rodents and lagomorphs. The golden jackal raids crops such as corn and watermelon (Heptner & Naumov, 1998). May transfer rabies (Wilde, 2005)				
	Monitoring methods	Transect counts; camera-trapping; Habitat suitability modeling.				
	Research activities	No ongoing research activities. Potentially, all zoologists researching mammal species can be consulted. Research institutions - Ilia State University, Institute of Zoology, Inst. of Ecology; NACRES, FFI				
Red Fox (lat. Vulpes vulpes)	**Conservation Status (Georgian)**	**N/A**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	It is met on the whole territory of the municipality; vertically it is spread up to 2,800 masl (Gurielidze, 2012).				
	Quantity/Density	No information on the population size available. However, common (although not numerous) species. Less common in Colchis lowland and generally in the areas where jackals (Canis aureus) are common. (Gurielidze, 2012).				
	Pop. trend	**Stable** (Gurielidze, 2012).				
	Economic importance (national)	Occasionally hunted for fur, but not a popular hunting object in Georgia. Regulates density of rodents in agricultural landscape. Commonly mentioned in Folklore (Gurielidze, 2012). May transfer rabies (Stephen & Derek, 2008)				
	Monitoring methods	Transect counts; camera-trapping; Habitat suitability modeling.				
	Research activities	No ongoing research activities. Potentially, all zoologists researching mammal species can be consulted. Research institutions - Ilia State University, Institute of Zoology, Inst. of Ecology; NACRES, FFI				
Wild cat (lat. *Felis silvestri*)	**Conservation Status (Georgian)**	**N/A**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	It is met on the whole territory; vertically it is spread up to 2,000 masl. (Bukhnikashvili & Kandaurov, 2002).				

	Quantity/Density	70	110	165	180	160
		The sex ratio is 1:3 (male / female). The population density is high 0.22-0.44 per 100 ha. (Gurielidze, 2012; Gurielidze, 2013).				
	Pop. trend	**Stable** (Gurielidze, 2012; Gurielidze, 2013).				
	Economic importance (national)	Wildcats play an important role in controlling populations of rodents and other small mammals				
	Monitoring methods	Transect counts; camera-trapping;				
	Research activities	No ongoing research activities. Research institutions - Ilia State University, Institute of Zoology, Inst. of Ecology; NACRES, FFI				
Grey Wolf (lat. *Canis lupus*)	**Conservation Status (Georgian)**	**N/A**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	It is met practically equally on the whole territory of the Ajara, vertically it is spread up to 2,900 masl. (Bukhnikashvili & Kandaurov, 2002).				
	Quantity/Density	12	16	20	28	26
		The sex ratio is 1:1; The density is 0.025 on 1km^2. (Gurielidze, 2012; Gurielidze, 2013).				
	Pop. trend	**Stable** (Gurielidze, 2012; Gurielidze, 2013).				
	Economic importance (national)	Occasionally hunted, but not a popular hunting object in Georgia. Predation on livestock. Important character in Georgian national folklore (Gurielidze, 2012; Gurielidze, 2013). May transfer rabies (Linnell, 2002).				
	Monitoring methods	Transect counts; camera-trapping; Habitat suitability modeling.				
	Research activities	Ongoing research activities: Ilia State University, Institute of Zoology, Inst. of Ecology Prof. Kopaliani N.; NACRES, FFI				
Brown bear (*lat. Ursus arctos*)	**Conservation Status (Georgian)**	**Endangered species**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	Widely spread species, on the territory of the municipality it is not distributed equally, vertically it is spread up to 3,000 masl. (Bukhnikashvili & Kandaurov, 2002)				
	Quantity/Density	20	26	42	45	42
		The sex ratio is 1:1; The density is one of the highest in Georgia and compiles 0.113 individuals per 100 ha (Gurielidze, 2012; Gurielidze, 2013)				
	Pop. trend	**Stable** (Gurielidze, 2012; Gurielidze, 2013)				
	Economic importance (national)	Interesting as an attraction for eco-tourists and scientists. Predation on livestock. Under heavy pressure from poaching. Important character in Georgian national folklore (Gurielidze, 2012; Gurielidze, 2013)				
	Monitoring methods	Telemetry, Genetic analysis, Surveys (distance sampling, aerial surveys); camera-trapping; genetic analyses; Habitat suitability modeling.				
	Research activities	Ongoing research activities: (1) ISU, Institute of Ecology, Institute of Zoology contact – Zura Gurielidze, Alexander Gavashlelishvili; (2) NACRES. contact – Bejan Lortkipanidze. Currently, DNA analyses and studies in bear population genetics are going on at Ilia State University with internal University support. In 2012 aerial and land surveys, conducted by the Institute of Ecology of ILIAUNI,				

		were funded by the government.
Lynx (*lat. Lynx lynx*)	**Conservation Status (Georgian)**	**Critically Endangered species**
	Conservation Status (IUCN)	**Least Concern**
	Spread	It is few in numbers species, on the territory it is not distributed equally, vertically it is spread up to 2500 masl. (Bukhnikashvili & Kandaurov, 2002)
	Quantity/Density	Quantity and density is not known, the sex ratio is 1 male to 2 females. No information on the population size available (Gurielidze, 2012; Gurielidze, 2013).
	Pop. trend	**Stable** (Gurielidze, 2012; Gurielidze, 2013).
	Economic importance (national)	Interesting as an attraction for eco-tourists and scientists. Minor predation on livestock. (Gurielidze, 2012; Gurielidze, 2013).
	Monitoring methods	Surveys (distance sampling); camera-trapping; Habitat suitability modeling.
	Research activities	(1) ISU, Institute of Ecology, Institute of Zoology; (2) NACRES. contact – Zura Gurielidze, Natia Kopaliani (ILIAUNI), Bejan Lortkipanidze (NACRES). 2012 land surveys, conducted by the Institute of Ecology of ILIAUNI, were funded by the government.
Eurasian Badger (*lat. Meles meles*)	**Conservation Status (Georgian)**	**N/A**
	Conservation Status (IUCN)	**Least Concern**
	Spread	Numbers species are few, on the territory it is not distributed equally, tries to keep out from the places where jackal can be met, vertically it is spread up to 2,200 masl (Bukhnikashvili & Kandaurov, 2002.)
	Quantity/Density	Quantity is not known, density can be assessed as high (Gurielidze, 2012; Gurielidze, 2013).
	Pop. trend	**Stable** (Gurielidze, 2012; Gurielidze, 2013).
	Economic importance (national)	Under heavy pressure from poaching (Gurielidze, 2012; Gurielidze, 2013). Eurasian badgers may damage agricultural crops as well as fruit gardens in populated areas (Delahay, et al., 2008).
	Monitoring methods	Habitat suitability modeling.
	Research activities	No ongoing research activities. Research institutions - Ilia State University, Institute of Zoology, Inst. of Ecology; NGO NACRES. NACRES, FFI
Wild Boar (*lat. Sus scrofa*)	**Conservation Status (Georgian)**	**N/A**
	Conservation Status (IUCN)	**Least Concern**
	Spread	It is spread on the forest part of the municipality, on the territory it is not distributed equally; vertically it is spread up to 2700 m.a.s.l. (Bukhnikashvili & Kandaurov, 2002.)
	Quantity/Density	16 | 24 | 38 | 45 | 38 The density is 0.007 individuals on 1 hectare. The sex ratio is 1: 3 (Gurielidze, 2012; Gurielidze, 2013)
	Pop. trend	**Decrease** (Gurielidze, 2013)
	Economic importance (national)	Game species, popular hunting objects in Georgia. *Wild boars can be problematic for farmers. Crops are often susceptible to damage where wild boars are prevalent* (Gurielidze, 2012; Gurielidze, 2013).
	Monitoring methods	Monitoring should combine tracking on transects, direct visual counts from high watching points, counting at night using thermal imaging cameras as well as indirect methods (e.g. dung counting) (Krebs, 2006; Sutherland, 2006; Thompson et al., 1998). Observations on wild boar - visual observations and tracking (footprints, feces etc.) should be carried out by professional zoologists or trained experts together with rangers and/or students. Counting all traces of the species within a

		protected area or sanctuary during multiple years will indicate the existing trend.				
	Research activities	2012 estimate (Gurielidze, 2013) suggests size of national population between 1000-1500 individuals. Wild boars were few times introduced from distant geographic areas, and extensive hybridization with wild pigs most likely takes place. Presumably population size appears to have dropped sharply in late 2000 as a result of the African Swine Fever epidemic.				
Roe deer (lat. Capreolus capreolus)	**Conservation Status (Georgian)**	**N/A**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	It is spread on the forest part of the municipality, on the territory it is distributed equally, vertically it is spread up to 2,500 masl. (Bukhnikashvili & Kandaurov, 2002.)				
	Quantity/Density	80	120	185	200	185
		The density is 0.15 individuals on 1 km^2. The sex ratio is 1: 3 (male / female) (Gurielidze, 2012; Gurielidze, 2013).				
	Pop. trend	**Stable** (Gurielidze, 2012; Gurielidze, 2013).				
	Economic importance (national)	Game species, under heavy pressure from poaching (Gurielidze, 2013).				
	Monitoring methods	Monitoring should combine tracking on transects, direct visual counts from high watching points, counting at night using thermal imaging cameras as well as indirect methods (e.g. dung counting) (Krebs, 2006; Sutherland, 2006; Thompson et al., 1998). Visual observations and tracking (footprints, feces etc.) should be carried out by professional zoologists or trained experts together with rangers and/or students. Counting all traces of the species within a protected area or sanctuary during multiple years will indicate the existing trend.				
	Research activities	Contacts: Ilia State University, Institute of Ecology, Natia Kopaliani, Zura Gurielidze, Alexander Gavashelishvili. No ongoing research projects. Transect counts were held in 2012, irregular counts are carried in the hunting farms, according to requests of Biodiversity Conservation Department of the Ministry of Environment and Natural Resources Protection. 2012 extrapolative estimate (Gurielidze, 2013) suggests size of national population between 7000-8000 individuals. Spatial distribution of the deer depends on the presence of food (green plants), shelters (scrub) and absence of domestic ungulates.				
Chamois (lat. Rupicapra rupicapra)	**Conservation Status (Georgian)**	**Endangered**				
	Conservation Status (IUCN)	**Least Concern**				
	Spread	It is spread on the forest part of the municipality, on the territory it is not distributed equally, vertically it is spread up to 2,600 masl. (Bukhnikashvili & Kandaurov, 2002.)				
	Quantity/Density	40	50	80	100	90
		The density is 0.45 individuals on 100 hectares. The sex ratio is 1: 2 (male / female) (Gurielidze, 2012; Gurielidze, 2013).				
	Pop. trend	**Unknown**				
	Economic importance (national)	Game species, under heavy pressure from poaching. Important character in Georgian national folklore (Gurielidze, 2012; Gurielidze, 2013).				
	Monitoring methods	Transect counts; camera-trapping; Habitat suitability modeling.				
	Research activities	No ongoing research projects. Research institutions - Ilia State University, Institute of Zoology, Inst. of Ecology; NACRES, FFI				

4. REVIEW OF THE EXISTING LEGISLATION AND INSTITUTIONAL FRAMEWORK RELATED TO THE HUNTING AND MONITORING

4.1 Legislative framework

According to the legislation in place in Georgia, wildlife is "the unity of all kinds of wild animals, which permanently or temporarily live on the territory of Georgia or in its territorial waters, continental shelf and special economic zone and are under the conditions of the natural state of freedom". According to the above mentioned legislation, wildlife is state property and the right of utilization of it, in case of the following certain conditions, can be given to the physical and legal bodies.

Goals and Tasks of the Law "on Wildlife"

Georgian legislation on wildlife is based on the Constitution of Georgia, international treaties and agreements which Georgia has established and joined. The main regulating normative act for the wildlife of Georgia is the Law of Georgia "on Wildlife"[3], accepted on December 25, 1996 and it regulates the field of protection of wildlife and its items and their utilization by the physical and legal bodies.

The goals of the Law are: 1. ensuring the protection and restoration of the wildlife, its habitat, maintaining the diversity of species and genetic resources, following the principles of sustainable management; 2. ensuring legislative support for protection of the wildlife and state regulation of the utilization of its items.

According to the Law, the protection of wildlife is carried out on the basis of the strategy of the sustainable development of the country, the national program of acts of environmental protection, regional, institutional and local management plans of programs and objectives of business of acts of environmental protection and according to the Georgian legislation on environmental protection and utilization of natural resources. The planning of measurements for the protection of the wildlife are set out and integrated in:

- Management plans of protected areas;
- Perspective plans of organizing and leading in forest management;
- Land use schemes in administrative-territorial units;
- Plans and projects of resettlement and development;
- Infrastructural projects;
- Plans of construction and sectoral development;
- Plans, projects and programs of protection, utilization and using of existing water, forest, land, mines and carriers, and other natural resources.

Legislative Mechanisms for Monitoring Wildlife

In order to ensure the protection of wildlife, the state carries out the permanent monitoring of biodiversity, which is regulated by the Decree[4] of the Minister of Environment and Natural Resources Protection of Georgia issued on May 30, 2002. According to the Decree, the MoENRP is responsible for making and monitoring a wildlife registry throughout Georgia by coordinating with its territorial units and subordinate agencies. The Ministry can also issue permits to a third party for data collection for national registry (monitoring) of wildlife. The methodology of national registration is based on methods of Cochrane and Tranekteb[4]. Hunting Reserves (see below) are responsible for information gathering within their territory and the further provision of information to the MoENRP.

[3] https://matsne.gov.ge/ka/document/view/33352

[4] https://matsne.gov.ge/ka/document/view/53800

Wildlife Utilization: Hunting

According to the Law "on Wildlife", wildlife utilization (such as hunting, fishing, wildlife utilization for zoological collections and scientific research, recreational and veterinary purposes, etc.) can involve the removal of wildlife removal from the habitat or not. Wildlife utilization for the purpose of common-use, such as zoological collections and scientific research, recreational and veterinary reasons, does not need a license. Hunting licenses are issued based on the Law of Georgia "on Licenses and Permits"[5] and the list of wildlife objects that are allowed for hunting is worked out and approved by the MoENRP. Hunting is allowed only on specially determined territories – Hunting Reserves, which can be arranged in a managed reserve, protected landscapes and territories of multipurpose use. Hunting is prohibited in the strict nature reserve areas and national parks and in the surrounding 500 meters zone, as well as within the administrative borders of cities of Georgia. Hunting migratory birds is possible outside the hunting farms too. Hunting with any kind of explosive or other means, causing the suffering to the wild animals is prohibited. The rule of wildlife hunting is regulated by the Resolution of the Minister of Environment and Natural Resources Protection of Georgia from December 27, 2013[6] and violation of those rules is subject to penalty (varies from 100GEL to 1,500GEL) and even custody[7].

Georgian Legislation on the Protection of Endangered Species

The state protects endangered species based on the Law of Georgia "on Red List and Red Book" (2003)[8], which regulates the compiling of the "Red List"[9] and "Red Book"[10] of Georgia and the protection and utilization of species facing danger of extinction. Any kind of actions, among them hunting, crafting, obtaining (getting out from the natural habitat), cutting and reaping, which can cause the decrease in number of endangered species, deterioration of their habitat and conditions of existence, is prohibited, except in special cases determined by legislation.

The Regulating Acts of Wild Animals, among them Species included in the Red Book and Red List

On December 31, 2014 the Minister of Environment and Natural Resources Protection of Georgia reversed the Decree from March 4, 2008 "on Approving the Resolution on Rules of Regulating Wild Animals"[11] and approved a new one, the goal of which is to regulate the basic relations dealing with the sanitary-epidemiological situation, protection of health and lives of the population, prevention of diseases of agricultural and other domestic animals and prevention of causing damage to farming, measurements for regulating the number of wild animals.

The rule of regulating wild animals was worked out in order to protect the health and lives of the population, as well as to prevent causing damage to farming. The rule comes into force, when the wild

[5] https://matsne.gov.ge/ka/document/view/26824

[6] https://matsne.gov.ge/ka/document/view/2166315

[7] According to the Article 301 of the Criminal Code of Georgia, hunting without the permit or on prohibited area, or with the prohibited gun or mean, that had caused an important damage, as well as hunting in the national protected area or on any other protected area, where hunting is fully prohibited, as well as hunting of wildlife included in "Red List" of Georgia

[8] https://matsne.gov.ge/ka/document/view/12514

[9] ''Red List'' of Georgia - The list of the endangered wild animals and wild plant species spread on the territory of Georgia;

[10] ''Red Book'' of Georgia - the document, containing data on the status, distribution area, locality (residence), number, breeding sites and conditions of the ''Red List'' of Georgia, including the necessary measures taken to protect and preserve them, as well as the related risk factors;

[11] https://matsne.gov.ge/ka/document/view/2521129

animal causes danger to human life, health, and/or their property and avoiding this danger is impossible. In the moment of attack, removing the wild animal out from the environment can be carried out immediately and does not need a preliminary permit from the Ministry of Environment and Natural Resources Protection of Georgia.

In the case of necessity, the interested municipality applies with the claim to carry out the regulating measurements to the Ministry of Environment and Natural Resources Protection. The Ministry, in case of necessity, sends the expert or the group of experts to the site. The Ministry, after reviewing the claim of the municipality and/or the conclusion of the expert or the group of experts, on the basis of the Article 17 of the Organic Law of Georgia "The Code of Local Self – Governance",[12] prepares the draft of the agreement to be settled between the Ministry and the municipality, and agrees it with the municipality. The Government of Georgia makes the decision on delegating the authority between the Ministry and the municipality, on the basis of the claim to the Ministry, according to the Article 17 of the Organic Law of Georgia "The Code of Local Self-Governance".

The measurements of the regulation are controlled by the Environmental Supervision Department, which establishes a sufficient act on results of carrying out the measurements of regulation. Selling wild animal or its part, taken out from the environment during the implementing measurements of the regulation, or giving it out in any form is unacceptable, except cases, when the wild animal, taken out from the environment during the implementing measurements of regulation, based on the decision of the Minister of Environment and Natural Resources Protection of Georgia is transferred to the scientific institution, zoo, or animal shelter. In case of the absence of the latter, wild animals, taken out from the environment during the implementing measurements of regulation, are liquidated.

The removal of disease carriers and infected animals from the environment shall take place on the basis of the Georgian Government Decree # 433[13] approved on 31 December 2013 and shall determine technical regulation for removal and destruction of raw material and products with epizootic, zoonotic, zooanthroponosis pathogens and infections or unfit for human consumption and of biological or chemical and pharmaceutical medicines used in veterinary practices. In accordance with the technical regulation for removal, animals must be slaughtered and then burnt; site of burning should be treated with disinfection liquid and remains must be buried.

4.2 Institutional framework

Distribution of Institutional responsibilities

The responsible body, for the implementation of monitoring wildlife and utilization of resources of the wildlife, is the Ministry of Environment and Natural Resources Protection Georgia. Monitoring wildlife, gathering and processing data is the authority of the Service of Biodiversity Conservation of the Ministry of Environment and Natural Resources Protection of Georgia, the main tasks of which are: the monitoring biological diversity and regulation of taking out items of the wildlife from the environment for the scientific research.

Within the frame of the above mentioned tasks, the Service is actively collaborating with the Agency of Protected Areas and the National Forestry Agency (Annex 7) of the Ministry of Environment and Natural Resources Protection.

The identification of species and quantity of the wildlife, as well as the quantity of utilized resources, is the responsibility of the Service of Biodiversity Conservation, while for issuing the license for the resources,

[12] http://static.mrdi.gov.ge/5326b29e0cf287919443293a.pdf
[13] https://matsne.gov.ge/ka/document/view/2188126

responsible is the National Environmental Agency of the Ministry of Environment and Natural Resources Protection. The oversight on utilization of resources of the wildlife is carried out by the Department of Environmental Supervision (Annex 8) of the Ministry of Environment and Natural Resources Protection.

Within the mandate of regulating wild animals, the Ministry of Environment and Natural Resources Protection collaborates with the Ministry of Agriculture and the Ministry of Labor, Health and Social Affairs of Georgia in order to prevent the epidemics and/or the threat of spread of diseases dangerous for humans, domestic or wild animals. The above mentioned threat is established by the diagnostic studies on zoonotic or anthropozoonotic diseases of animals.

At a local level collaboration within the frame of regulation of wild animals is based on the Code of Local Self-Governance, according to which the representative body of the local municipality – the local municipal government and the Ministry of Environment and Natural Resources Protection set an agreement (see in the Annex 9 the Agreement set between Khulo municipal government and the Ministry of Environment and Natural Resources Protection) on activities for regulating wild animals. The agreement sets out the measures, which are planned for the implementation by the local municipality, and for the oversight on which the Department of Environmental Supervision is responsible.

It should be noted that with the purpose to receive and promptly react on information about breaches of environmental law and to receive information and consultations on environmental issues (including cases of wild animal attacks), a hotline 153 has been in operation since 2014. The responses on it are provided by the Department of Environmental Supervision (See Picture 6).

Picture 6: Department of Environmental Supervision – hot line 153.

For the removal of disease carriers and infected animals is responsible LEPL National Food Agency of the Ministry of Agriculture of Georgia. It has entrusted persons in each action zone.

4.3 Relevant Information on the initiations to reduce the human-wild animal interface

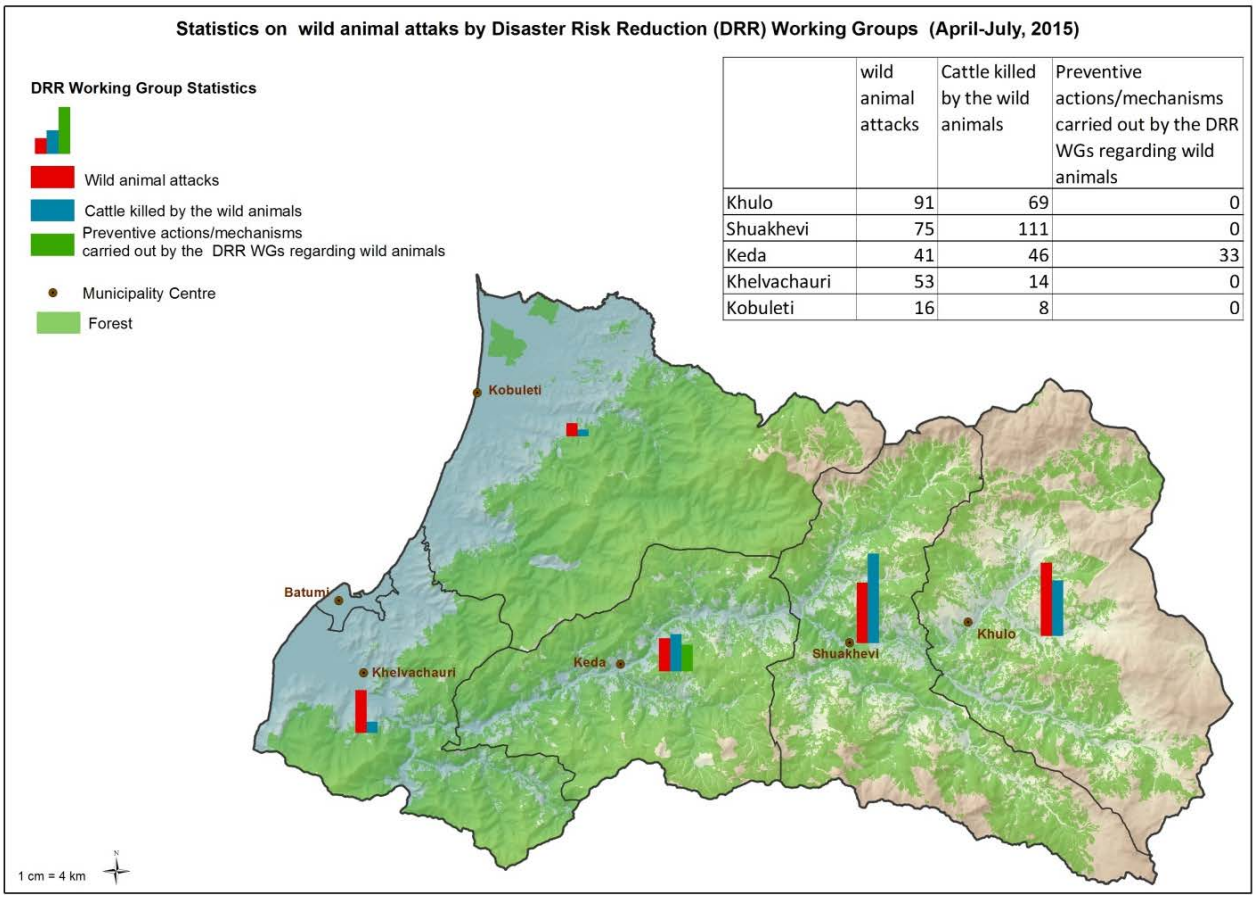
Disaster Risk Reduction Working Groups (DRR WGs) in Ajara Autonomous Republic

Since January 2015, Municipal Disaster Risk Reduction Working Groups, facilitated by the ALCP, have been functioning in all five municipalities of Autonomous Republic of Ajara (See Annex 10). Local groups were established in accordance with the Georgian Law on Local Self-Government. Currently Disaster Risk Reduction Groups are operating in all municipalities of Ajara. On the basis of order from Mayor/Gamgebeli of Municipalities groups are composed by heads of municipal services who are responsible for disaster risk reduction issues and representatives of Gamgebeli in administrative units of Municipality. Working groups are also composed by the representatives of Emergency Management Agency of Ajara Autonomous Republic, Information and Consultation Service at the Ministry of Agriculture and National Food Agency.

On the basis of their functions and responsibilities Disaster Risk Reduction Working Groups are eligible to gather information on livestock diseases monitoring and natural disasters and provide an appropriate response on livestock diseases and natural disasters. The groups carry out the function for monitoring of wild animals in human living and economic activity areas as well. These functions of groups are prescribed by Local Self-government Code and Legislation in the field of Environment and Natural Resources Protection of Georgia. To achieve stated aims working groups shall actively coordinate all institutions national and local governments responsible for natural disaster risk reduction.

The information collected by the DRR WGs regarding wild animal attacks within April-July, 2015 is presented on the Map 3.

Map 3: Statistics on wild animal attacks by Disaster Risk Reduction (DRR) Working Groups (April-July, 2015)



	wild animal attacks	Cattle killed by the wild animals	Preventive actions/mechanisms carried out by the DRR WGs regarding wild animals
Khulo	91	69	0
Shuakhevi	75	111	0
Keda	41	46	33
Khelvachauri	53	14	0
Kobuleti	16	8	0

Georgian Carnivore Conservation Project (GCCP)

In Georgia the first steps towards reducing wild animal attacks were made by Georgian Carnivore Conservation Project (GCCP) in Eastern Georgia (in Vashlovani & Tusheti Protected Areas), which was implemented by NACRES – Biodiversity Conservation and Research and FFI (Fauna and Flora International) and was funded by the EU. In 2009, in frame of the project, was done baseline survey which included two components, one for understanding existing husbandry practice and conflict origins and second for perceptions and attitudes towards large carnivores among local community; Based on baseline survey findings and international practice was prepared conflict mitigation toolbox; The Human carnivore conflict response team was established (HCCRT) which was aimed on implementing toolbox components among which was implementation of HCC surveys. Within the project Addressing Human-Carnivore Conflict in Vashlovani & Tusheti Protected Areas (funded by Acacia Conservation Fund) HCC-RT continues to monitor human – carnivore conflict events, maintaining structured database of the events and adapt mitigation approaches in and around Vashlovani Protected Area. Such monitoring forms are the basis for understanding HCC issues, developing solutions and engendering awareness within rural and urban communities that could be replicated throughout the Georgia (FFI & NACRES, 2014).

5 WILDLIFE AND LOCAL PEOPLES ATTITUDE TOWARDS IT

5.1 Introduction on wildlife value[14]

Biodiversity conservation is a complex procedure in our modern world. The existence of a range of international conventions and directives (e.g. Convention on Biological Diversity, Bern Convention, Birds and Habitats Directives, Bonn Convention, CITES, etc.) testify the emergence of a widespread global commitment to conserve biodiversity. Although the overall picture may often be pessimistic, there are some groups of species which are doing relatively well in some regions. It often comes as a surprise to people that the large wild animals (brown bear, Eurasian lynx and wolf), are among the species that are generally holding their own, and even expanding, across the large parts of their former distributions, while there are regions where the species are extremely endangered.

All these populations are exposed to a wide diversity of threats, although there is a growing realization that a low social acceptance and/or poor institutional capacity are emerging as key issues. The relationships that large wild animals have with the human communities, with which they share space, are also highly diverse. In some contexts the relationship is calm and human-wild animal negative interface basically involve minor issues of occasional material damage. In other contexts the negative interface is extreme, touching on a range of social and political issues. Because of this diversity of the situation there is obviously no "one-size-fits-all" solution.

The best approach, which could ensure mutually beneficial co-existence of humans and wild animals could be related to the development of eco-tourism in Ajara, especially in mountainous regions of Ajara. The number of tourists, coming to Georgia, increased from 2005 (559,753) to 2014 (5,515,559)[15] out of which 431,678 have visited Ajara AR[16]. The majority of tourists visit the Black Sea coast of Ajara, but recently the interest towards the mountainous Ajara has increased. Some of the visitors, on one and several days tours, travel in Upper Ajara villages with the purpose of seeing the local landscapes and biodiversity, cultural monuments and ethnographic traditions of Upper Ajara. Development of transport infrastructure in mountainous municipalities would make the mountainous Ajara even more attractive, and establishment of Machakhela National Park will facilitate attraction of tourists loving biodiversity. The development of eco-tourism may become a major source of income for the local population, but an improvement of knowledge and awareness rising of population towards proper use of resources is required. In order to achieve this purpose, active efforts are required from the state departments – the Department of Protected Areas of the Ministry of Environment and Natural Resources Protection, Department of Biodiversity Protection, Environmental Information and Education Center, Environment Protection Division of Ajara, the Ministry of Agriculture of Ajara; the scientific institutions – Batumi Shota Rustaveli University, Ilia State University; local, national and international non-governmental organizations – Association Fauna & Flora, Black Sea Eco-Academy, NACRES, World Wildlife Foundation (WWF), International Union of Conservation of Nature (IUCN), Fauna & Flora International (FFI). In the case of successful cooperation of the above-mentioned groups the attitude of the population towards the wildlife/wild animals could be changed, and in the case of implementation of properly planned and managed biodiversity conservation and local social-economic development programs, the local population could become the main stakeholder, protecting biodiversity.

The main stakeholders and potential partners, interested in the conservation/management of biodiversity were identified by research team in Ajara. It's necessary to work with them to determine the proper ways of

[14] During the preparation of the section 5.1 the report of Norwegian Wildlife Research Institute, prepared in 2013, aimed at description of the conflict between the carnivores and local population was used (Linnell, 2013)

[15] http://gnta.ge/statistics

[16] http://adjara.gov.ge/branches/description.aspx?pid=344&gid=7&ppid=334#.VbrQbs6ppSU

the regulation of interface between the population and wild animals and to develop the relevant thematic programs and projects:

Domestic animal producers. These are one of the major stakeholders, especially the ones who are following the livestock free grazing practices. In addition, honey producers are the important actors that frequently come into interface with wild animal (bear). Depending on density, livestock grazing can have both positive and negative impacts on habitat from a wild animal point of view.

Crop producers. Bears are frequently involved in the damage to fruit trees in orchards, and occasionally may damage some crops.

Foresters. Because foresters directly affect the structure of large wild animals' primary habitat they can be very influential in the wild animal conservation.

Hunters. Hunting is a very widespread activity that occurs over most of the country. Many of the most valued species (wild ungulates) are the sources of food of large wild animals.

Media. Although there have been few studies about the role of media in large wild animals issues the media is obviously a very important stakeholder in any policy arena as they are both the public's main source of information and a major shaper of attitudes and perceptions. Media is very diverse (print, internet, TV, radio) and exists at many scales (from local to national) making it complicated to identify the appropriate representatives to at different scales.

Outdoor recreationists. Many people engage in the recreation of the mountain and forested habitats where large wild animal live. The forms of recreation are as diverse as walking, fishing, gathering berries and mushrooms and a range of modern activities such as mountain biking and skiing. These activities may well influence some large wild animals because of disturbance, and the presence of wild animals may enhance or diminish their nature experiences. There may also be some constraints placed on their recreational activities because of the large wild animal conservation concerns. Including these groups, for example via some of the many hiking and other recreation associations, may also provide a route of access to a wider, but otherwise unstructured, groups of stakeholders representing the wider public, both rural and urban.

Policy makers/decision makers. The various political and bureaucratic institutions that make and administer decisions and policies are without doubt a crucial stakeholder in just about any biodiversity conservation context. No other stakeholder group has more formal power and influence over the issue. For any process to have real lasting impact it is crucial that it is endorsed and enabled by the formal institutions who are the holders of formal authority.

Rural residents. Because they are wide ranging large wild animal home ranges include the areas where many people live, work and engage in recreation. Wild animal presence therefore touches on the lives of many people who are not engaged in any of the above mentioned activities. Rural residents are diverse and have different attitudes towards large wild animals, ranging from the very positive to fear. Although they are a crucial stakeholder group and will almost always outnumber the number of farmers, hunters, foresters or landowners in any given area occupied by large wild animals, they are typically very difficult to engage with because of a general lack of any umbrella organizations at a large scale. Substantial efforts to engage with them could greatly benefit any stakeholder process. The extent to which their local elected representatives reflect the subtle views of the wider public or the louder voices of special interest groups is an issue that is often discussed.

Scientists. Scientists are a multi-faceted stakeholder. They possess unique knowledge and experience which is vital to the success of any process. This includes knowledge about the human society, legislation and

politics from social scientists and knowledge about the ecology of the species that are involved in the discussion. Because the ecology of the species is one of the externalities that places some constraints on the range of viable outcomes it is crucial that all available scientific knowledge is made available to any process to ensure that it can be science-based.

Spatial planners and engineers. Their activities have direct impacts on the large wild animal habitat through the infrastructure they create, and any requirements that are made on them to consider the interests of large wild animals (i.e. such as building crossing structures or rerouting roads) will have serious economic and technical impacts on their activities. Because of the cumulative impacts of infrastructure projects, it is becoming increasingly important to engage with them.

Ecotourism operators. Ecotourism, nature-based tourism and rural tourism are rapidly developing fields. The presence of large wild animals in an area may serve as an important marketing attraction, even though the chances of any visitors seeing them are slight simply knowing that they are out there may be a positive experience to many tourists. Because of the ongoing policy of diversifying rural incomes these are likely to be a key stakeholder group for the future. Their activities (bringing more visitors to the area) may be seen by locals as beneficial and may help raise the profile of large wild animals in local minds. For others it may mean the disturbance on their property or the need to share their own nature experience with "outsiders", e.g. hunters may feel that tourists spook the game. If not properly managed and controlled, this may potentially increase the disturbance of large wild animals, or may influence their behavior.

Environmentalists. There are several NGOs concerned with the conservation of biodiversity who are engaged with large wild animal issues. These NGOs represent their desires to see large wild animals survive. Motivations are diverse but reflect both their desire to conserve wild animals because they feel it enriches lives and because of an ethical belief in the intrinsic rights of the large wild animals to exist.

5.2 Analysis of the survey for measuring public attitudes and awareness towards wildlife

The aim of the survey was to determine the attitude and knowledge of the local population on wildlife. The survey was conducted in the so called "hot spot" villages (see the chapter 2).

With this purpose in mind, relevant questionnaires were distributed in target villages. The questionnaires were to be filled by respondents independently. Totally 1000 questionnaires were distributed, with 391 were completed (39%).

Results of the survey are given below.

Information about the respondents

391 people from Ajara participated in the survey. According to the municipalities, respondents are distributed as follows. See Figure 3.

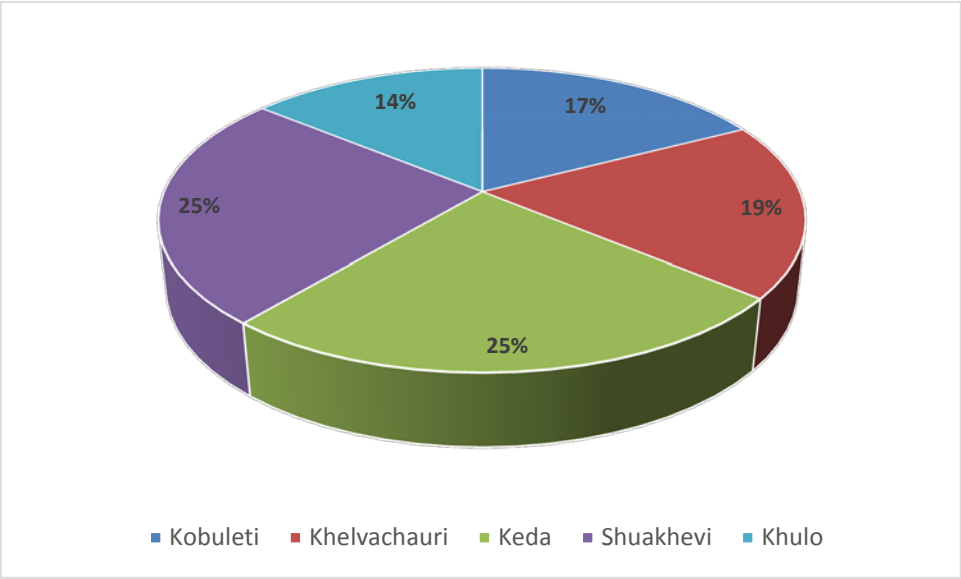


Figure 3: Distribution of respondents per municipalities

The Figure reveals that the most active were respondents from Keda and Shuakhevi municipalities which have completed 25%-25% of the surveys. Less active were respondents of Khulo municipality with only 14% of completed surveys.

With regard to gender structure of the respondents it should be noted that in certain share of received questionnaires gender wasn't mentioned at all. Number of these questionnaires was 83 and made 21% of the total amount. Number of the questionnaires per municipality in which gender wasn't mentioned is demonstrated in Figure 4.

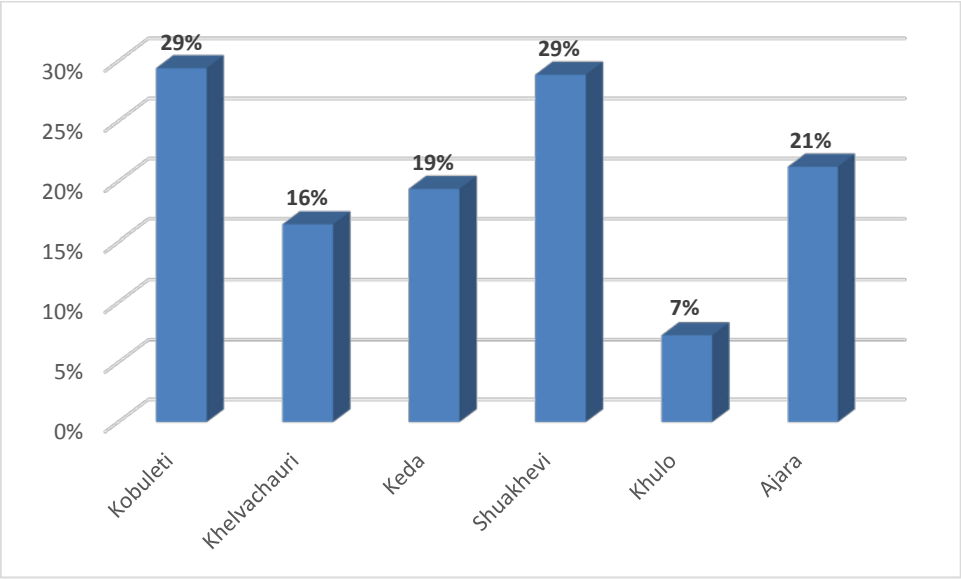


Figure 4: Number of questionnaires without respondent gender information per municipalities

As it can be seen gender mostly isn't pointed in surveys received from Kobuleti and Shuakhevi municipalities. The lowest number of such surveys was received from Khulo municipality – 7%.

Gender structure of the rest respondents looks as follows. See Figure 5.

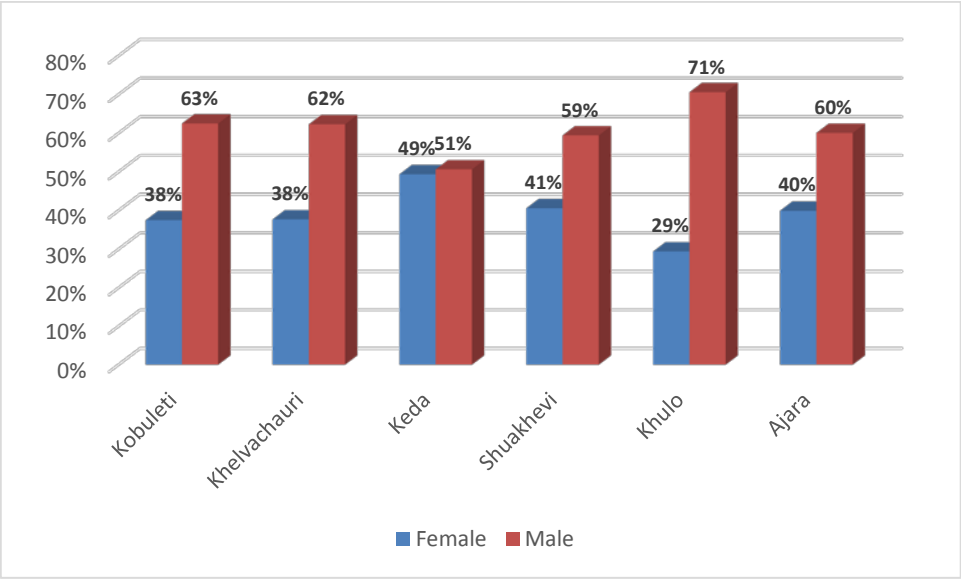


Figure 5: Gender structure of respondents with regard to municipalities

As can be seen from the Figure, questionnaires mainly are completed by males. In Ajara percentage of questionnaires completed by females and males is 40% & 60% respectively. According to municipalities there are certain differences in this regard. In Keda number of males and females is practically equal. In Khulo number of males is much higher than females (71% and 29% respectively). In other municipalities the situation is almost the same and number of female-respondents is within frames of 40%.

Age structure of respondents is given in Figure 6.

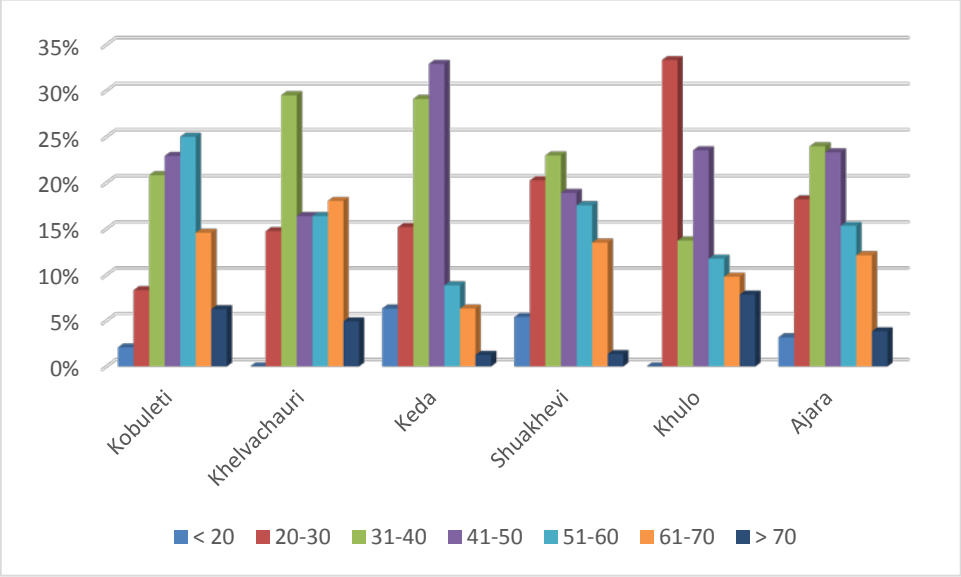


Figure 6: Age structure of the respondents

As it can be seen from the Figure, respondents mainly belong to the age group of 30-60 years. It should be noted that in part of questionnaires the age wasn't mentioned at all. Such questionnaires in Ajara amounted to 20%. With regard to municipalities the age wasn't mentioned in questionnaires completed in Shuakhevi and Kobuleti (24% and 29% respectively). The lowest number again is from Khulo municipality - 7%. In Khelvachauri and Keda it is 16% and 19% respectively.

Educational structure of respondents is presented in Figure 7.

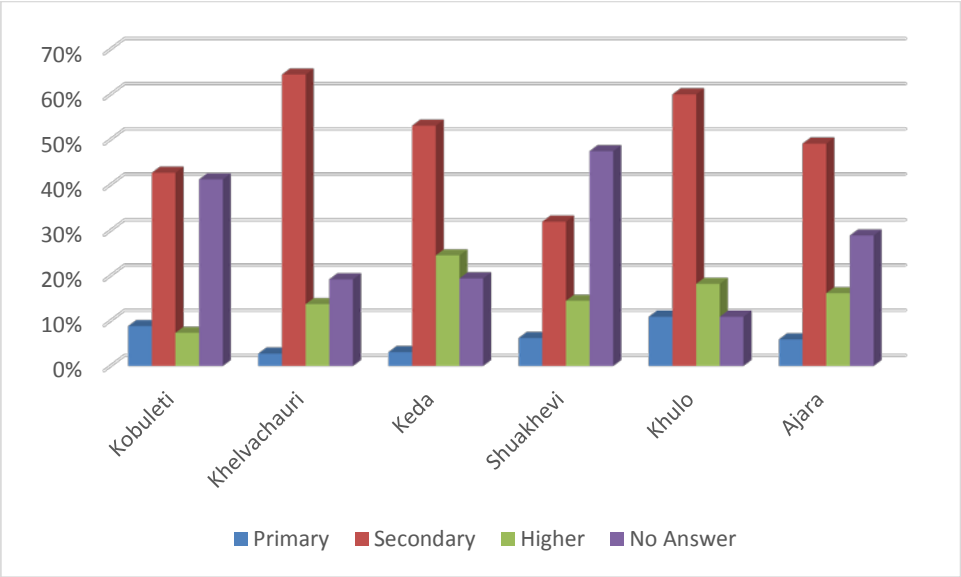


Figure 7: Educational structure of the respondents with regard to municipalities

As it can be seen the most part of the respondents have a secondary education. There are almost no differences in this aspect with regards to the municipalities. It should be noted that the large part of the respondents didn't mention their education. Total number of these respondents in Ajara amounts to 29%.

The project team was interested to determine how many respondents were involved in agricultural activity. So respondents were asked to answer whether they have agricultural plots or cattle. The answers of respondents with regard to the municipalities are demonstrated in Figure 8.

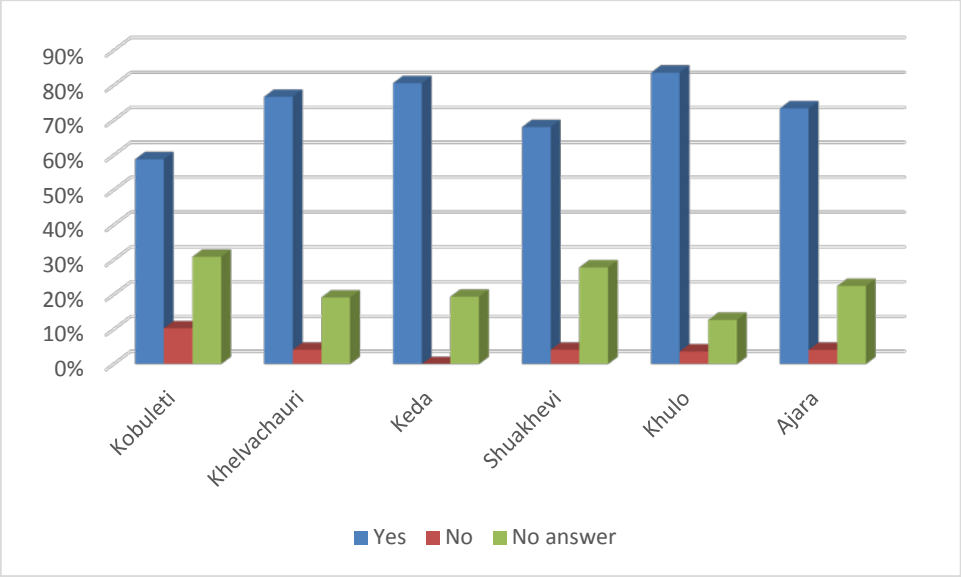


Figure 8: Agricultural plots and cattle ownership by the respondents

As it can be seen in all municipalities that there is the same situation and the most part of the respondents, despite of the main type of their activity, are involved in agricultural activity. The most part of the

population of settlements in Ajara present themselves as small farmers who could be employed at paid works (school, municipality/Gamgeoba and etc.)

The majority of respondents own small farms and are mainly involved in poultry and livestock farming. Comparatively less number is involved in beekeeping – 8%. Almost all respondents own small land plots, homestead lands, plots of arable land and fruit gardens. It should be noted that in accordance to the type of the farm there is no difference between the municipalities.

The absolute majority of respondents claim that they are involved in farming activity without any commercial aims. However they sell some excess product at the market or exchange them on products they need (cheese, corn, beans and etc.). In this case there is also no difference with regard to municipalities.

Attitude and knowledge toward wildlife

The purpose of this part of the survey was to assess attitudes of the respondents towards wild animals. Respondents were asked to assess their attitude towards wild animals by the following criteria: very negative, negative, neutral, positive and very positive. It should be noted that this part of the questionnaire differs from other ones as was completed almost by all the respondents.

An attitude of the respondents toward the bear with regard to municipalities is represented in Figure 9.

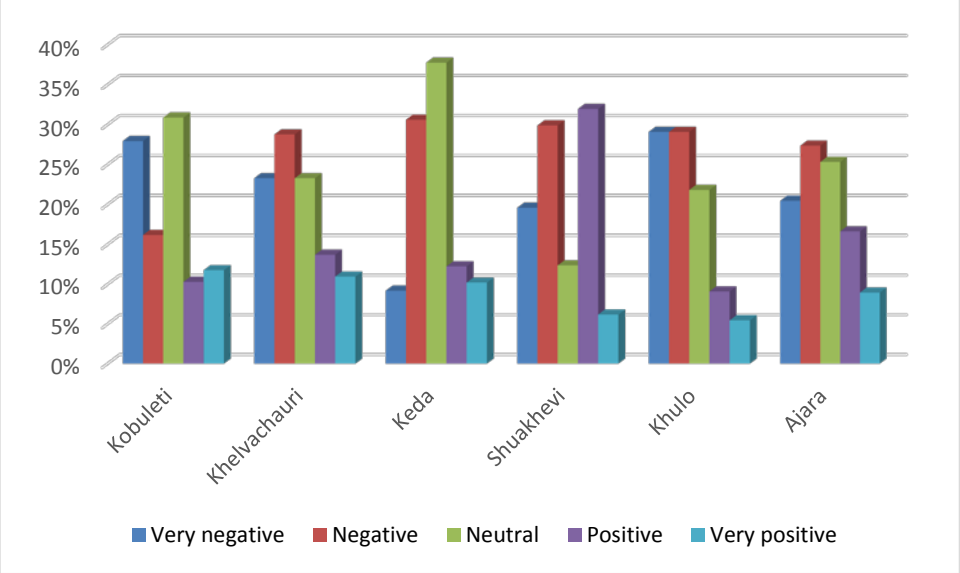


Figure 9: Attitude of the respondents towards bear

As can be seen, the attitude of the respondents towards the bear varies between very negative and negative. Negative attitude (very negative and negative) is demonstrated almost by the half of the respondents (47%). The neutral attitude totally is expressed by 25% of the respondents. Positive attitude as very positive and positive is demonstrated by 25% of the respondents. The difference with regards to municipalities was small. However it should be noted that in Keda and Kobuleti there is a big number of neutral respondents, but overall their number is lower than the amount of negative respondents (extremely negative and negative). There is a rather high rate of the positive attitude in Shuakhevi – 31%, but in total it is less than the number of the respondents with the negative attitude (extremely negative and negative) (40%), but it is considerably higher compared with other municipalities. In this case the rising of the positive attitude happens at the expense of the reduction of the neutral attitude. In Shuakhevi this number is lower compared with other municipalities – 12%. The negative share in Shuakhevi municipality is the same as in other ones. It should be noted that the positive attitude in Khelvachauri municipality isn't related to any

gender, age or social group or even the type of farm. The positive attitude is equally presented among all types of respondent groups.

It is interesting to summarize answers of the respondents according to different degrees of negative (negative or very negative) and positive (positive or very positive) responses. In this case, the Figure will have following shape (Figure 10 a).

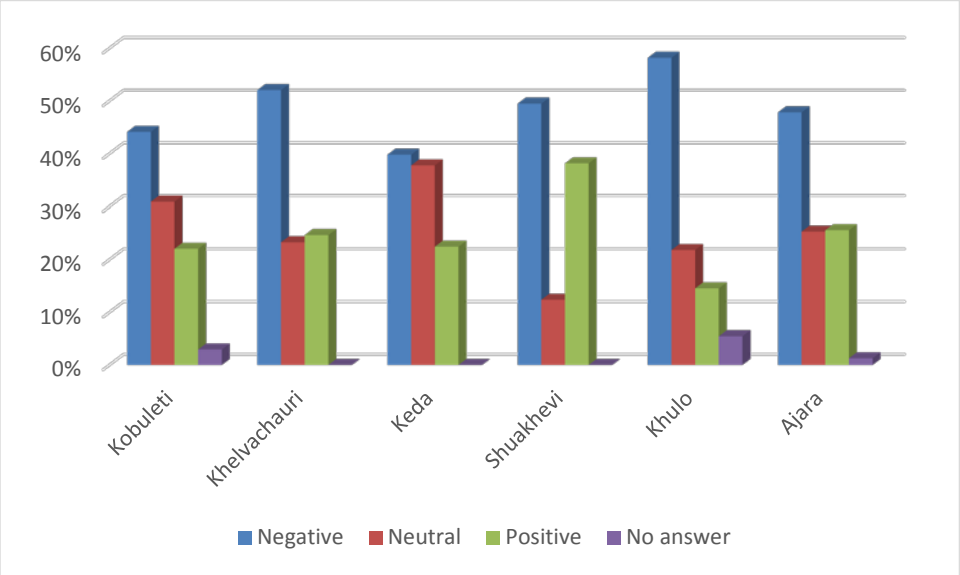


Figure 10: Attitude of the respondents towards bear (a)

As it can be observed, the negative attitude in each municipality dominates. Even in Shuakhevi municipality, where the number of positive respondents is higher, eventually negatively disposed respondents still prevailing.

The project team was interested to reveal gender aspects in the attitude to animals. It should be noted that there is almost no difference in the attitude towards bears among men and women however women's answers are more neutral. See Figure 11.

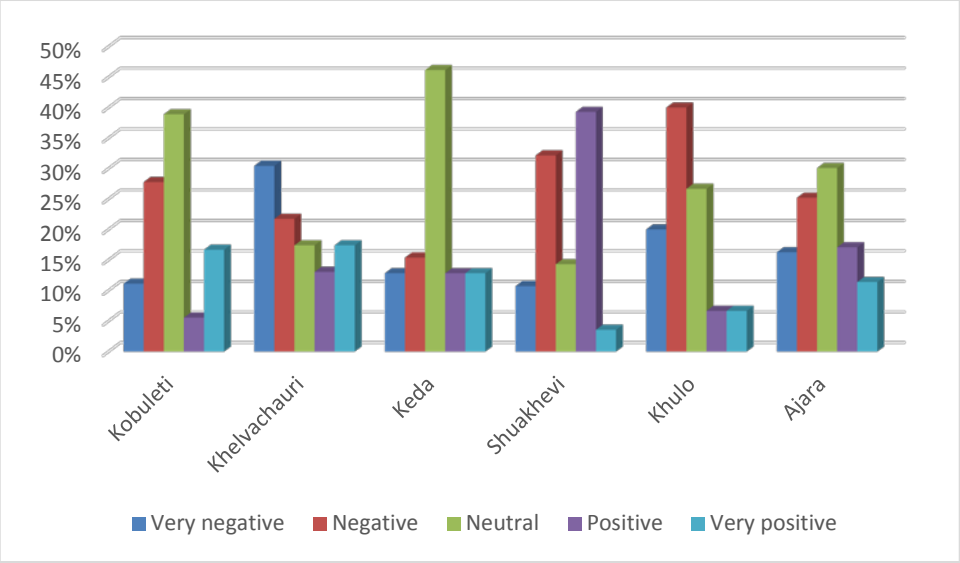


Figure 11: Attitude of female respondents toward bear

Attitude toward wolf with regard to municipalities is demonstrated in Figure 12.

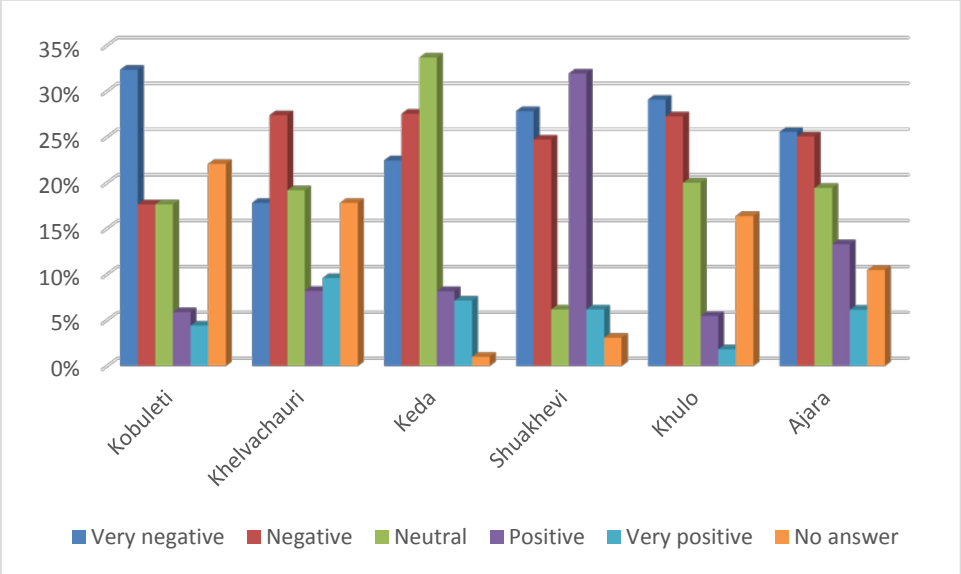


Figure 12: Attitude of the respondents towards wolf

It should be noted that 10% of the respondents did not complete the questions related to their attitude towards wolf, whereas almost 100% of the respondents indicated their own attitude towards bear.

It should be noted that as in the case with bear negative and neutral attitudes were expressed by almost the same number of respondents. Amount of positive attitude was reduced at the expense of the respondents, who didn't provide the answer to this question at all.

Distribution of answers with regards to municipalities is almost the same. The exception is Keda where prevail the neutral attitude (34%), while this number is still lower than the total amount of respondents with the negative attitude (50% in total). As in the case with bear in Shuakhevi there is a high rate of the respondents with the positive attitude – 32%. However in this case too, the number of them is lower than amount of the respondents with the negative attitude – 53%. And in this case the increase of respondents with the positive attitude is related to reducing of the neutral respondents. In this case too, the positive attitude isn't related to any specific group. Such an attitude is equally distributed in the municipality by gender, age, social and economic groups.

Unlike the case with bear in Kobuleti municipality the number of neutral respondents is reduced. At the expense of them is grown number of the respondents with the negative attitude (32%). It could be assumed that by the opinion of respondents from the Kobuleti municipality, the wolf is an important problem.

Similar to the bear case, if there will be studied only negative (both very negative and negative) and positive attitude, the negative attitude of the respondents will dominate. Across Ajara region, more than half of the respondents (51%) have different degrees of negative attitudes (very negative, negative) toward the wolf. 19% shows the neutral attitude, while 16% of the respondents have positive (very positive and positive) attitude. The situation is identical in every municipality where the negative attitude dominates the positive and neutral attitude of respondents. See Figure 13.

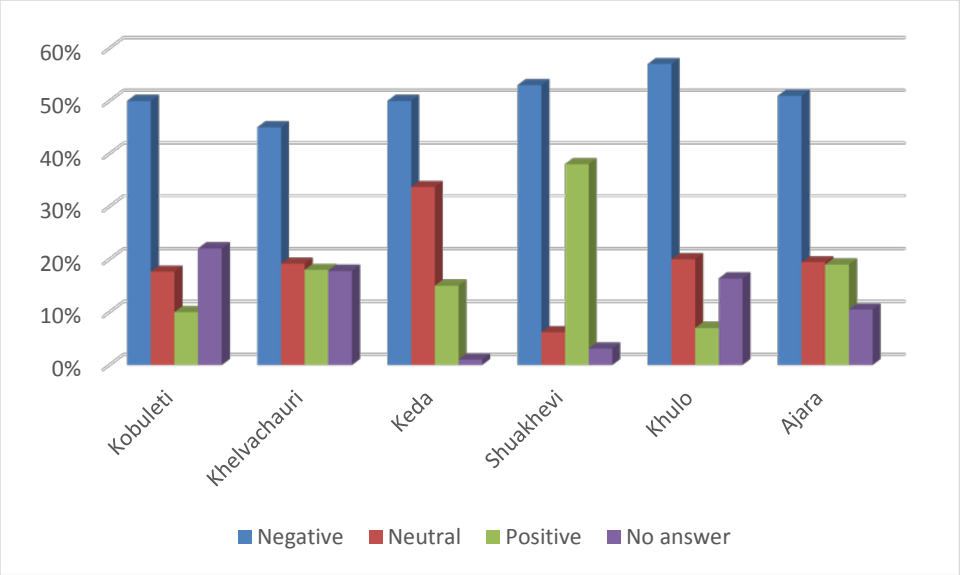


Figure 13: Attitude of the respondents towards wolf

Practically there is no gender difference in attitude to the wolf. Distribution of answers, given by female-respondent almost reflects the overall picture. To illustrate this in Figure 14 is presented distribution of female- respondent answers with regard to municipalities.

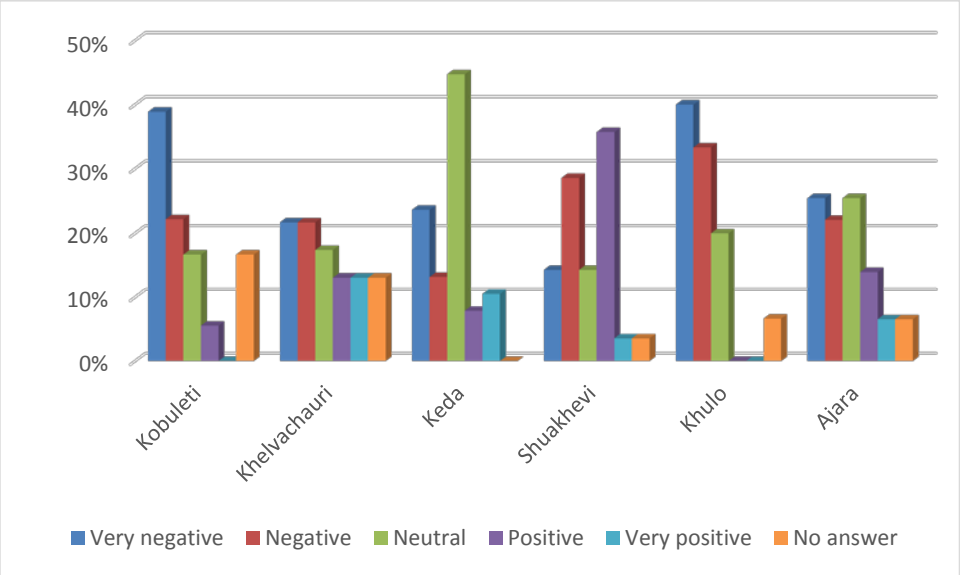


Figure 14: Attitude of the female respondents toward wolf

Attitude of the respondents toward jackal is presented in Figure 15.

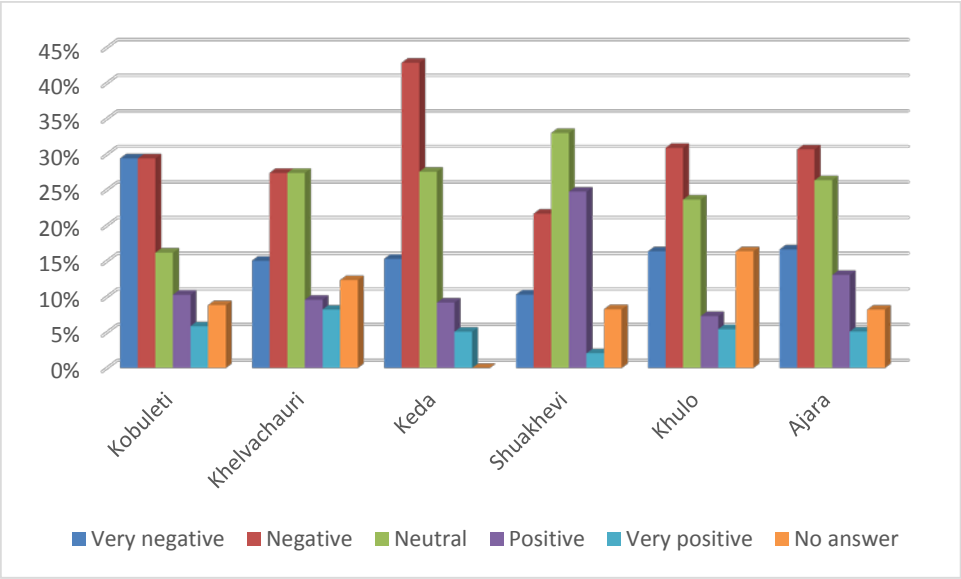


Figure 15: Attitude of the respondents toward jackal

An attitude to jackal as to other wild animals generally is negative. The negative attitude of different types toward jackal is expressed by 47% of the respondents. Neutral attitude is demonstrated by 26% of the respondents, while positive by 18%. The 8% of the respondents didn't give an answer. The situation by municipalities is the same. An extremely negative or negative attitude dominates everywhere. In Shuakhevi municipality it is observed relatively tolerate attitude towards wolf and bear, where negative attitude was low and the number of the respondents with positive attitude was high. In case with jackal the rising of neutral attitude and reduction of the positive attitude is important. In this case there are no important gender differences in answers.

Distribution of respondents' negative and positive attitudes towards jackal, without differentiation (very negative/negative and very positive/positive) is given in the Figure 16 a.

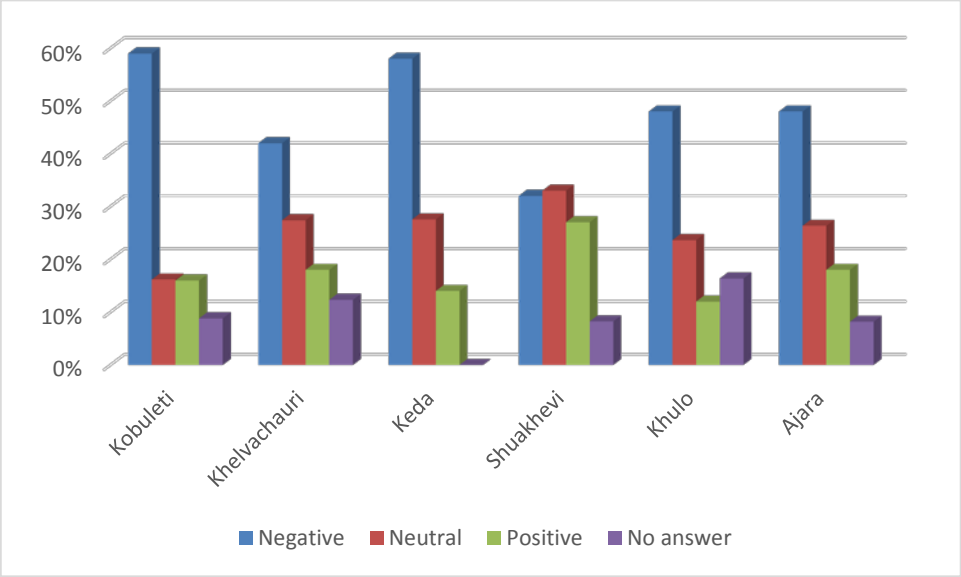


Figure 16: Attitude of the respondents toward jackal (a)

An attitude towards other animals listed in the questionnaire – lynx, fox and wild boar is almost the same. The Figures expressing an attitude of the respondents to them are almost identical with very small differences. To demonstrate attitude of the respondents towards this animals it is provided an average on the Figure 17.

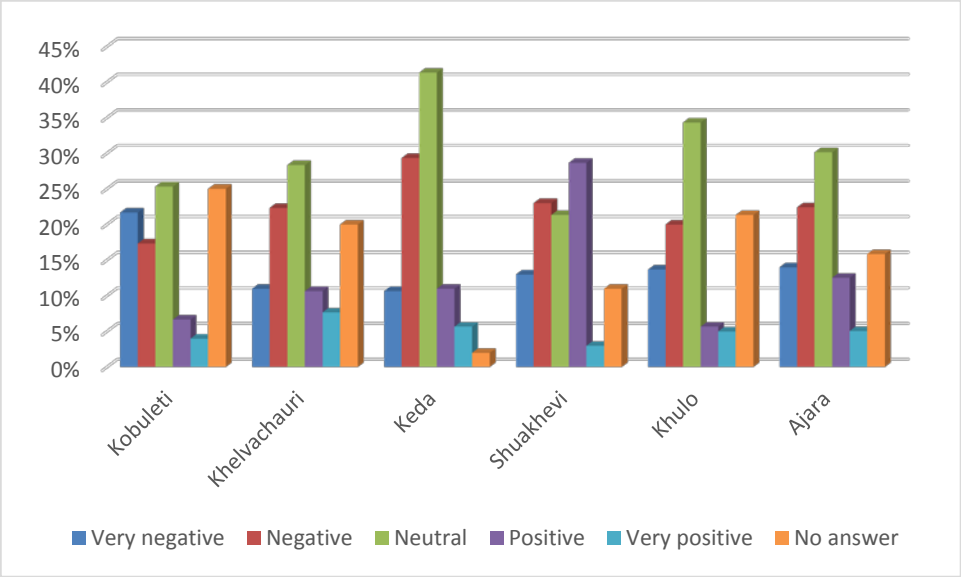


Figure 17: Attitude of respondents towards other animals of Ajara wildlife

As can be seen the rate of the negative attitude from the respondents towards these animals is high. However there can be noticed some kind of softening of the attitude and comparative rising of neutral respondents – total 30% in Ajara. However the rate of neutral respondents in this case is lower than the number of respondents with different type of negative attitude, who amounted to 36% in Ajara. It should be noted that in Shuakhevi number of the respondents with the positive attitude is high again. It should be noted that the rising in number of respondents who do not answer the questions might be explained by the lack of interest towards these animals. Opposite to it, in case of bear and wolf, the number of respondents who do not answer the questions was very low. If there will be considered only the negative and positive attitudes of the respondents (without differentiation of very negative/negative and very positive/positive) the Figure will have following shape. See Figure 18.

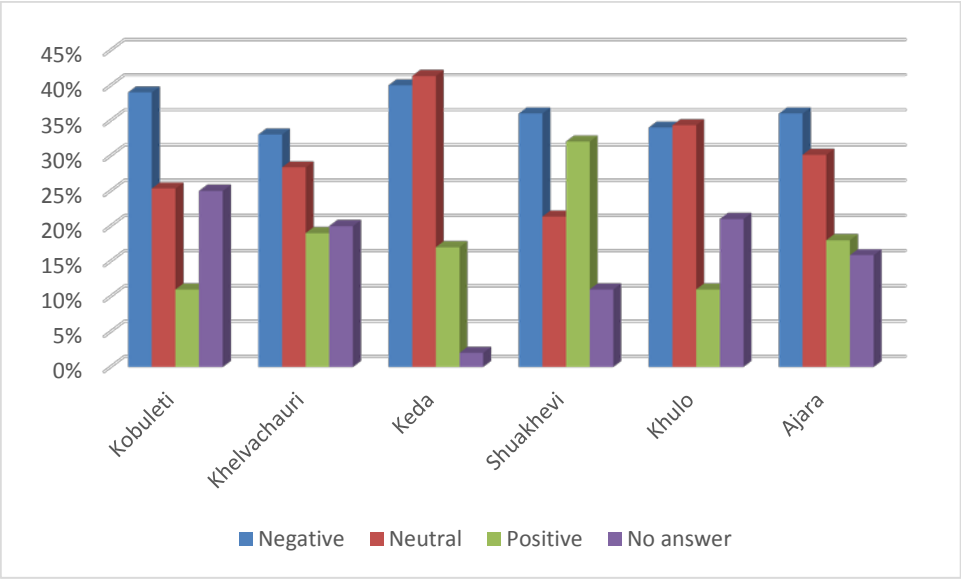


Figure 18: Attitude of respondents towards other animals of Ajara wildlife

To find out the attitudes towards wildlife, respondents were asked to answer the question about which wild animal is typical for the whole Georgia and their local habitat (Ajara). Answers are provided in Figure 19 and Figure 20.

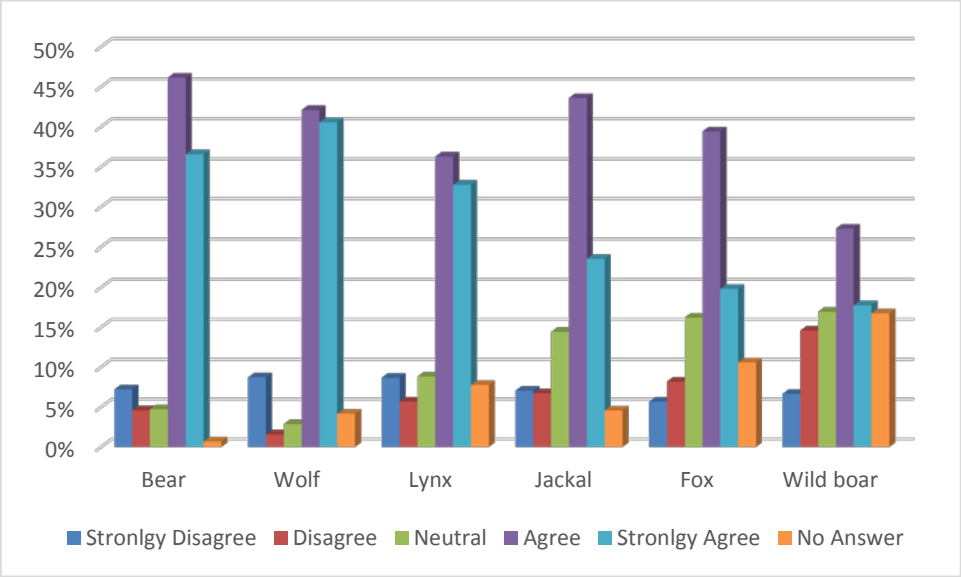


Figure 19: Wild animals in Georgia

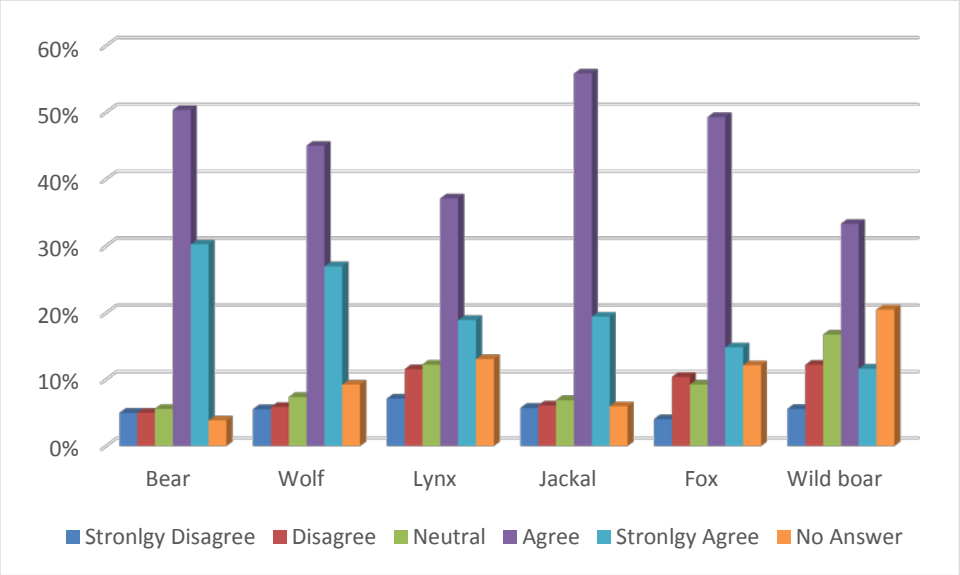


Figure 20: Wild animals in local habitat (Ajara)

As it can be seen from Figures above, the attitude towards wildlife of absolute majority of the respondents is unambiguous and they consider that above mentioned animals represent the wild animals typical as for their local habitat (Ajara) as well as for the whole Georgia since wild animal attacks on humans and their livelihood happen daily, resulting in losses.

On question which of the below listed animals are dangerous for humans, answers of the respondents were distributed as follows. See Figure 21. According to the respondents the most dangerous animals are: bear with 81% of respondents as dangerous or very dangerous. 86% thought that wolf is dangerous and very dangerous animal. Lynx - 66%; jackal - 60%. Relatively small number of respondents thinks that fox and wild boar are dangerous animals (37% and 47% relatively). It should be noted that representatives of the wild nature are assessed by respondents mostly as dangerous for the human.

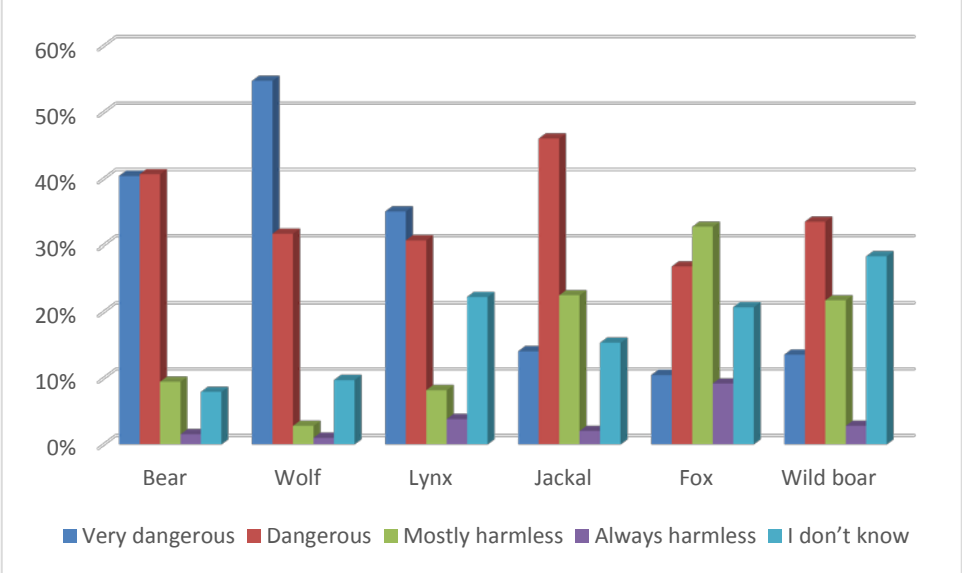


Figure 21: Dangerous animals for human

To achieve the purposes of the survey it was very important to reveal opinion of the population which animal mainly causes loss of the livestock. Respondents were asked to fix their opinion on wild animals included in the list (Figure 22).

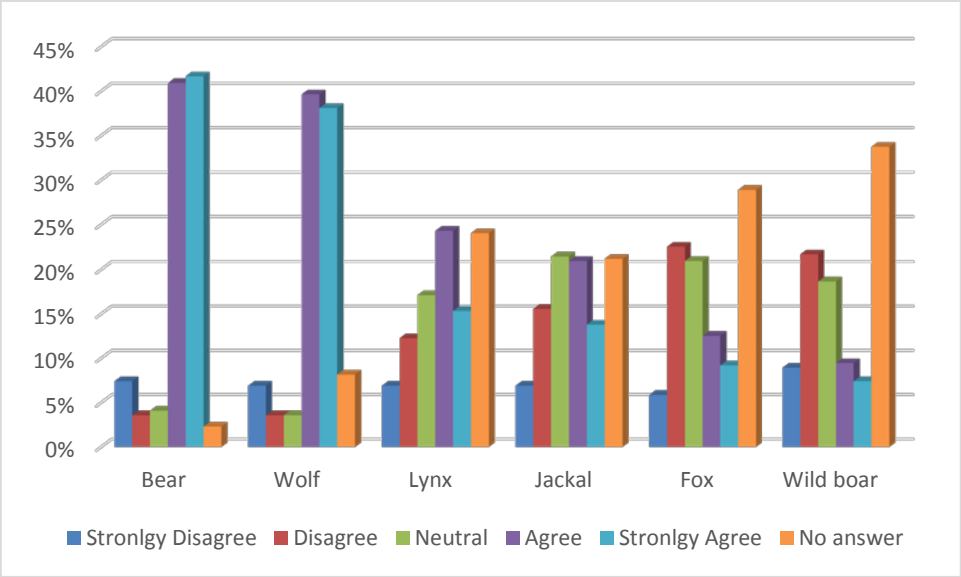


Figure 22: Main reason of livestock losses

The absolute majority of the respondents agree that the most part of livestock dies as a result of attacks bears and wolves (83% and 78% respectively). High rate of the respondents point out lynx and jackal, whereas fewer mentioned fox and wild boar. It should be noted that large number of respondents don't give answers related to lynx, jackal, fox and wild boar. This attitude is caused by the fact that respondents do not know/they underestimate the activeness of the attacks of these animals and the amount of damage caused. Respondents are mostly focused on the attacks and damages caused by bear, wolf and thus other animals remain beyond the attention. In addition, often the damage caused by other animals is attributed to bear and wolf as the local population has negative attitude to them. Also, there is established opinion by the local population that the main damages are caused by bear and wolf.

To test the knowledge of the respondents about the wildlife the relevant questions were included in the questionnaire. Among other, the respondents were asked which animals of Ajara hibernate in the winter? 92% of the respondents answered the question correctly regarding the bear and stated that they hibernate in winter. Regarding the other animals the respondents gave the correct answers as well, that wolf (71 %), Lynx (66%), Jackal (71%), fox (68%) and wild boar (68%) do not hibernate in winter. In addition, the majority of the respondents correctly answered the question if the listed wild animals live in groups.

In order to clarify the respondents' knowledge about wildlife representatives and their behavior, the questionnaire included the relevant questions. The respondents were asked about which wildlife representatives' sleep for the winter (Figure 23). The 92% of respondents answer this question right regards bear and note that the bear sleeps for the winter. The majority of respondents, in relation to other animals, answer the question correctly and the absolute majority of respondents correctly characterize their behavior.

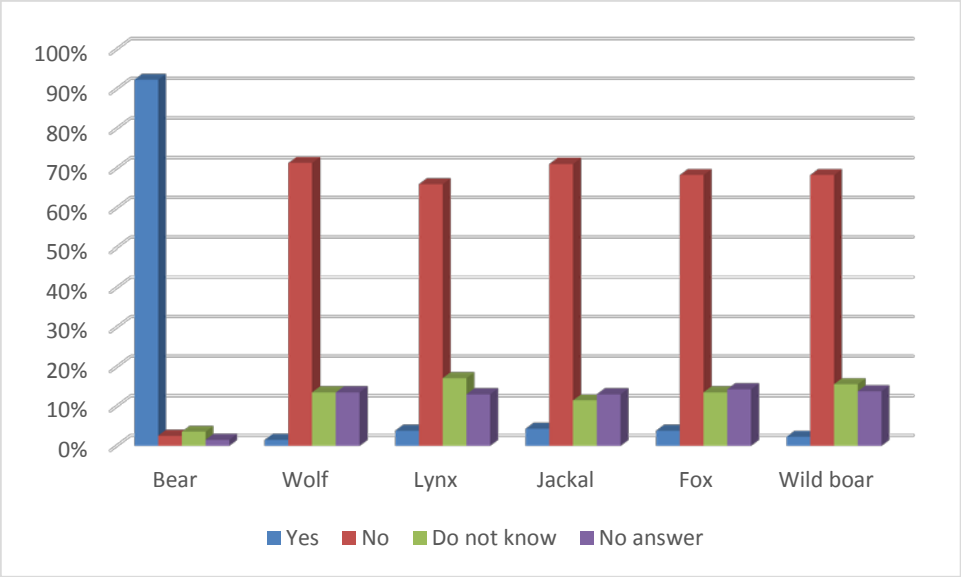


Figure 23: Do these animals hibernate in the winter?

As regards to the animals who live in groups, the majority of respondents were better aware of wolves and bears and had less information of lynx and boar, also had an average knowledge of jackal and fox (Figure 24). The 62% of interviewed respondents knew that the bears live alone, the 20% of respondents stated that the bears live in groups. 72% had the information about wolves living in groups, as for the jackal, the 77% of respondents think that jackals live in groups, which comes more out of their ''experience'' rather than their knowledge. Only 21% of respondents gave the correct answer about lynx.

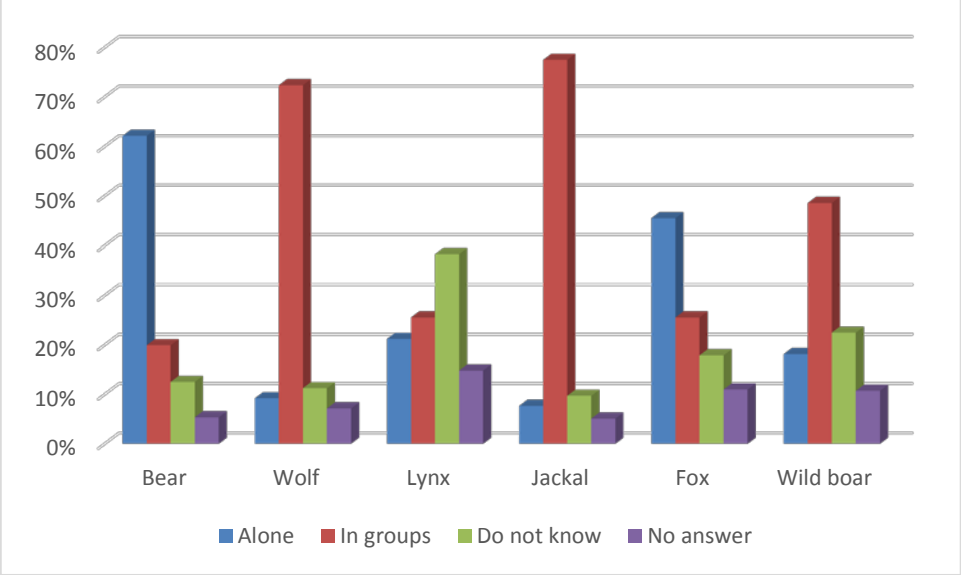


Figure 24: Do these animals leave in groups?

The majority of respondents believe that the number of animals in Ajara is unknown for them, only 50% of the interviewed respondents say the number is more than 100 individuals, which happens to be true (Figure 25). It should be noted that when the population does not know the real number of wild animals, they consider the existing number of animals as ''many'' rather than ''few'' and accordingly, 'many'' wild animals

will be considered as the consisting part of the human-wild animal interface. It is therefore important to record the number of wild animals periodically and make the population aware of the results.

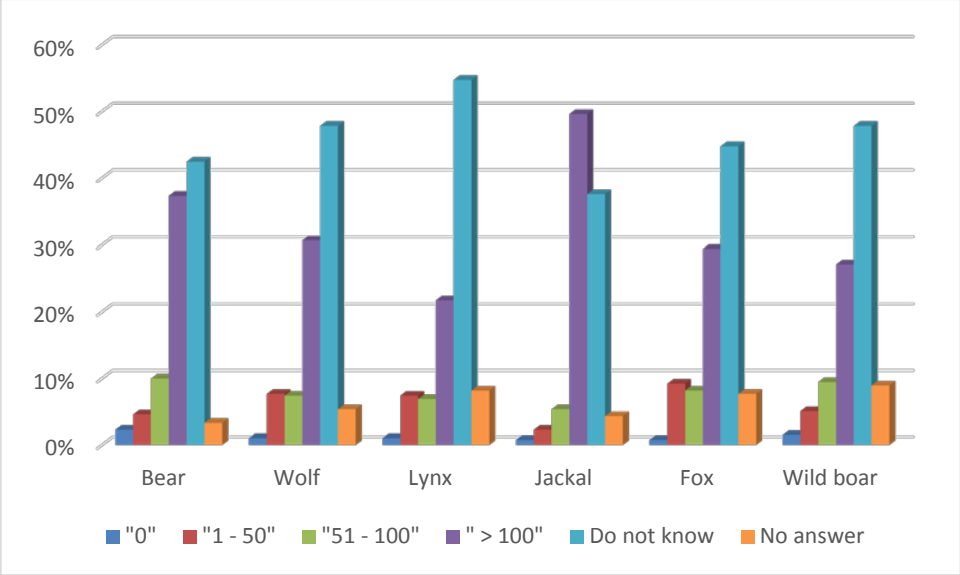


Figure 25: How many of these wild animals live in Ajara?

When asked how many offspring do wild animals have each year, about the 30% of respondents gave the correct answer. The biggest percentage was 45% in connection to the number of baby bears. The highest answer of ''I don't know" was regards lynx, showing 53% (Figure 26).

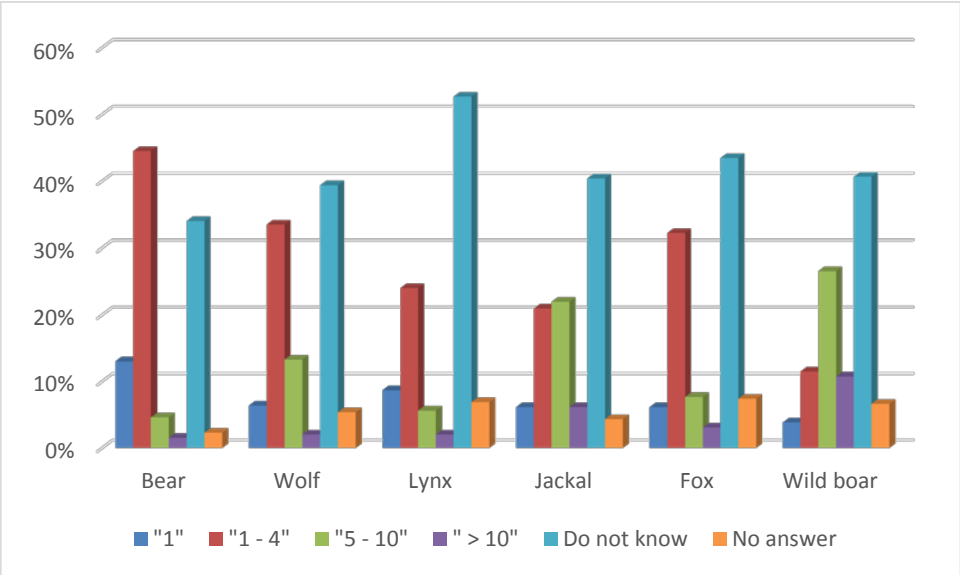


Figure 26: How many offspring do these animals have each year?

When asked what is the main food for animals in Ajara, an interesting answer was depicted (Figure 27). The 66% regards bear and 71% - regards wolf believe, that the main food is sheep and the cattle. As regards to the boar, the 41% of respondents named an agricultural crop. The 15% of respondents think that the jackals eats sheep and the cattle. The mentioned question clearly showed the lack of information about wild animals, which itself forms a negative attitude toward prey animals. Therefore, to make the population aware of the facts is one of the main components of the human wild animal negative interface mitigation.

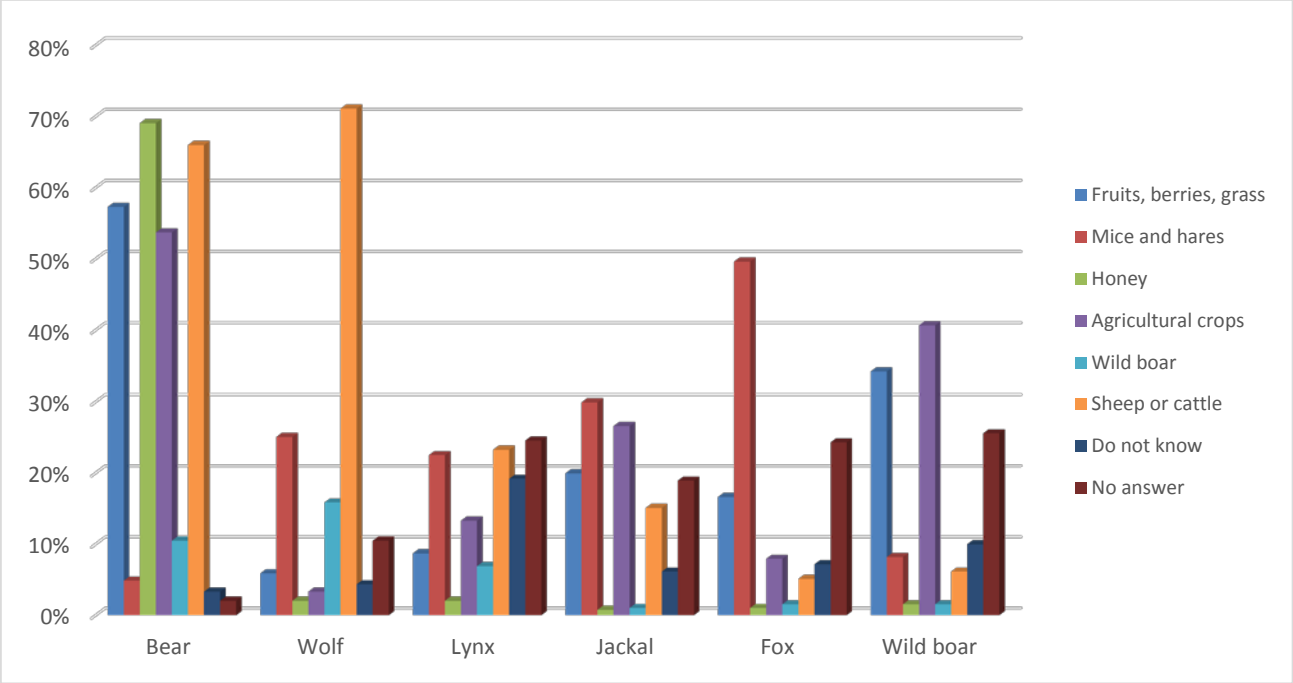


Figure 27: What is the main food of these animals in Ajara?

The questionnaire covered questions aimed at identification of population knowledge about wildlife legislation. At the question whether the hunting on listed animals is legal or not (Figure 28) the absolute majority of the population claim that hunting on listed animals is prohibited by legislation of the country. It should be noted that during dialogues with locals it revealed that this knowledge is more solid in relation to bear and wolf. With regard to other animals, population isn't sure about existence of hunting bans, however on the basis of the situation with bear and wolf they thinks that hunting these animals is also prohibited.

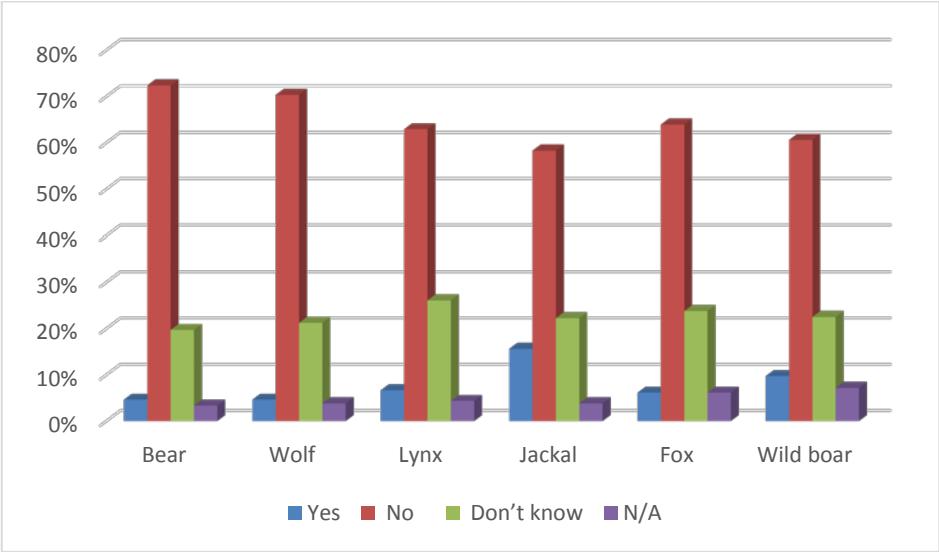


Figure 28: Hunting Legitimacy

On the question whether the owner of died and/or damaged livestock or crop is paid any compensation, the absolute majority of the respondents answered that it was not a case. It should be noted that there is a clear consensus on these issue among the respondents and 100% of the answers coincide with each other.

In relation of quantity and dynamics of quantity there is also a clear consensus among the respondents and big part of them points out that there are a lot of wild animals in Ajara and in recent years they have increased in number.

It is notable that the content and character of answers by respondents regarding attitude and knowledge towards wild animals didn't change by gender or other groups (age, social, economic). Accordingly, the results are presented cumulatively and demonstrate answers of the respondents for whole Ajara without mentioning any groups.

It can be said that, the findings clearly indicate that, Ajara residents have negative attitudes towards wild animals, although, there are some areas where positive and neutral attitudes dominate.

Source of information about the wild life

For the purposes of the survey it was important to reveal main sources of information, which mainly provides the population with information about the wildlife. In future it would help in implementation of the project to identify adequate sources of communication with population about planned activity and awareness rising activities.

On the base of this in the questionnaire a question was included about information sources, which have a strong influence on formation of population's knowledge about the wildlife. In the questionnaire there were provided possible alternative answers. Also in the questionnaire there free space was given where respondents could point the source of information not listed in the alternatives. However respondent didn't mention such sources. On the basis of answer findings revealed that main source of information for the population is Media (mainly TV). In formation of their impression and views a key role is given to private experience and narratives of member of the local community, particularly of hunters.

The absolute majority of the population clearly expressed interest in receiving more information about wildlife.

6 NATURE OF THE WILD ANIMAL ATTACKS AND PROBLEMS CAUSED IN THE AUTONOMOUS REPUBLIC OF AJARA

6.1 Information gathered on human-wild animal interface from the central government agencies

During the survey, in order to conduct the assessment of the human–wild animal interface and study the facts about the attacks of the wild animals over humans and domestic animals, initially, in order to collect the data, the project team addressed official letters to the Agency of Protected Areas (APA) of the Ministry of Environment and Natural Resources Protection (MoENR), National Center for Disease Control and Public Health (NCDC) of Ministry of Labor, Health and Social Affairs (MoLSHA), National Food Agency (NFA) of the Ministry of Agriculture (MoA) and Environmental Supervision Department (ESD) of MoENR (See the official letters sent to the government institution in the Annex 11).

From the information received:

- Information was provided by the Agency of Protected Areas and it consisted of facts about the attacks of wild animals at the Mtirala National Park and surrounding territories during 2011-2015 years (see the Table 9):
- The National Food Agency provided information about 5 cases (see the Table 8):
- According to the information provided by the Disease Control and National Centre of the Public Health, from 1980 to date the cases of the rabies of humans caused by the attacks of wild animals have not been reported in Ajara. In 2010-2015 in the region of Ajara, 2 cases of rabies by wild animals (jackals) were confirmed from pathological material, namely: In 2010, the Shuakhevi Municipal district of the village Dabadzveli and 2014 in Batumi at the settlement of Kvariati.
- In other cases (environmental supervision department) the information was not available.

It should be noted that the data received is not complete. For example in the data there is recorded that in 2011 in the National Park of Mtirala the domestic cattle was attacked by the bear 5 times, but not the results of these attacks (how many cows died/get damaged due attack). Also, in 2011 around the National Park of Mtirala 35 cases of wild animal attacks were recorded, the data indicates that the attacks were carried out by bears and wolves, but there is not indicated specifically how many of these attacks was carried out by the bear and how many by wolf. In the data of the injured animals, hives and crops, there is no information by which wild animals (bears, wolves) were attacks carried out and if there were damages due to the attacks.

6.2 Information gathered on human-wild animal interface from the local level stakeholders

The purpose of the survey with the local level key stakeholders was to collect statistical information/recordings on the wild animal attacks, the types of wild animals most often attacking the livestock, nature of attacks, attacks intensity and frequency; disaster risk reduction measures existing at local level and their character; in terms of the wild animals attacks, identification of so called "hot spot" villages where the human-wild animal interface is of high intensity.

Results of the survey are presented in the sections below.

Demographic data of the interviewees

51 respondents were interviewed in the initial stage of the research. The respondents mainly were the representatives of the local government and forestry sphere. Gender-based distribution of the respondents is shown on Figure 29, which shows that 88% were men and 12% - women.

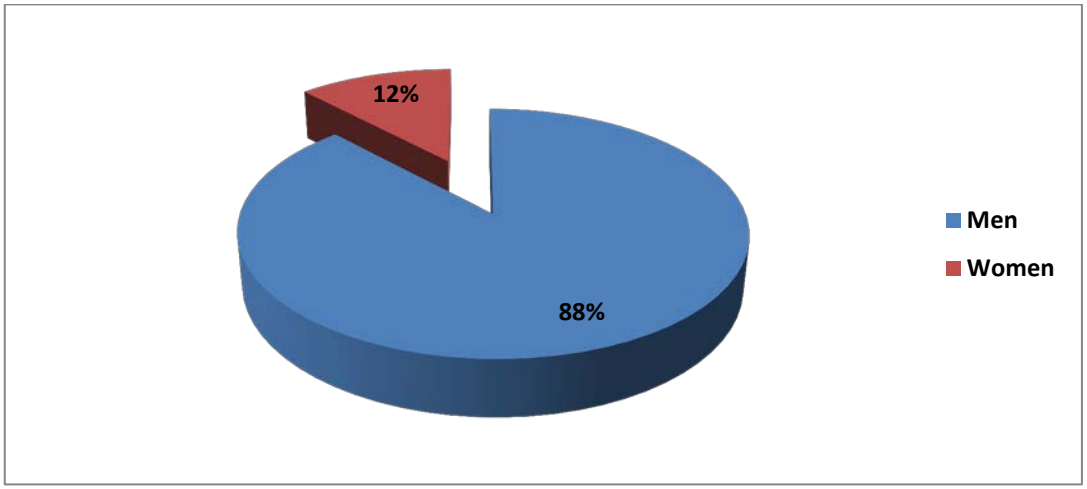


Figure 29: Gender-based structure of the local stakeholder respondents

Distribution of the population according to the age groups is shown in Figure 30.

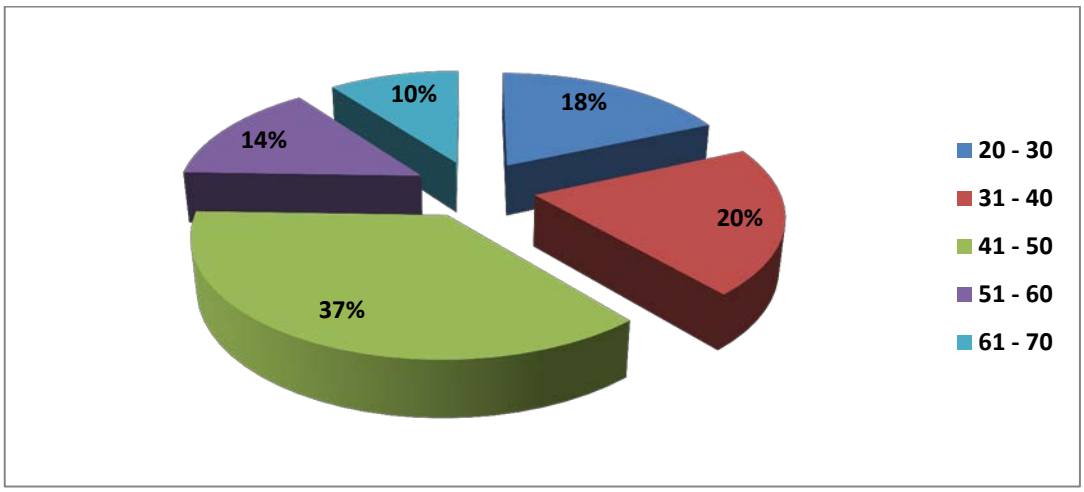


Figure 30: Age-based structure of the respondents

As the Figure shows, the majority of the interviewees belong to the age category of 41-50. The next category, according to the number, is 31-40. The third and the fourth groups are 20-30 and 51-60 age categories.

An absolute majority of the interviewed respondents were the representatives of the forestry sphere – 63%, from where the representatives of the local self-governance (10%) and local community (10%). 6% of the interviewees were the representatives of the government of the Ajara Autonomous Republic, from where the representatives of local NGOs (4%), protected areas (4%), and single respondents were the representatives of scientific sector and international organizations (UNDP).

Geographical distribution of respondents according to municipalities is given in the Figure 31.

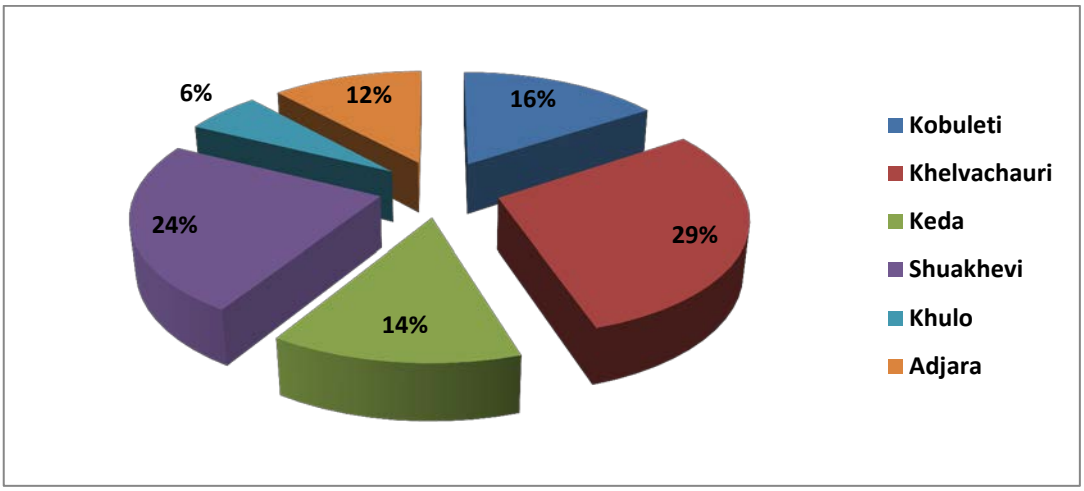


Figure 31: Geographical distribution of respondents

As the Figure show, the respondents are somewhat evenly distributed according to the municipalities. Khulo municipality, representing only 6% of respondents, is the exception. 12% of respondents were represented by regional services and organizations, more or less having an information about the whole Adjarian region.

Statistics about Human - Wild animal interface

Majority of the interviewees – 51% state that statistics regarding wild animals' attacks do not exist whilst 37% do not answer this question at all. It shall be mentioned that the answer "yes" was given by the representatives of the government of the Republic (2 "yes"), local self-governance (3 "yes") and protected areas (2 "yes"). None of the representatives of forestry sphere answered this question positively. It makes us assume that the representatives of forestry sphere don't maintain such statistics, unlike local self-government and protected areas (See Figure 32).

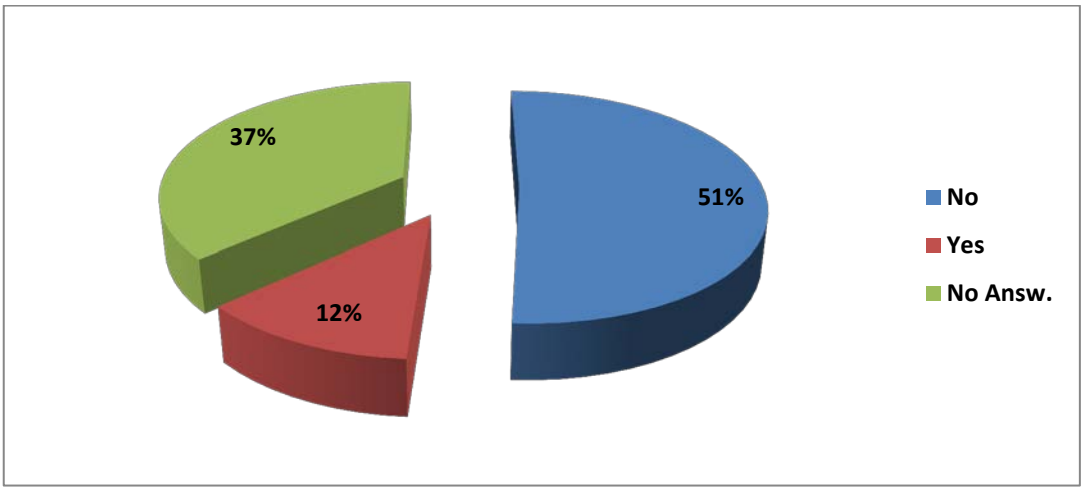


Figure 32: Maintenance of statistics related to attacks by wild animals

The above mentioned is supported by the explanations, related to the positive answer. In particular, the respondents, who answered the statistics-related question positively, described the mechanism of maintenance of statistics. Particularly, the respondents mentioned that the notification about such attacks come from the population and in response to such notification, specialist of National Food Agency goes to the site. If a livestock was injured by a wild animal, 10-days surveillance is established for the purpose of exception of rabies. In the case of rabies, the information is sent to the National Food Agency, National

Health Center and self-governances. Besides, a report, describing the information about on-site visits of the Agency's personnel in response to the phone calls of citizens, is sent by the end of each month. In addition, applications are received by the self-governances from the population with the request of the compensation of damage.

According to both PA representatives, protected areas maintain independent statistics. According to their information, they carry out social surveys of the population annually, which is sent to the Agency of Protected Areas, where the obtained information is analyzed. According to the information of the representative of protected areas, the population considers that the number of wild animals has increased due to the protection of areas.

The main wild animals

One of the main goals of preliminary interviewing was to clarify which wild animal is the main actor of attacks against humans, their economic activities and livestock and to identify the "hot spots" where the project group would carry out an additional research.

According to the obtained results, four wild animals were identified, which, in accordance with the respondents' opinion, create problem to the local population. These are: bears, wolves, jackals and foxes. The frequency of attacks of these wild animals is shown in the Figure 33. It should be noted that each respondent had the opportunity to name more than one answer. Therefore the total number of replies is more than 100%, the Figure illustrates how many times was mentioned each by respondents.

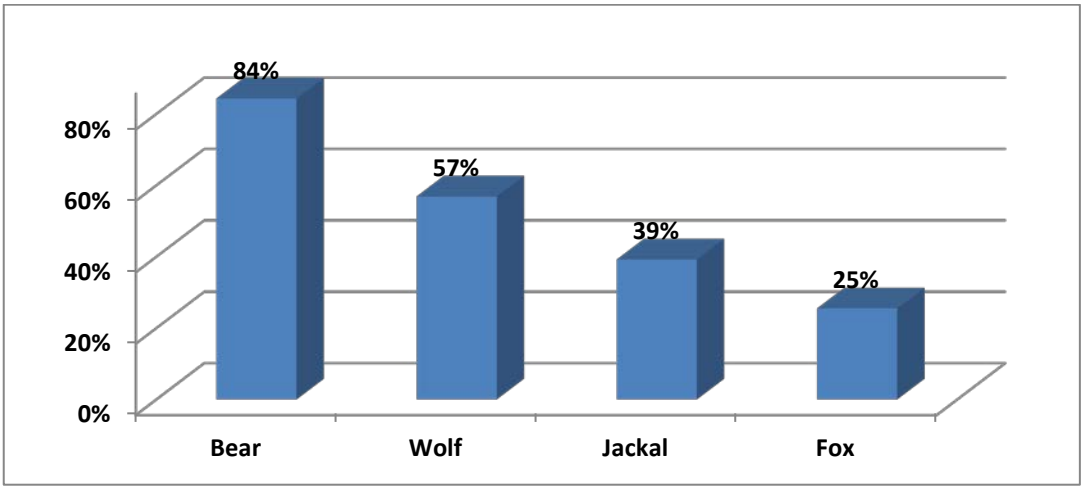


Figure 33: Main wild animals and the frequency of their nomination

As it can be seen, an absolute majority of respondents (84%) specify bear, as the main actor of such attacks. The wolf is on the second place (57%) and jackal is on the third place (39%). Most seldom, the respondents name fox. The frequency of nomination of fox, as the attacker, made 25%, i.e. only one fourth of the respondents name fox, as attacking wild animal.

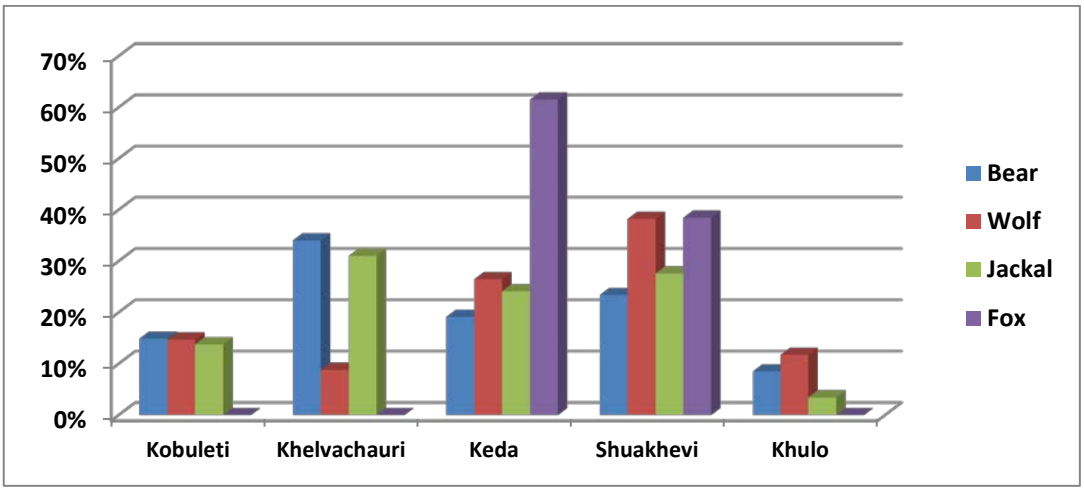


Figure 34: Main wild animals and the frequency of their nomination according to municipalities

The geography of nomination of wild animals according to municipalities is as follows: the bear, as attacking wild animal, is nominated in all municipalities with an equal frequency, as well as the wolf and fox; the Khulo municipality, where the density of settlements is more or less low, is the exception, although it shall be taken into account that the fewest respondents were interviewed from Khulo in the preliminary stage (6%. See Figure 34), which explains such low number of settlements. In addition, an exception is nomination of foxes, as the source of wild animal attacks. The fox, as a wild animal, was nominated only in two municipalities – Keda and Shuakhevi.

The nature of attacks

Respondents describe the nature of attacks for each wild animal. The Figure 35 describes the results of their answers.

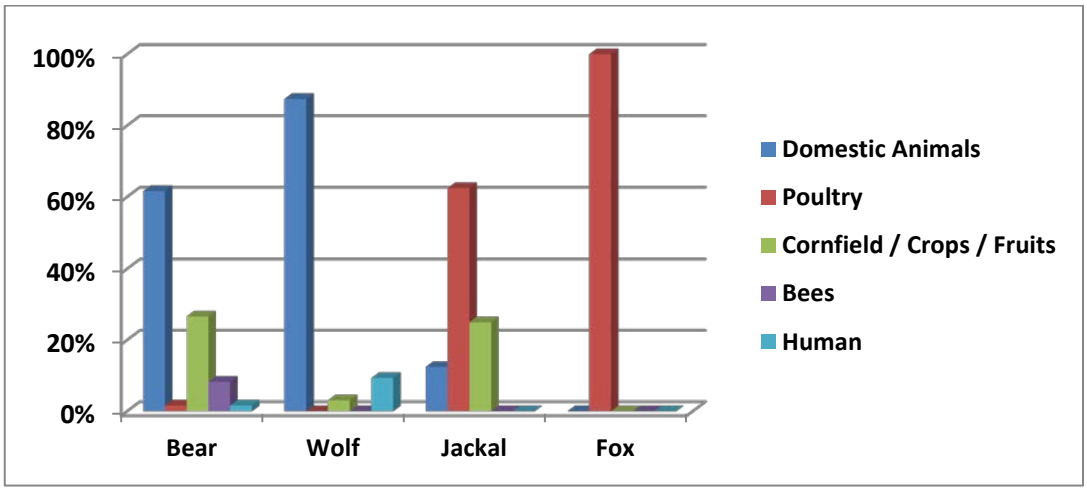


Figure 35: Main animals and nature of attacks

The Figure shows that according to the information, provided by the respondents, the bear causes the main damage to the livestock (62% of settlements) and crop plantations – cornfields, grain crops, vineyards (27% of settlements). The bear also causes damage to bees. 8% of bear attacks, described by the respondents, relate to causing damage to bees. It shall be mentioned that one respondent mentioned the case of attacking human by bear. When describing bear attacks the facts of attacking poultry were also mentioned in few cases (2% of cases).

The Figure shows that the wolf causes the main damage to the livestock (88% of settlements). It shall also be mentioned that respondents state several cases (3 cases) of humans being attacked by wolves. In regard to the wolf, respondents also mentioned the damage, caused to plantations (3% of nominations).

The jackal mainly causes the damage to poultry (63% of nominations). However, it was also mentioned that it also causes the damage to crop plantations (25% of nominations) as well as livestock (13% of nominations).

The fox, as the attacker, causes main damage to poultry (100% of nominations). It shall be mentioned that fox does not participate in any other type of damages, described by the respondents.

Seasonality of attacks

For the purpose of identifying the nature of human-wild animal interface, it is very important to determine the seasons, when the wild animal attacks are most intense. Consequently, the respondents were asked the question – during which season wild animals mainly attacks? The Figure 36 reflects the respondents' answers.

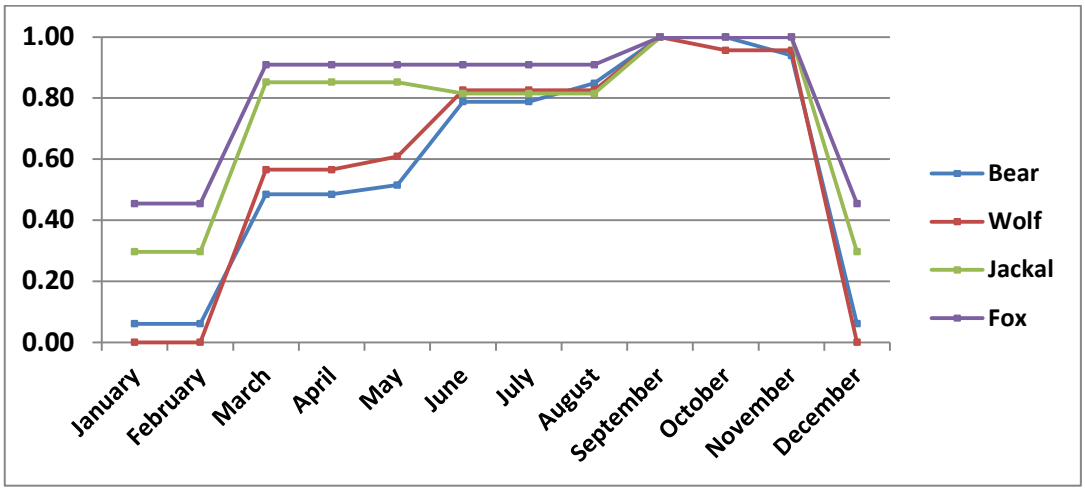


Figure 36: Seasonality of wild animals attacks

As it can be concluded from the Figure, an autumn period is particularly active from the viewpoint of wild animal attacks, considering the cases of attack of all types of wild animals. In addition, the winter season is less active. There is almost no difference among seasonal activity of different wild animals. The jackal and fox shall be mentioned, attacks of which, according to the respondents, are actual all the year round (during all seasons), although they are more active during the spring months. An activity begins in the spring, increases in the summer and achieves the highest point in the autumn.

Also, the situation does not differ according to the municipalities, and the seasonality of attacks is practically identical. The situation is somewhat different in Khulo municipality. In general, the seasonality of the attacks repeats, the general trend and wild animal activity mainly falls on the summer and autumn periods. But somehow different is the fact that practically no attacks are recorded during the winter and beginning of spring (when the wild animals are quite active in other areas). The reason can be the fact that the Khulo municipality has the highest elevation compared to other municipalities. Consequently, the duration of winter, as a rule, is longer here. As a general trend, it can be observed that the winter in general is not active from the viewpoint of wild animal attacks, so this difference can be caused by this reason.

Frequency of attacks

On the initial stage, it was important to record the respondents' opinion – how they saw the frequency of wild animal attacks. Such frequency is slightly different according to municipalities. Besides, it shall be mentioned that the respondents, using different time periods, still use the terms – "rarely", "often", "single cases", etc. Finally, on the basis of the obtained data it can be performed the following ranking of answers – rarely – up to 5 cases per year, an average – from 5 to 10 cases and frequent – 10 cases and over. Based on such ranking, the answers, obtained from the municipalities, were distributed in the following way, see Figure 37.

	Bear	Wolf	Jackal	Fox
Kobuleti	Average	Average	Average	
Khelvachauri	Often	Rare	Often	
Keda	Often	Often	Often	Often
Shuakhevi	Often	Often	Average	Rare
Khulo	Average	Often	Rare	

Figure 37: Frequency of wild animal attacks according to municipalities

It shall be mentioned that according to each municipality, the respondents were speaking about rare, as well as frequent and average attacks. Differences were mainly caused by the location of the specific village, mentioned by respondents. The mentioned information was used by the project team for planning of the basic process of the research (for the purpose of identification of the so-called "hot spots"). Although, the results, obtained on the initial stage were used for analysis of the situation in the municipalities.

As it can be seen in the Table the bear attacks are specified as "frequent" in Khelvachauri, Keda and Shuakhevi. The bear attacks are assessed as "average" in Kobuleti and Khulo.

In the case of the wolf, Keda, Shuakhevi and Khulo respondents speak about "frequent" attacks. The Khelvachauri respondents mention "rare" attacks; and in Kobuleti – attacks of "rare" and "average" intensity.

The jackal, as the participant of extensive attacks, was mentioned in Khelvachauri and Keda cases, in Kobuleti and Shuakhevi cases attacks are observed as average intensity and in Khulo as rare. As for fox, the respondents in Keda municipality say that the intensity of its attacks is high. Such intensity in Shuakhevi is assessed as "rare".

Based on the Table, it can be concluded that Keda municipality is particularly vulnerable from the viewpoint of wild animal attacks; also, Shuakhevi is remarkable for the intensity of wolf and bear attacks.

Damage, caused by attacks

In the initial stage, it was important to assess respondents' attitude – how they assess the damage, caused by wild animals. For this purpose, they were asked to assess damage based on scale from 1 to 5, where 5 would denote the highest damage. The results are provided in the Figure 38.

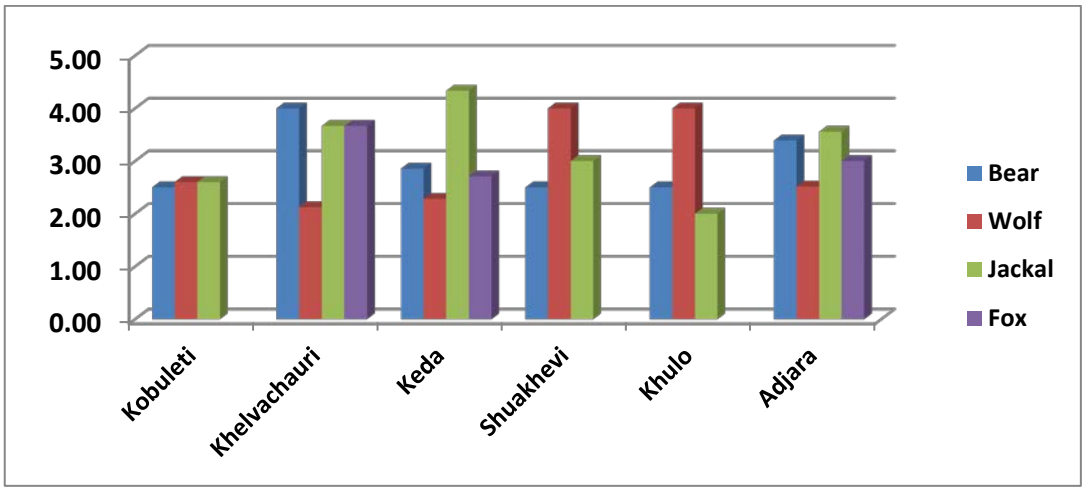


Figure 38: Assessment of damage caused by wild animal attacks

The Figure shows average values of the assessments, made by respondents for the individual municipalities as well as for the Ajara region in overall. As the Figure shows, the respondents from the Kobuleti municipality assess the damage, caused by each wild animal as equal except for fox. The Khelvachauri municipality points out the damage caused by the bear and assesses this damage by 4 points. The damage, caused by the wolf and jackal is also assessed as high. In this case, the wolf is less important and its damage has relatively lower assessment.

In the Keda municipality, a damage caused by the jackal is assessed as very high – over 4 points (4.33), whereas the damage, caused by other wild animals is assessed as lower and ranges about an average value.

The assessments of Shuakhevi and Khulo municipalities are practically identical, where a damage caused by the wolf is the most important and this damage is assessed by almost 4 points. The damage caused by the fox and jackal is lower, ranging within an average value. Besides, the damage caused by jackals is higher in Shuakhevi, assessed at almost 3 points, and in the Khulo municipality this damage is assessed by respondents as less than 2 points on average.

As for the regional situation in general, in this regard the damage, caused by the jackal is assessed as the highest, making 3.56 points based on averaged value of respondent's answers. It is followed by the damage, caused by the bear, assessed by 3.39 points, and the wolf is on the last place, as the average value of damage caused by it makes 2.52 points.

Established practice of response to the wild animal attacks

It was important to obtain from respondents the information about the practices of response, established in the region in regard to the wild animal attacks.

It shall be mentioned that a great share of respondents throughout the region (43.14%) did not answer this question at all, and 33.33% stated absence of such practice. If it will be assumed that the absence of an answer is the indication that the existence of such mechanism is unknown to the respondent, it would come out that an absolute majority of respondents, over ¾ (76.47%) speaks about the absence of such practices. Other respondents mention a certain level of response, in particular:

- Notification of the relevant departments (local environmental division, municipality management, police, food safety services, etc.) Almost one tenth (9.80%) of the interviewees throughout the region speak about this type of practice.

- From the viewpoint of response, the respondents speak about an imposition of control over the injured animal in order to make sure that there is no risk of spreading the rabies or other disease. Only one respondent mentions such practice. It makes us think that in reality such practice is less established.
- Some respondents mentioned the practice of hunting and extraction of wild animals from the nature. E.g. it was mentioned that municipal program – "Homeless and Stray Dog Program" is being implemented, which provides for purchase of hunting bullets for the purpose of preventive measures (frightening of wild animals), and "hunting groups" created in the villages provide the relevant response (frightening of wild animals). It was also mentioned that a hunter, living in the village (officially registered) has the right to participate in the process of liquidation of wild animal. Besides, in this regard, it was mentioned that an extraction of wild animals, the so-called "thinning" is carried out according to the existing agreement between the municipality and the Ministry of Environment and Natural Resources Protection of Georgia. Total number of respondents, speaking about such practice, throughout the region, makes 7.84% of the interviewees.
- Some respondents speak about a simple preventive measures carried out by the local population, including the noise (shouting, whistling), making fire, scarecrow, etc. The number of such respondents is very small and makes 3.92% of the interviewees throughout the region.

Distribution of respondents' answers to this question in general is given in the Figure 39.

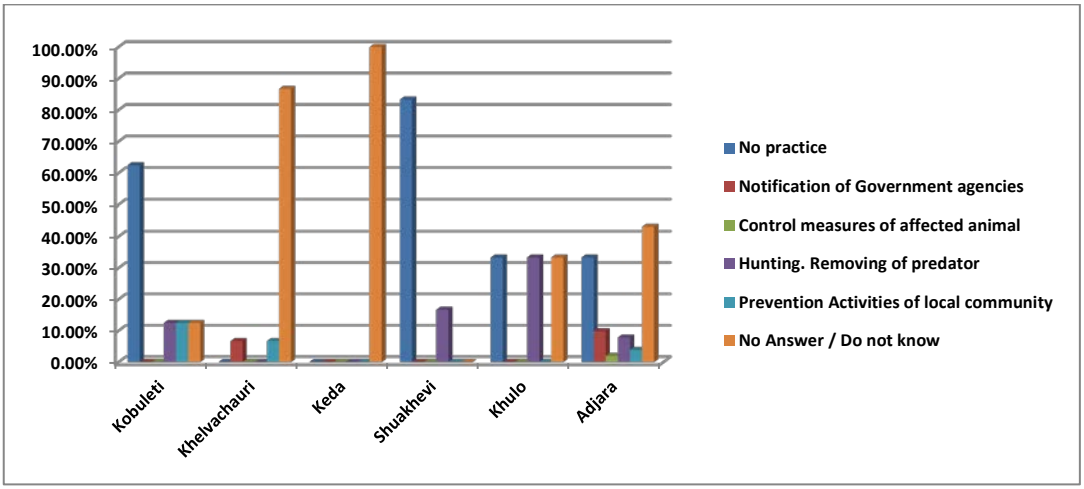


Figure 39: Established practices of response per municipalities

As it can be seen, there are differences according to municipalities, e.g. in Kobuleti the majority (62.5%) speaks about the absence of such practice, besides, they mention the hunting and local community measures. Relatively small share 12.5% does not answer the question.

In the Khelvachauri municipality an absolute majority did not answer, only single respondents speak about the notification of departments and community activities. The situation is identical in Keda, where none of respondents answers this question.

In Shuakhevi an absolute majority (83.33%) indicates to the absence of such practice, and two respondents speak about hunting.

In Khulo the respondents, who say that such practice does not exist and those who do not give answer, were distributed equally; and out of specific measures, only hunting was mentioned.

It shall be mentioned that according to municipalities, hunting was mentioned in their majority at least once; and contacting the governmental structures was mentioned only in one municipality (Khelvachauri). In other cases, only the representatives of central government spoke about the practice of notification.

In addition, the existence of local practices (noise, fire, scarecrow, etc.) was mentioned only in two municipalities.

Risk reduction measures

On the initial stage of research, it was important to obtain information about the measures, provided for the purpose of reduction of negative interface between wild animals and humans.

It is important to mention that a big share of respondents throughout the region – 56% - mention that no risk reduction measures are implemented; over one tenth of respondents – 13% do not give answer at all, or state that they do not know the answer. Consequently, about 2/3 of the population is not aware of any measures in this direction. Out of the answers, where certain activities were mentioned, the following shall be pointed out:

- Notification of the relevant department; only one respondent mentioned such measure on municipal level, mentioning that municipalities provide detailed information to the relevant services so that they take the relevant measures for risk reduction. However, the respondent did not specify what services are these and moreover, what kind of specific risk reduction measures they implement.
- Big share of respondents (11%), speaking about certain risk reduction measures, mention the practice of shepherding. According to these respondents, shepherds are hired by the population during the season (besides, it was stressed that as a rule the shepherds do not have the weapon), or the population is shepherding livestock in turn.
- Almost identical number of respondents (9% and 7%) speak about hunting, as risk reduction factor, as well as about measures, implemented by the population independently on local level, like fencing of livestock and poultry stalls, and selection of location for them, where wild animal can't get them; also, making of scare devices, etc. As for hunting, it was mentioned that it is implemented by special task group of Environmental Supervision Service. It was also mentioned that the officially registered hunters obtain special license for extraction of wild animal.
- It shall be stressed that one respondent, when speaking about risk reduction measures, mentioned awareness raising campaigns. In particularly, the government and environmental organizations actively call the population that none of the animals is dangerous for humans and their existence is necessary in the environment. In the respondent's opinion, such approach is very important from the viewpoint of the risk reduction.

Distribution of answers in municipal cross-section was also interesting for us. The results are reflected in the Figure 40.

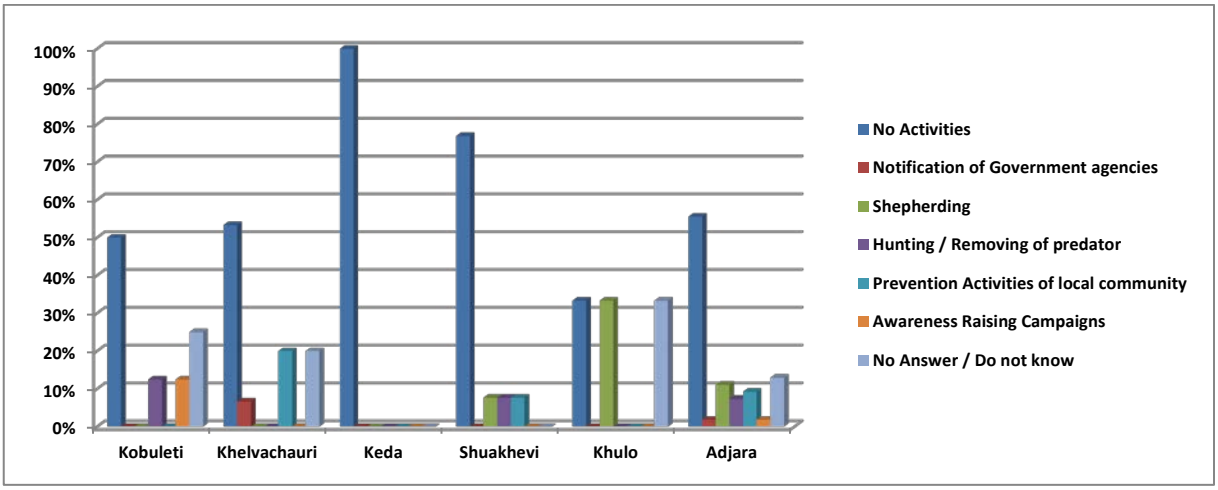


Figure 40: Risk reduction measures per municipalities

The Figure shows that an absolute majority of answers in all municipalities are related to the absence of the risk reduction measures. An absolute majority of respondents answer this question that there are no activities at all in the Keda municipality. In Kobuleti, Khelvachauri and Khulo the share of respondents, not answering this question, or stating that they do not know the answer/they have not heard about such measures, is big.

Value of wild animal

On the initial stage of research, it was important to assess the attitude of respondents towards the wild animals. It was interesting to clarify what importance they attach to the existence of wild animals, if there is any value in their existence. The answers were distributed in the following way, see Figure 41.

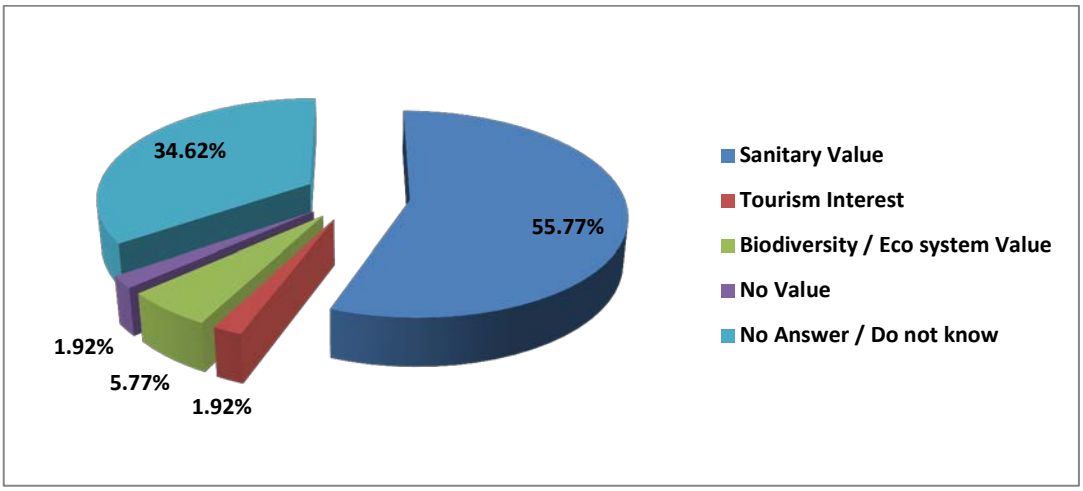


Figure 41: Value of wild animals

The majority of respondents (55.77%) mention that wild animals serve as sanitary function (by eating of carrions and diseased animals prevents the spread of diseases and supports the maintenance of the health of species). Besides, it shall be stressed that an absolute majority of respondents speak about this function in regard to wolves. Quite big share of respondents do not answer this question, or state that they are not aware of such value. Share of such respondents made 34.62%, i.e. over one third of the interviewees. The small share of respondents (5.7%) speak about biodiversity, its conservation values and value of wild animals, as constituent part of biodiversity and ecosystems. It shall be mentioned that one respondent

stated that wild animals have no value; and one respondent spoke about their value, as the object of potential tourist interest. In this case, the factor of bear was specifically stressed. It should be noted that there was recorded 1 answer by the respondent that jackals have no value and they should be annihilated. On the final stage, the respondents were asked to assess the value of wild animals according to 5-point scale (1 the lowest, 5 the highest). The mean values of the obtained results are reflected in the Figure 42.

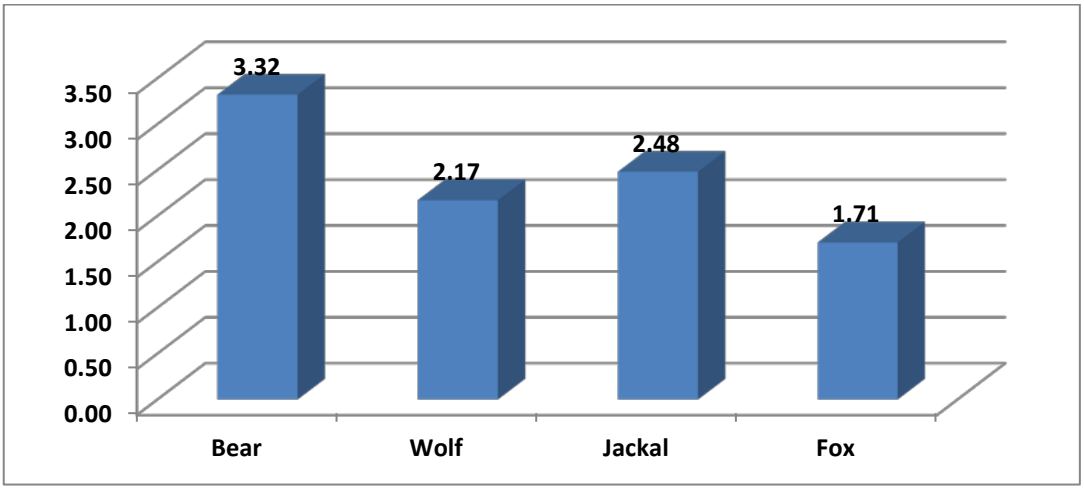


Figure 42: Value of wild animals based on 5-score scale

The Figure clearly shows that the respondents give the highest assessment to the bear (3.32 points). The wolf and jackal are assessed almost equally, with slight advantage of the jackal (2.17 and 2.48 points, correspondingly). The value of the fox was assessed as the lowest – 1.71.

6.3 Analysis of the field survey on the nature of human-wild animal interface

To analyze the nature of human-wild animal interface, the second stage of the survey were conducted on the selected villages of Ajara Autonomous Republic, and local farmers were interviewed (see Chapter 2. research stages). Below the detailed analysis of the research are presented:

Demographic data

The interviews were conducted in all five municipalities of Ajara Autonomous Republic. 20 respondents were interviewed in each municipality. Total number of respondents - 100. The list of target villages ("hot spots") by municipalities is provided in the Table 3.

Table 3: Target Villages

Municipality	N	Village
Kobuleti	1	Ochkhamuri
	2	Tchakhati
Khelvachauri	3	Tkhilnai
	4	Kibe
Keda	5	Piveli Maisi
	6	Gobroneti
Shuakhevi	7	Khabelashvilebi
	8	Matskvalta
Khulo	9	Pachkha
	10	Riketi

In terms of age, the 30-60 year range represents the main category of respondents. Age structure of respondents by municipalities and overall region is provided in the Figure 43.

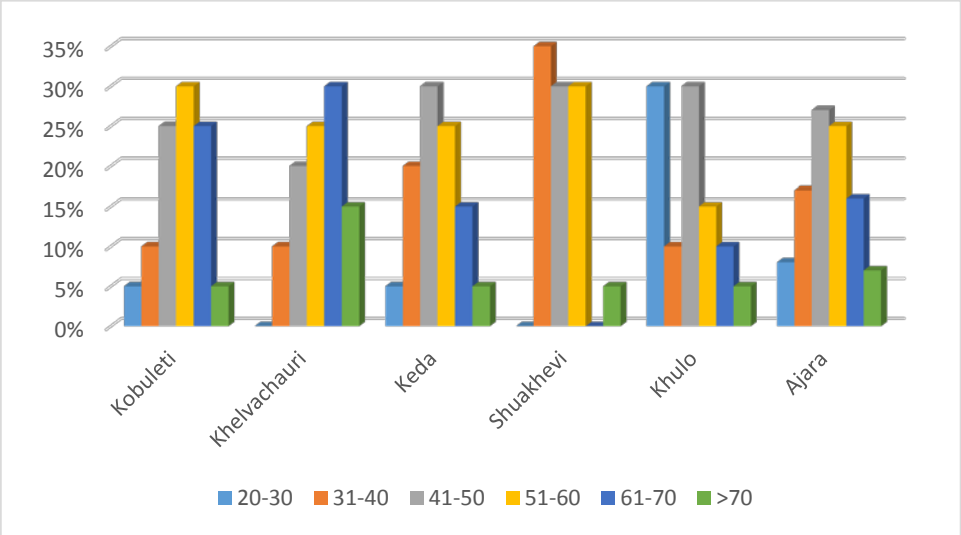


Figure 43: Age structure of respondents by municipalities

In terms of gender structure, 60% of respondents were male, 40% - female.

Distribution of respondents according to the highest education level is presented in the Figure 44.

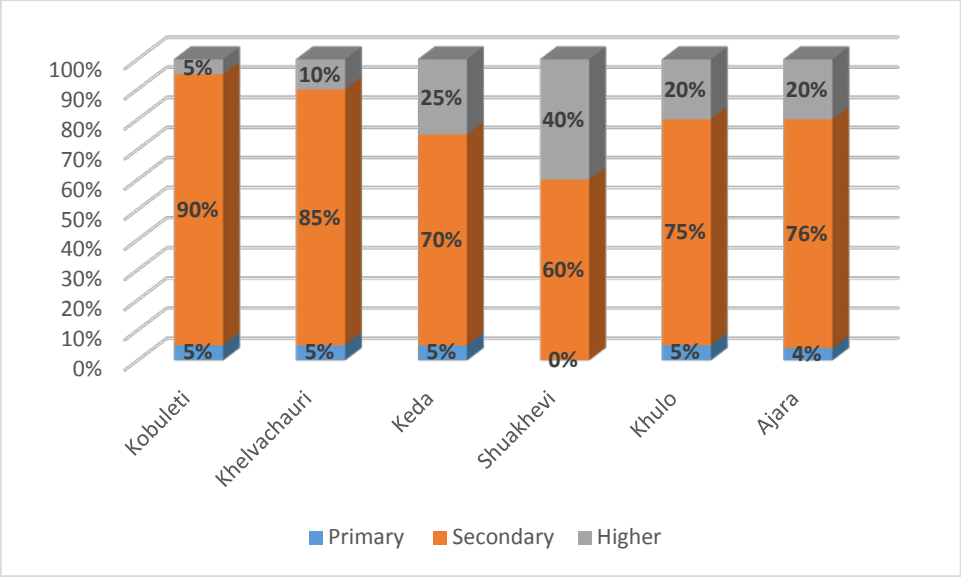


Figure 44: Distribution of respondents according to the level of education

It is evident from the Figure that respondents with the secondary education represent the absolute majority of respondents.

The objective of the survey was to interview local farmers, who were in touch with the wild environment in some form and who, potentially, were belonging to the vulnerable group affected by the attacks of wild animals. However, it has to be noted, that there is no definition for farmer in place. It can be considered

that all residents of target villages are small farmers despite the area of their activities. Despite the places of employment of family members, practically all families own small different types of farms. Practically, there are no large farmers encountered in the target villages. Accordingly, it is practically impossible to divide respondents by their activities, into different farmer groups, as in general, absolute majority of farmers has in possession some livestock in parallel with land cultivation activities. Often, in addition to the above, the farmers possess one or two bee-hives. Actually, the absolute majority of respondents are composed of such types of small farmers. One or two members of families owning such farms are additionally employed at some paid work places; schools, local administration and etc.

Farms

Farms of respondents

The areas of land plots owned by the majority of respondents vary from 0.25 to 0.5 ha. There is an identical situation all over Ajara. There is, to some extent, different picture in Shuakhevi and Khulo municipalities, where part of respondents possesses land plots with the areas exceeding 0.5 and 1 ha; there are no similar respondents in Kobuleti, Khelvachauri and Keda municipalities. For the detailed information on land plots in the possession of respondents see the Figure 45.

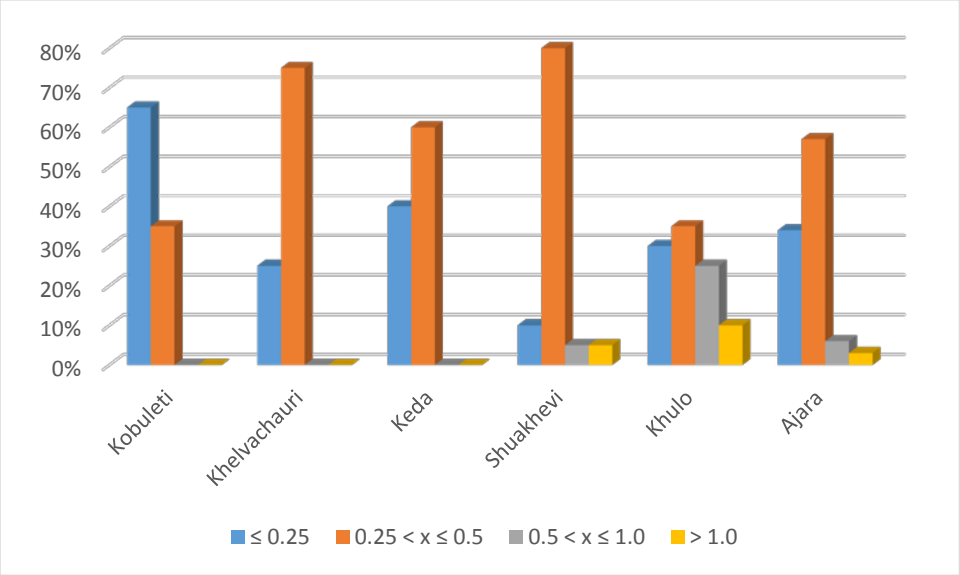


Figure 45: Land plot areas owned by the respondents according to the municipalities

In terms of farm types, as mentioned above, absolute majority of respondents is involved in different types of small farming (Majority of the farmers who are involved mostly in the cattle breeding farming where migrated to the pastures during the interviews). Large part of families participating in the survey owns livestock. The share of such farmers in total number of respondents equals to 86%. The next by number are farmers involved in small scale poultry farming; the share of such farmers in total number of respondents across Ajara equals to 37%. There is relatively small number of farmers involved in bee keeping (11%). The above indicators are actually identical for all municipalities of Ajara. In all municipalities the number of farmers owning live-stock is first by number, and then come the farmers involved in poultry farming; relatively small number of farmers is involved in bee keeping. There is minimal number of farmers, who during the interview noted that owned limited number of sheep. There are such respondents encountered only in Shuakhevi municipality. Detailed composition of respondent farmers by municipalities is provided in the Figure 46.

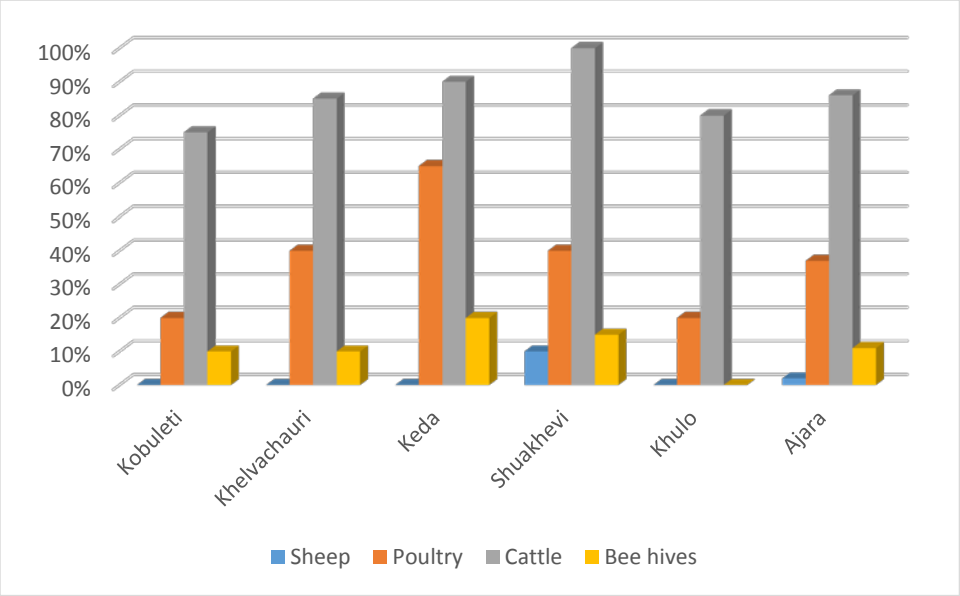


Figure 46: Type of farms by municipalities

In such small farms population is mainly producing: in case of livestock - milk, dairy products and meat products, honey; in the areas of land cultivation – vegetables, crops (mainly corn), grape and wine, citrus, fruits. During the recent years the hazelnut production has expanded largely. More and more farmers are establishing hazelnut plantations. This is a tendency observed in practically all municipalities without exceptions. In conversations expansion of hazelnut plantations is mentioned as one of the reasons for increasing the occurrence of animal attacks (especially attacks of bears).

Revenues from typical small farms are very low and mainly depend on sales of the excess one of the product types. Essentially, vast majority of interviewed farmers does not produce any specific type of product with the purpose to sell it at the market. Accordingly, on the question – what type of farming are they involved in, absolute majority's response was; farming for self-consumption/subsistence. Only a few respondents talk about owning a commercial-sized farm (13 %). Moreover, practically, there is no difference in responses between the municipalities. The Figure 47 provides the assessment of farm types by the respondents (for subsistence vs. commercial).

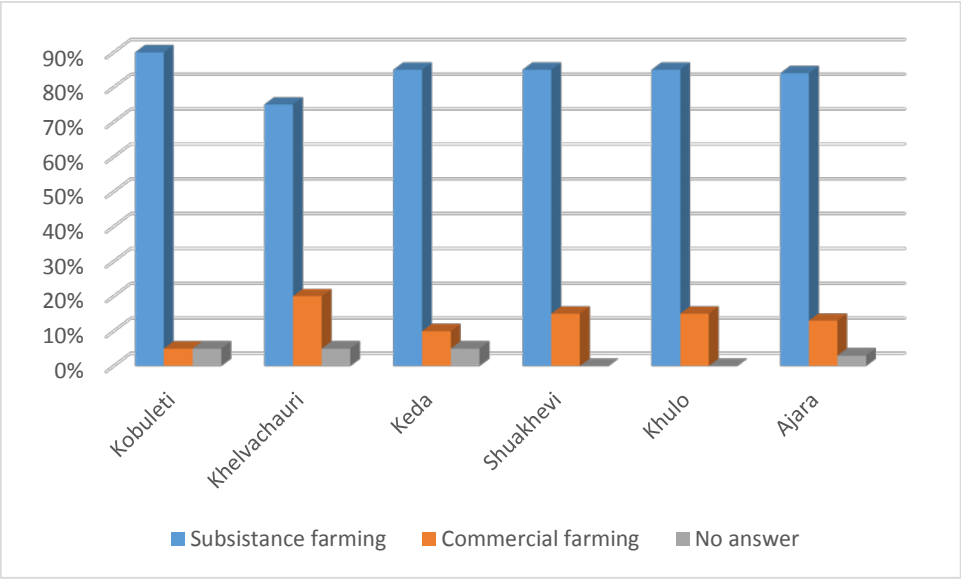


Figure 47: Farming types by respondents

Above mentioned conditions the fact that respondents do not have the specific method established for the sales of produced goods. Sales methods depend on specific case and buyer of products could be intermediaries, tourists, neighbors and etc. Majority of respondents marks all possible responses, as apply all possible means of sales in practice. It has to be noted that, there was quite a high share of respondents who did not provide any answer to the above question (33% across Ajara). The above reinforces the position that farmers do not have any established and developed mechanism for product sales and accordingly, find it difficult to identify specific method used. When talking about the possibility to improve sales methods, absolute majority of respondents mention that it would be easier for them to have possibility to deliver goods from the farm gate. Moreover, there is quite high share of respondents who do not know what measures must be implemented to improve product sales (≈35% across Ajara).

Loss of products due to diseases

Large part of respondents talks about loss of cattle and/or other products due to diseases. Share of such respondents for whole Ajara equals to 35%. Equal number of respondents, about 30-35%, mention the disease as a reason for product loss practically in all municipalities.

Absolute majority carries out preventive measures against diseases – 88% of responses for the whole Ajara. Essentially there are no differences between municipalities. In all municipalities, respondents talk about preventive measures implemented at a similar frequency.

As for the nature of implemented measures, practically in all cases, respondents name the vaccination – in case of live-stock and poultry farming (vaccinations conducted under the state program was mentioned among others). As for the land cultivation, practice of applying various products, including pesticides was mentioned.

Local practice of animal husbandry

For understanding the nature of human-wild animal interface, it was necessary to analyze locally established practices for animal feeding. Accordingly, respondents were requested to describe feeding practices for autumn/winter as well as spring/summer periods.

It was discovered that animal feeding regime is practically identical all over Ajara region. In general, in autumn/winter period the animals are kept in the storage areas and household plots located near the living space. Such storage facilities are located in close vicinity of residential house. Distance on average equals to 30 meters. There is qualitatively different situation in spring/summer period, when large number of animals is taken to summer pastures by cattle breeding farmers. Such pastures are located at an average distance of 5-10 km-s from the villages. It has to be noted that there is two-stage practice of taking live-stock to the pastures. Namely, in early spring the live-stock is taken to the intermediary pastures, which are located relatively close to villages (locals refer to them as "Kishlebi"); these pastures are distinguished with relatively low altitude and accordingly milder climate. Later, during the late spring live-stock moves to mountainous pastures ("Iailebi"); live-stock stays there until the end of summer. In general, such pastures ("Iailebi") represent the summer settlements with stationary houses. Farmers, mainly involved in live-stock breeding, generally move with their families to the summer pastures. The above seasonal migration type live-stock breeding is also widely spread in other regions of Georgia, especially in the East Caucasus mountainous regions (Tusheti, Khevsureti).

It must be noted that families owning small different types of farms are not involved in migration type live-stock breeding practices, as in general, they have small number of live-stock heads (2-3). Such farmers during the whole year practically follow one type practice and do not change the practice seasonally. Generally, live-stock stays in habitats and during the days animals are let free to the territories adjacent to the villages, including the adjacent forests.

It must be stressed that practice of shepherding is not practically used in the villages. Livestock is simply let free to the territories adjacent to the villages, often without any supervision.

Prior to moving to the summer pastures livestock farmers apply the vaccination practices. Vast majority of respondents was mentioning the existence of such practice (80% Ajara- wide).

Information on tourism

The population survey contained an evaluation of local tourism potential. However, based on the fact that for the interviews the villages for which the interface between human-wild animal was especially relevant were selected, the objective for interviews was identification of the local population position on the opportunities for the development of tourism locally. It was also decided to determine, whether the local population considers wildlife as the potential for the development of eco-tourism.

First of all, respondents were asked to comment on how common tourism was in their area. Distribution of responses according the municipalities is provided in the Figure 48.

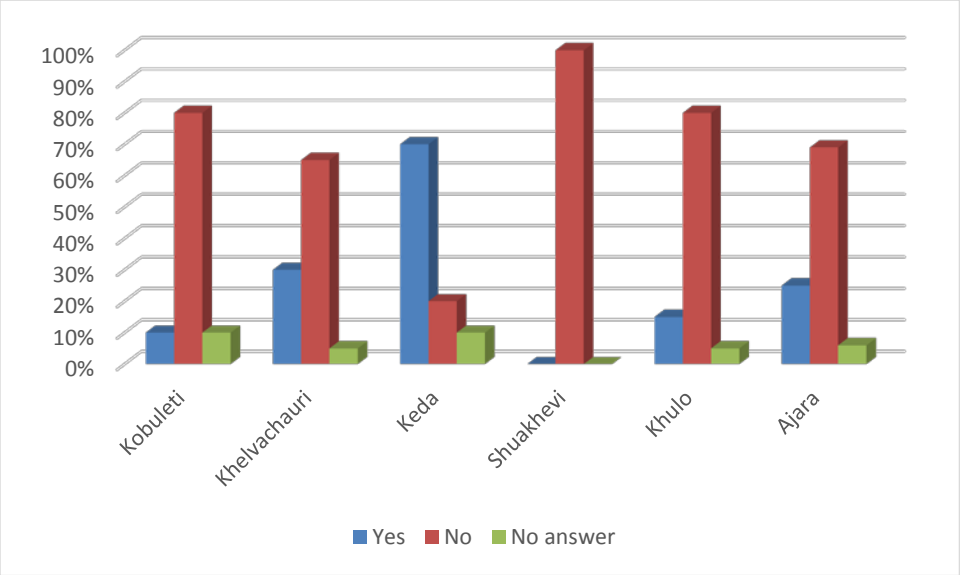


Figure 48: Is tourism common in your local area?

As it is evident from the Figure, respondents from practically all the target villages are talking that tourism is weakly developed. Keda municipality is one exception; however, it must be noted that one of the selected villages in Keda is Gobroneti, which is distinguished touristic site in the mountainous Ajara. There are even several family guesthouses functioning in the village and tourists visiting high-mountainous Ajara, generally visit this village. It was somewhat unexpected to have respondents from Kobuleti evaluating the development of tourism at a relatively low level; however, with the consideration of the fact that villages selected in the municipality (Ochkhamuri and Chakhati) at this stage do not represent the sites of touristic interest, the above outcomes become understandable.

Respondents, mentioning the tourism spreading, indicate on the various types of tourism. In this regard, there is practically identical picture in all municipalities. Respondents mainly name eco and agro-tourism. Keda municipality is an exception, where respondents name mainly eco-tourism and cultural tourism as widely spread forms of tourism.

The responses on the question – whether they are willing and are interested to be involved in the activities related to tourism - were especially interesting for this research. Distribution of responses according the municipalities is provided in the Figure 49.

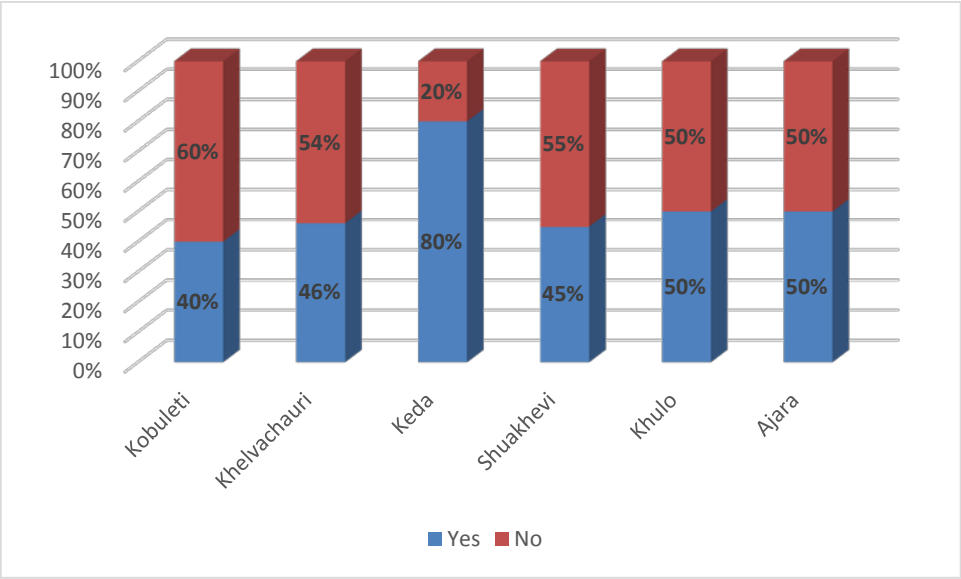


Figure 49: Interest of respondents towards the tourism

As one can see from the Figure above, the responses were divided nearly in two parts and the half of the respondents expressed their desire and interest towards tourism. Within Ajara the responses were divided into two parts. Keda municipality is an exception, where the majority of respondents give positive response to the question and expresses desire to be involved in tourism. It has to be noted that Keda is the municipality, which was distinguished with relatively high spread of tourism. Noteworthy, such high interest to tourism expressed in Keda is related to the development of tourism at certain level. Moreover, the fact that tourism is relatively well developed in target villages of Keda and respondents of these villages express the highest interest to the involvement in this area give the basis to think that experience of locals related to tourism is positive. There is also high expectation from the opportunity to be involved in the tourism area; it could be assumed that the above is based on already generated reality, knowledge and experience. As it can be observed, the target villages from other municipalities are lacking such positive experiences and accordingly there is lower interest towards the involvement in the area.

It is also interesting to analyze, in which form and type of tourism do the respondents wish to be involved. Responses of respondents across all municipalities are practically identical and mainly imply development of guest-houses and eco-tourism. In this regard, in this case, the Keda situation is again different. Responses provided by the respondents from Keda municipality were especially interesting, as they were representing the respondents with certain knowledge and positive experiences in tourism area. Like other municipalities, respondents talk about the development of eco-tourism; however, there are certain differences observed. Namely, unlike representatives of other municipalities, respondents in Keda answer that they would like to develop agro-tourism on site. There is relatively low frequency of naming guesthouses. It is understandable, as part of these respondents already have guesthouses. The high level of interest towards agro-tourism is interesting. Practically all respondents talk on the need for the development of this area of tourism. Such a frequency of naming and contents of informal conversations with respondents enable us to assume that desire to develop this area of tourism is dictated by the desire and requests of tourists. It has to be considered that these are the respondents, unlike the respondents from other municipalities, which have direct contact with tourists, and have experience and knowledge of relationship with them. Accordingly, they know better the requirements and interests of tourists. Based on the above mentioned, it could be concluded that there is quite a high potential for the development of agro-tourism in the region and actually there is market demand.

In terms of tourism development, it was important to study whether the existence of wild animals hinders or supports development of tourism. As it was discovered, tourism is relatively poorly developed in the target villages; however none of the respondents have mentioned the existence of wild animals (wild animal as the factor hindering tourism development) as the reason for the above neither during the interview nor during informal conversations.

Attacks of animals and results

Key objective of the survey was to evaluate the perception of population on the damages caused by the wild animals. How large is such damage and how serious is problem perceived by the population. Based on the view of the local population, which representatives of wild nature are causing the largest damage for them? For the above purpose, the questionnaire contained special section, aiming at getting specifically this information from the respondents.

First of all, the following question was given to respondents – does the wild animal represent big problem for them? The Figure 50 demonstrates the responses to the above question for the different municipalities.

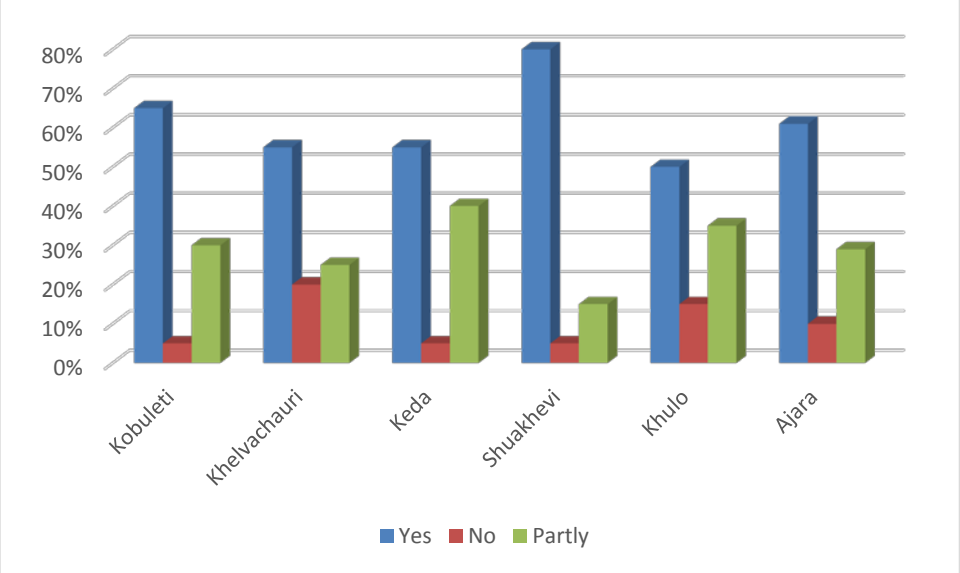


Figure 50: Wild Animals as a problem (a)

As one can see, the problem of wild animals is equally acute for practically all selected villages in discussed municipalities. The above indicator is somewhat higher in Shuakhevi municipality (80%). The responses of Khulo municipality respondents are minimal, where only 50% of respondents talk about wild animals as an important problem. However, it is worth mentioning that large part of respondents talk about wild animals representing "partial" problem. Respondents under the response "partial" imply the problem characterized with the relatively low acuteness. However, response – partial, still implied the existence of problem. If there will be added the quantities of respondents, naming wild animal as a problem, despite of the acuteness of the problem, then the Figure will have the following form - Figure 51.

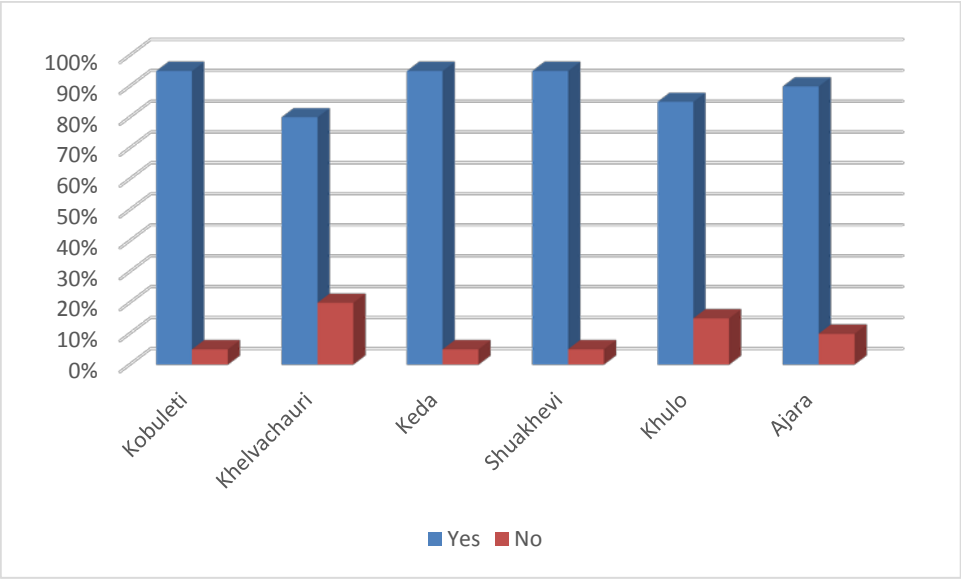


Figure 51: Wild Animals as a problem

As it is demonstrated in the Figure, in this case the absolute majority of respondents consider wild animals as the problem for their farm/ activities. Moreover, there are practically no differences in the assessment of animal as problem across the municipalities.

In relation to the seasonality of attacks, practically all respondents indicate the summer as the important period in terms of activeness of animals and their attacks. On the question – mainly in which months are there losses encountered due to the wild animals? – practically all respondents in all municipalities provide the similar response and note that such losses are mainly incurred in May-September/October period, that is practically identical to the results of the initial survey (data collection from local level stakeholders).

In order to assess, how important are the losses incurred as a result of animal attacks according to the position of population, respondents were requested to assess and compare the volume of losses incurred as a result of diseases and animal attacks. The outcomes have the following form across the municipalities - see the Figure 52.

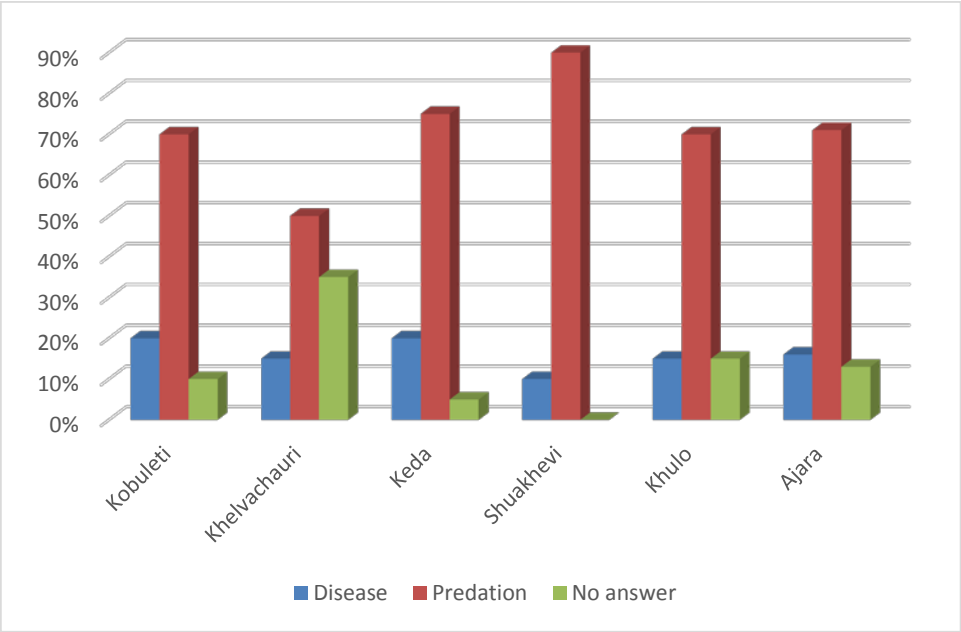


Figure 52: Assessment of damages caused by the various reasons

As one can see from the Figure, practically everywhere, the animal attacks and damages caused are considered as more important problem compared with the damages caused by the diseases.

Following the assessment of problem acuteness, respondents were requested to name the wild animals, in their view, causing the most problems. Respondents were allowed to name several wild animals. The Figure 53 reflects the responses received from respondents from the various municipalities.

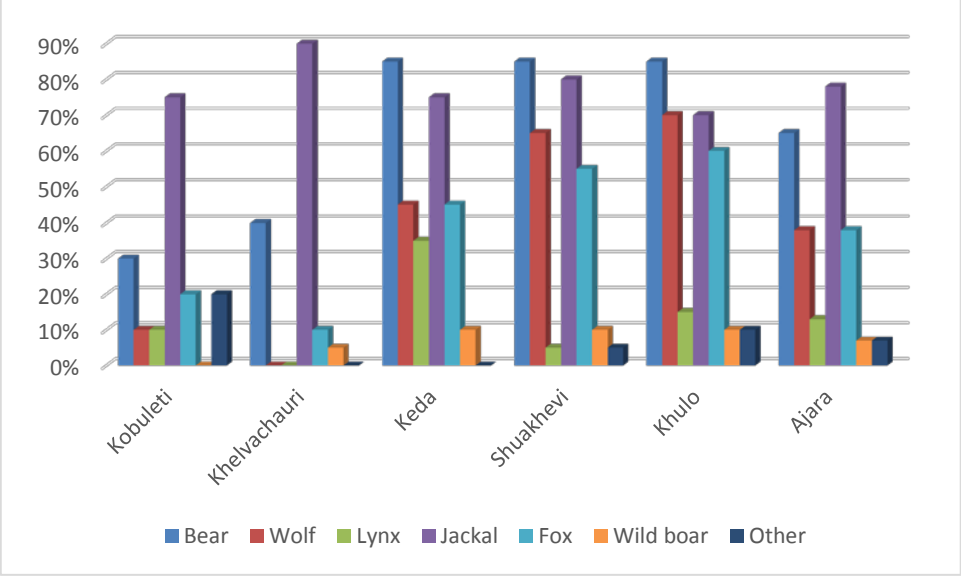


Figure 53: The most problematic wild animals

As one can see, there are certain differences between the municipalities in terms of identifying the most problematic wild animals. For example, respondents from the villages selected in Kobuleti and Khelvachauri municipalities name jackal as a problematic wild animal. In Keda, Shuakhevi and Khulo, problems related with bear, become more relevant. However, even among these respondents, jackal as a problematic animal does not lose its relevance. Based on the Figure, can be concluded that jackal represents an important

problem for the whole Ajara region. While relatively bigger wild animals – bear, wolf – are indicated as important problem more for the respondents from the selected villages in mountainous Ajara.

It was interesting to find out, how the population is assessing the problem dynamics. Accordingly, respondents were requested to assess, whether the problems related to the attacks of wild animals had become more acute during the past 5 years' period. The Figure 54 demonstrates responses provided by the population.

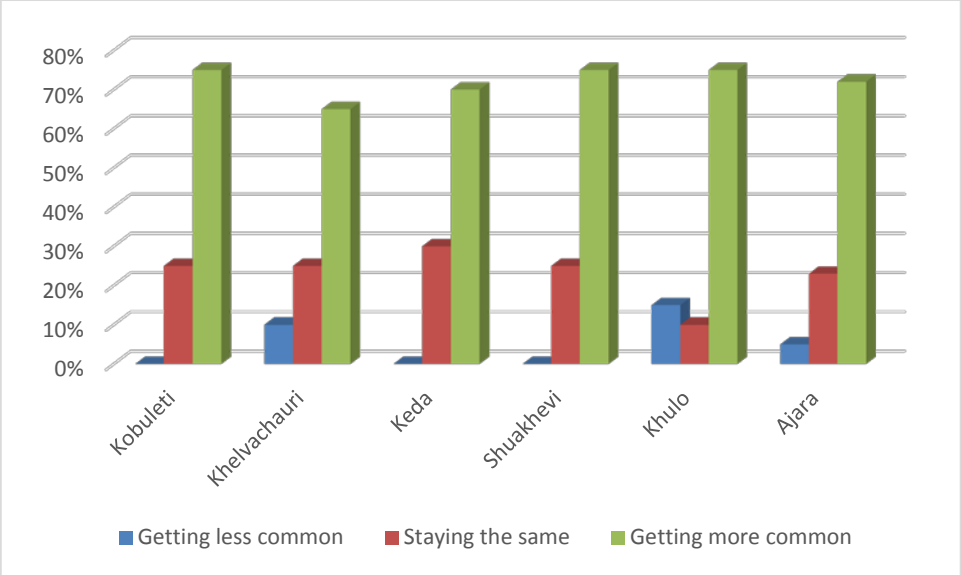


Figure 54: Problem dynamic during the past 5 years

As is it evident, vast majority of population notes that problem has become acuter for the recent years and there is practically no differences observed in terms of municipalities. According to the assessment provided by the population, the problems were worsened due to the fact that for the recent years the number of wild animals increased dramatically, which in their view was conditioned by several factors. When talking about the above factors respondents mainly name the following ones:

- Prohibition of hunting and stricter control over the illegal hunting during the recent years;
- Strict sanctions in case of illegal hunting;
- 2008 year Russia – Georgia war, during which part of the Borjomi forests was burnt. According to the view of the population, animals avoiding the fires found their shelters in the Ajara forests.
- During the recent years important changes have been occurring in the structure of Ajarian agriculture. More and more small and medium farmers have been establishing hazelnut plantations; plantations are mainly located at the outskirts of villages, over the plots adjacent to forests. Population is of the view that cultivation of hazelnuts caused attraction of wild animals, mainly bears to the villages;
- Problem concerning the chestnut drying also was mentioned that caused reduction in animals' (bear) food resource, resulting in the activation of their attacks;

The question of whether the respondents have seen any wild animals enables us to indirectly evaluate the acuteness of the problem. In this regard, it turned out that vast majority of respondents (Ajara-wide 78%) have seen jackal. Moreover, there are no differences between the municipalities. This fact could explain the result of the survey, based on which the jackal was named as the most problematic wild animal (see figure 44). In all municipalities large part of respondents mention the fact of seeing jackal him/herself in a stable manner. Moreover, the share of respondents, who have seen a bear is also high and equals to 65% Ajara-

wide. In this case, there are differences between the municipalities. In Kobuleti and Khelvachauri municipalities the share of such respondents are relatively low; as for Keda, Shuakhevi and Khulo municipalities, the share of such respondents reaches 85%.

When talking about the specific losses, incurred by the local population due to the attacks by wild animals, population identifies the following key types of damages:

- Injury to/death of domestic animals (particularly cattle);
- Loss of poultry;
- Damage to hive/loss of bees;
- Damage to corn fields;
- Damage to hazelnut plantations.

It has to be noted that respondents found it difficult to name specific number and estimate specific volume of incurred damages. It has to be also mentioned that there are practically no official records maintained for such attacks and their outcomes. However, as it was clarified at the meetings with the various bodies on the site, some institutions, including local administrations possess certain, mainly verbal information concerning such attacks. It is important to consider the nature of incurred damages in the process of quantitative evaluation of attack results. Namely, if there is some type of information concerning the damage or destruction of livestock and/ or bees, it is practically impossible to estimate the damages to the crops or hazelnut plantations incurred by the farmers. In this regard, practically there are no official estimations made and it is impossible to obtain any type of quantitative information.

Under the condition, when it is impossible to quantitatively assess incurred damages, respondents were requested to estimate what was the relationship between the losses incurred during the last one year as the result of animal attacks with the volume of similar damages incurred during the other years. Are these damages usual, higher than usual or lower than usual? Responses from different municipalities are provided in the Figure 55.

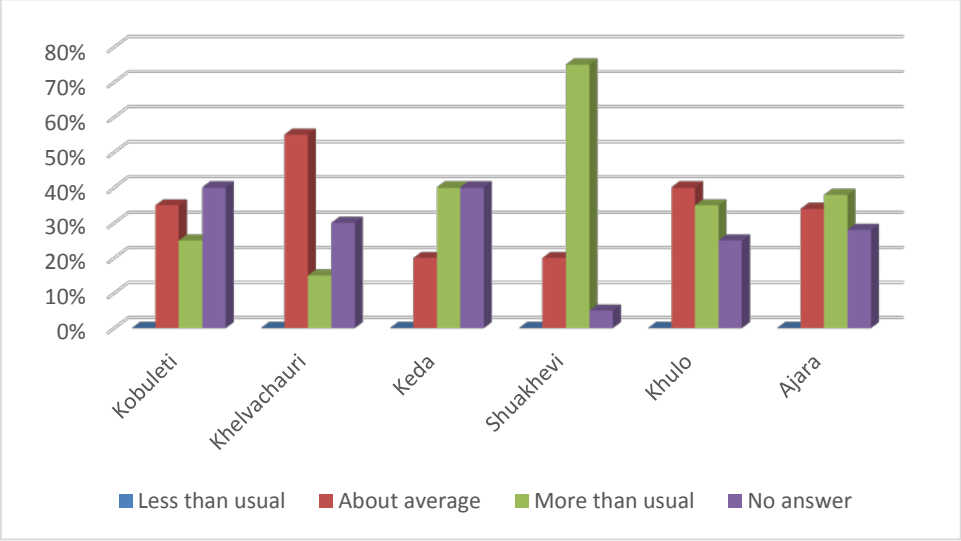


Figure 55: Estimation of damages to the farm incurred during the last one year period

One can see that majority of respondents indicate on average, usual level of damages, or talk about the increase in the volume of damages. Vast majority (75%) of respondents from Shuakhevi municipality indicate the higher than normal damages incurred during the last year. It is important that across Ajara there were no responses observed with the indication of lower than average damages incurred during the

last year. It has to be noted, that the large part of population (in total 28% of respondents) finds it difficult and/ or does not have answer to the above question.

It was interesting to find out, how the respondents were evaluating the losses to the farm budget inflicted by the wild animals. Is it very big, big, medium, small, or insignificant? Based on the responses, half of respondents indicate that incurred losses are big or very big for them. Significant part of respondents assesses incurred losses, as a medium level loss (35%). Practically, the share of respondents noting that such losses are low is at zero level (only one response). It has to be mentioned that part of respondents did not provide answer to this question (over 10%).

Reactions and preventive measures

Objective of the last, concluding section of questionnaire was to collect information on the established practices for the reaction of all stakeholders (local population, local government, representatives of relevant branches of regional and central governments) participating in the human – wild animal interface. In addition, the objective was to study the nature of preventive measures implemented by local population as well as representatives of local government for the mitigation of attack risks and mitigation/avoiding of losses.

In this regard, first of all it was necessary to find out how the information was accumulated, if at all, on the attacks of wild animals. According to the public opinion, is there any statistical data maintained and what is the role of local population in this process.

Accordingly the first question of this section of the questionnaire was attempting to find out, whether the respondents were providing information on the attacks of wild animals to the local government. Responses to this question for different municipalities are provided in the Figure 56.

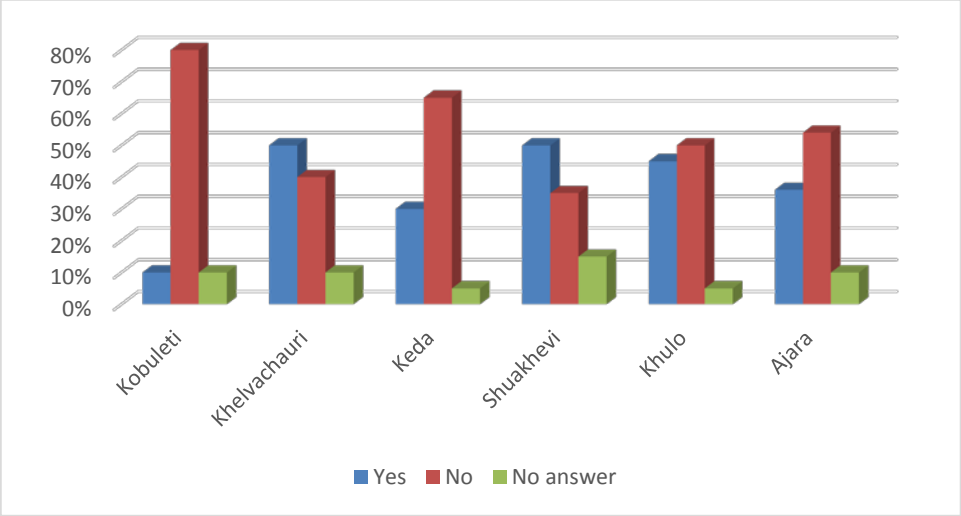


Figure 56: Provision of information to the local government

As one can see, responses vary between municipalities. For example, in Kobuleti the majority of respondents (80%) state that information is not provided. Similarly, a large proportion of respondents from Keda (65%) state the same. In Khulo the number of respondents declaring that information is not provided (50%) and the number of those declaring that such information is notified (45%) are almost equal.

There is an opposite picture observed in Khelvachauri and Shuakhevi municipalities, where the majority of respondents talks about providing information to the local government (50% - in both municipalities).

However, it has to be noted that there is quite high number of those respondents in the above municipalities, who do not talk about the information notification (40% and 35% accordingly).

Respondents providing positive response on the question related to the provision of information to the local government were requested to describe the process. It turned out that verbal or telephone notifications are common practice. In general, population notifies the mayor of his/her village, and then the mayor passes on the information to the management of municipality. Only in one municipality, Khulo, the respondents mentioned the written notifications. It must be noted that the reason stated by the respondents, explaining why the notifications were not provided, was that there was practically no hope or expectation that there would be any reaction. Majority of respondents states that they don't see the sense in providing notifications.

On the question – following the notification, what is the reaction from the local government? – Absolute majority of respondents either does not have answer or states that practically there is no response. The responses encountered the most are the following: - "there is not response", "they do not provide any response", "there was never any response" and etc. Somewhat different situation is observed in Khulo municipality, where some of the respondents noted that bullets are distributed by the municipality management; and locals use them for frightening the animals (sound of shooting, liquidation is prohibited). It was also mentioned that there are groups of hunters in Khulo, which in case of permission liquidate animals (2 respondents). Based on the above, it is evident that respondents are not able to assess the effectiveness of measures implemented by the local authorities.

Following the above, respondents were requested to talk about the measures, which, in their view, must be implemented by the government in order to reduce wild animal attacks and damages incurred by the population due to such attacks. It has to be noted that responses are practically identical in all municipalities and there are no differences. Responses of respondents can be grouped under several key issues:

- Establishment of groups of hunters. According to the majority of respondents, objective of such groups must be patrolling during the most dangerous periods of the year and frightening wild animals. If necessary, groups must liquidate the wild animals. Some of the respondents note that such groups must be granted with the preliminary permission to liquidate animals and if necessary, make such decision themselves. According to some respondents, the population must be granted with the permission to liquidate the wild animals themselves.
- Insurance system – respondents talk about the need for the activation of insurance system. In their view, there is a need for introduction of such insurance packages by insurance companies.
- Compensation of losses. Many respondents state that the losses inflicted by the wild animals must be compensated to local farmers. In general, respondents name the Government as the body responsible for the reimbursement of incurred losses.

It must be noted that there is large number of respondents, who stated that they did not know what the government should do. Moreover, some of the respondents stated that it was impossible to do something and the problem would be in place forever. Large part of respondents (30%) did not provide response on the question.

It was interesting for us to study the preventive measures applied by the population for avoiding the attacks of wild animals. Each respondent could mention several measures. Responses of respondents according the municipalities and frequency of naming various measures are provided in the Figure 57.

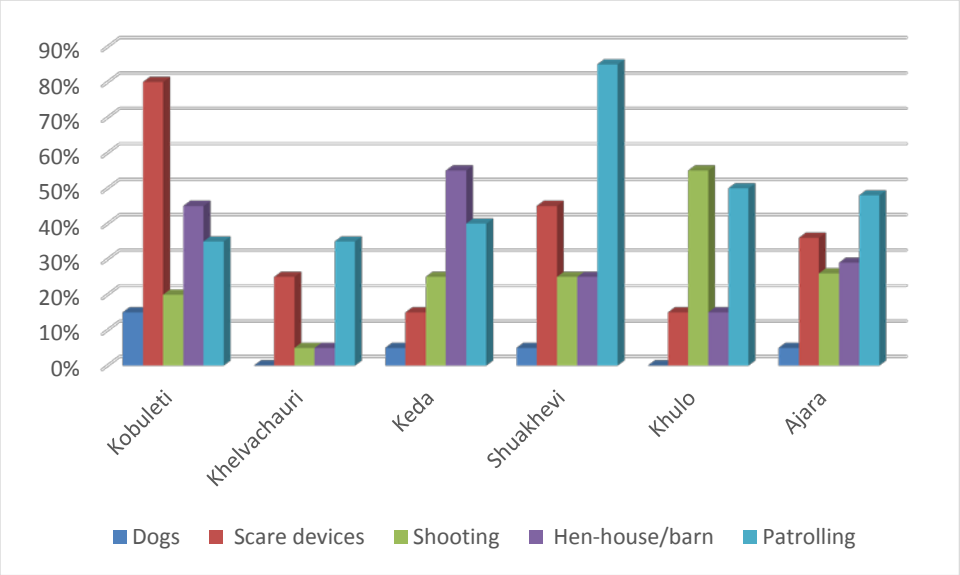


Figure 57: Measures implemented by the community members

As one can see from the Figure above, the situation is to a certain extent different between the municipalities. For example, in Kobuleti municipality respondents mainly mention the practice of using scarecrows (80%). However, during the informal discussions, population was mentioning that the above method is not effective. The above practice is also used in other municipalities, however with a lower intensity. It must be also taken into account that in Kobuleti plantations are mainly suffering the damages and not the livestock. Shepherds/patrolling, groups on duty near the fields during the period of crop maturity is a practice applied in practically all municipalities. Moreover, the noise is also used to scare the animals. It must be noted that population talks about the special devices, which cause noise at certain periods (intervals). Population mentions that this method is more or less effective.

It must be noted that unlike other mountainous regions of Georgia, where the livestock breeding is also developed, dogs are not actually used as the effective mean for the protection of farms. In relation to the use of dogs the questionnaire contained additional questions. The questions were enabling us to clarify when and where were the dogs used more frequently; which breeds of dogs were more popular, what type of practices for dog training was more popular and etc. However, it was not possible to collect the above information as respondents do not consider dogs as mean for protection from wild animals. Only small part of respondents indicated that they had dogs. All respondents mentioning that they had a dog, stated that they had only one dog. Practically none of respondents know what breed is their dog and only mixed breeds are mentioned (specifically, only one respondent in Keda mentioned that he/she had a dog of hunter breed and one respondent from Shuakhevi – Caucasian breed dog). Dog owner respondents state that they do not use any special methods for dog training. Practically none of dog owner respondents considers dogs as effective mean for the prevention of wild animal attacks. All dog owners stated that in general they vaccinate dogs. Moreover, it must be noted that on the question, whether they think that have a good dog, all owners stated that they had a good dog.

Responses on the question, how the respondents are assessing the effectiveness of implemented measures, have the following distribution according the municipalities, see Figure 58.

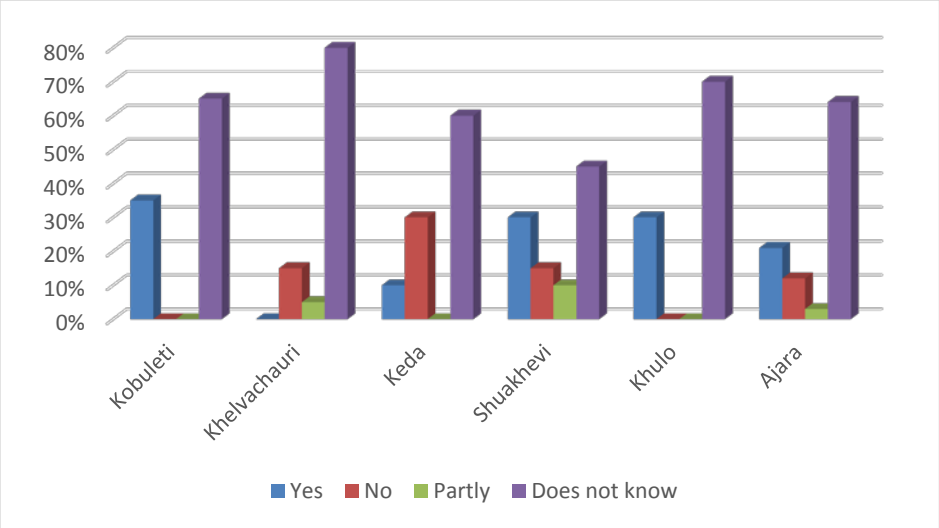


Figure 58: Is the protective measures used by you effective?

As it is demonstrated in the Figure, the vast majority of respondents do not actually know/cannot assess the effectiveness of measures carried out by them. Only the small part of respondents (15%-30% for different municipalities) state that implemented measures are effective. Again, very small part of respondents state that measures are non-effective or partially effective. The key conclusion from the Figure is that the population does not actually know how effective the implemented measures are. They just implement an action they are aware of; however, they are not able to assess the outcomes of such measures.

The question about the safety of bee-hives was raised separately. Responses are identical for all municipalities and absolute majority (over 90%) states that bee-hives are not protected/are unprotected against the attacks of wild animals.

It was interesting for us to find out the position of respondents on the following: what are their thoughts, what will happen if they do not protect/do not implement preventive/protective measures? More so, as the large part of respondents cannot assess the effectiveness of these measures. Despite the above, on the question – what will happen in the absence of preventive measures, practically all respondents (almost 100%) stated that their losses would considerably increase?

Respondents find it also difficult to name the measures to be implemented in order to reduce the negative interface between the human – wild animals. Responses to the relevant question mainly relate to the creation of hunters' groups and patrolling groups and legalization of hunting (for locals) (over 60%). Relatively small part of respondents (10%) state that it is necessary to retain natural forest eco-system/to look after the above and in this case respondents are of the view that attacks from the wild animals will be reduced naturally.

In this case, again, large part of respondents (30%) do not have answer/do not know how to resolve the discussed human-wild animal interface. Moreover, respondents assign the responsibility for the implementation of adequate measures to the government.

An absolute majority of respondents state that they, with their own forces, are not able to deal with the problem and require an external support.

7 GENERAL FINDING AND RECOMMENDATIONS

7.1 General findings

The following subchapter has been developed based on the information that has been retrieved by the project team during the project implementation. Key findings have been reached as a result of a detailed analysis of the following sources of information:

- Official information provided by state agencies;
- Reports prepared by the project team of experts (legislation, biodiversity, tourism / agro-tourism);
- Surveys of target community population and stakeholders;
- Workshops:
    - With the participation of heads of local municipalities;
    - Meetings with municipal disaster risk reduction working groups (DRR WGs) formed with the facilitation of ALCP;
    - Meeting at Ajara division of the Environmental Supervision Department;
    - Meetings with target community representatives.

The below findings related to the Human Wildlife Interface in Ajara have been based on the analysis of the information obtained from the sources listed above.

Key findings are grouped in the following main topics:

- Exchange / dissemination of information about human-wild animal interface
- Human -Wild Animal Interface Profile
- Attitudes towards and awareness of wildlife
- Notification about animals attacks
- Responses to the animal attacks
- Preventative measures

Exchange / dissemination of information about attacks

Studies have shown that no information about human-wildlife interface is gathered by any specific agency and accordingly there are no statistical records about such attacks and damages. Usually the information is accumulated on several department levels, though there is no communication between them. There are no mechanisms to ensure the exchange of information between these levels. By the established practice information is gathered at following levels:

- Local authorities. Usually, most of the information of animal attack has been gathered at local level. Affected farmers inform their village mayor and the latter reports the municipal authorities. These notifications are usually made in oral form. In most cases, except for rare cases, when attacks are intensified, the local municipality is the last instance, which does not notify any other agencies. Established practice primarily involves verbal or phone notifications. People usually notify village mayor who informs the municipality.
- Environmental Supervision Department of the MENRP. Here, the information comes from the local authorities. Besides, hotline is operating, but as a local representative declared, since its establishment (2014), not a single call has been received from local residents about the animal attack.
- The local branch of the National Food Agency (NFA), which gathers information on animal diseases, including the diseases caused by wild animals.

- Agency of Protected Areas and in particular, Administration of Protected Areas collects the independent statistics as a part of the management monitoring process.

The situation has changed over the last couple of months, when DRR Working Groups were formed with the facilitation of the ALCP. One of the functions of the DRR WG is to monitor the influence of wildlife on living and working environment and to coordinate with all national and local institutions responsible for disaster risk management with respect to *inter alia* human-wild animal interface issues. DRR WG will allow creation of unified database and recording system to register attacks on cattle and people, damages, time, location etc. It is worth noting that despite the short period of operating, DRR WGs managed to collect certain amount of information revealing full strength of the problem. The most valuable information about the animal attack has been accumulated by DRR WGs.

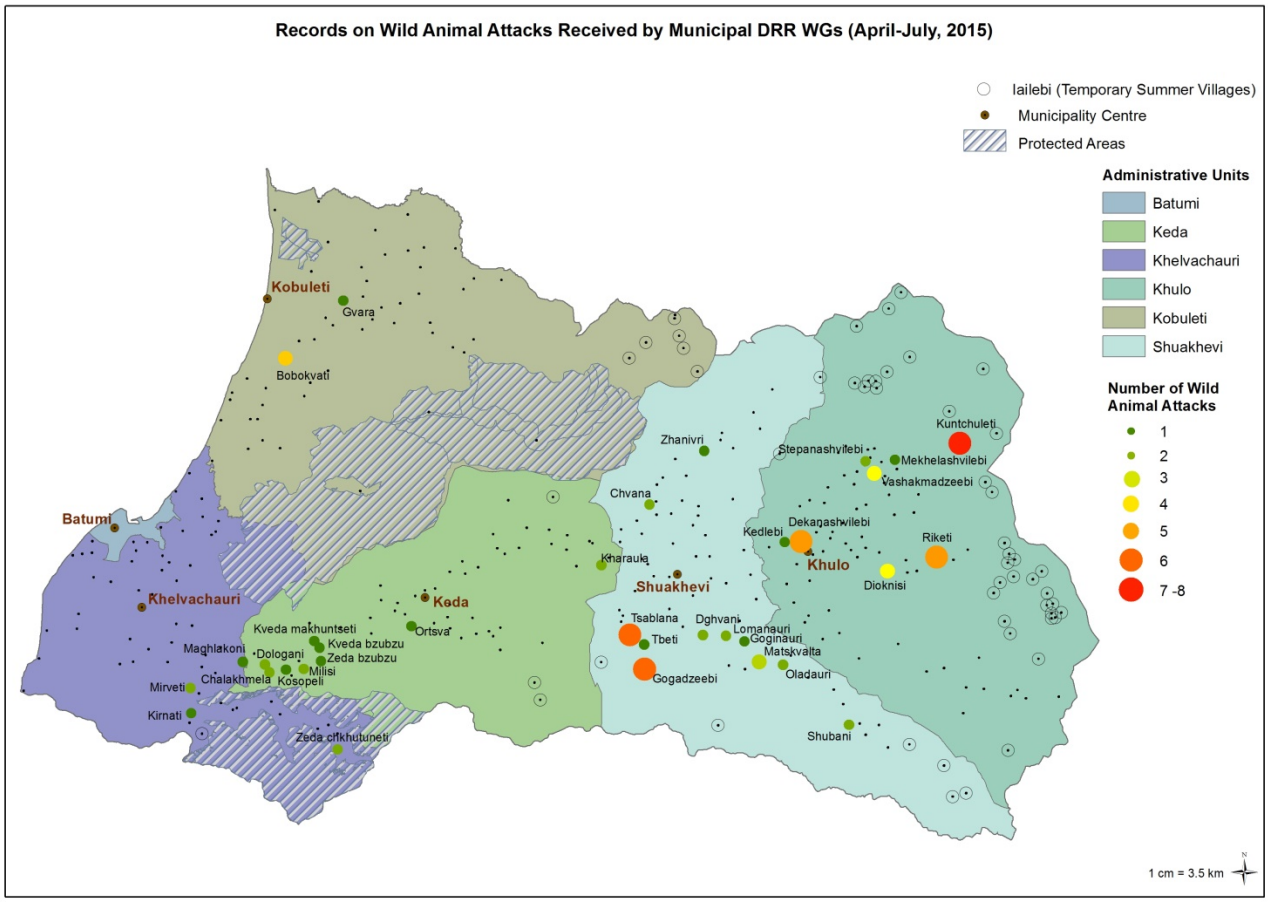
Human–Wild Animal Interface Profile

The study related to humans vs. wildlife has revealed the following issues:

- Human-wild animal interface is one of the urgent and acute problems the population is facing in Ajara[17]. It have to be noted that only within **April-July, 2015 the 276 case of wild animal attacks** was recorded by the DRR WGs (see Map 4). The problem is particularly acute for families with small farms (2-3 cows, a small plot), who are under the threat to loss the largest part of their economy (**livelihood**) in case of wild animal attacks.

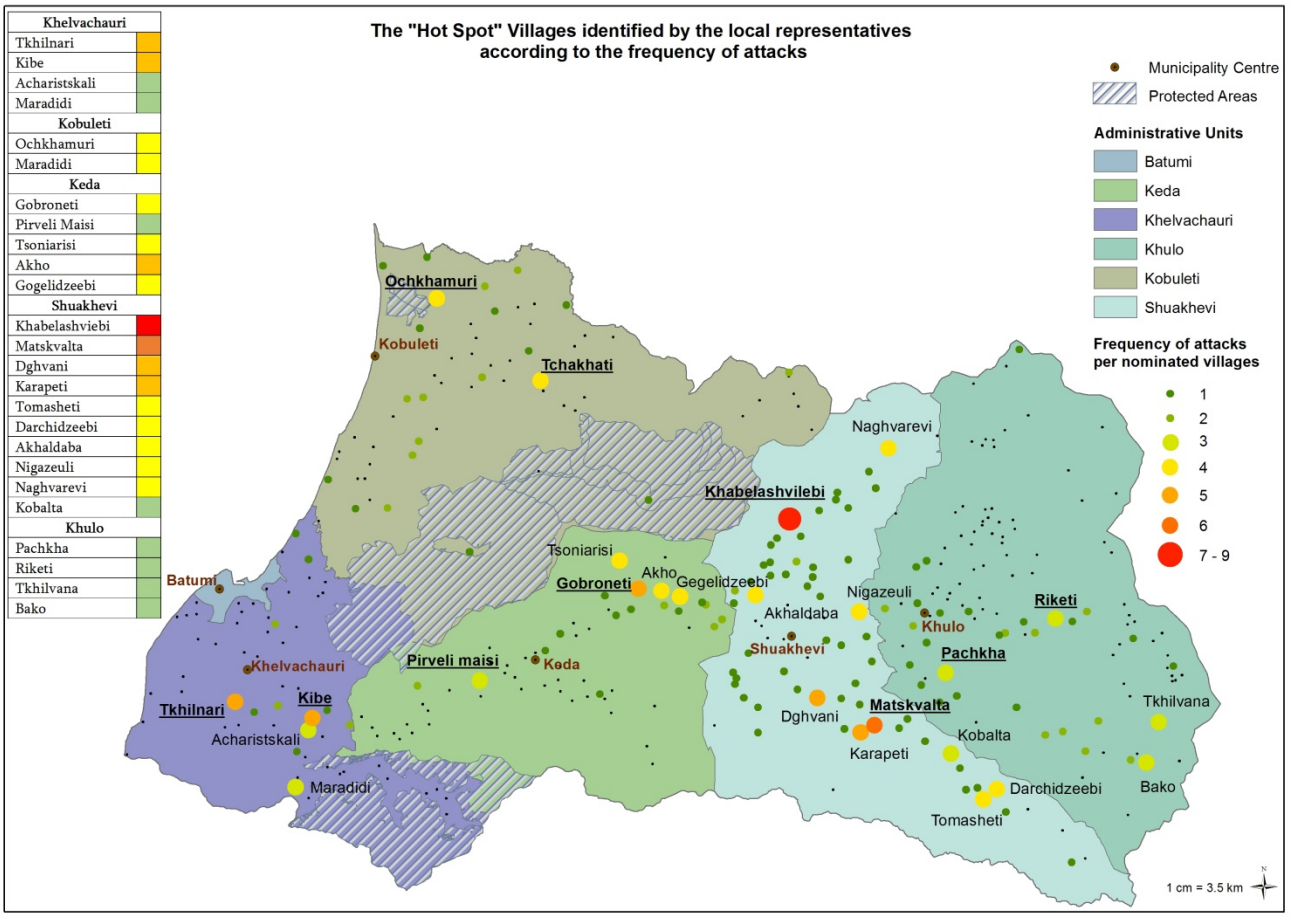
[17] http://ajaratv.ge/ge/news/society/nebartva-mtatseblis-likvidatsiaze/102783; http://www.tv25.ge/?page=news&news_id=16769" \l ".VgkRNZc73YF" \t "_blank" http://www.myvideo.ge/tv/adjara&seekTime=24-09-2015%2018:27

Map 4: Number of wild animal attacks recorded by the municipal DRR WGs (July-April, 2015)



- Wild animals posing a threat to local farmers are **bear, wolf, jackal** and to a lesser extent fox that was confirmed by both a preliminary and detailed surveys conducted in selected villages. Bears and wolves are especially problematic for the mountainous municipalities of Ajara (mostly Keda, Shuakhevi and Khulo), while Jackal for the entire region regardless the geography of a specific area (see the "**hot spot" villages** identified based on the interviews with local stakeholders on the map 5).

***Map 5: The "hot spot" villages identified by the local representatives according to the frequency of attacks*[18]**



- Damage caused by wildlife:
  - Bear can cause serious harm to both livestock and crop farming, affecting cattle, cereal crops and hazelnut orchards, as well as apiaries
  - wolf damages the cattle farmers
  - Jackal mostly affects poultry. However, as reported by respondents, it is also dangerous for cultivated plants and livestock
  - Fox attacks are mostly dangerous for poultry
- Large wild animals (bears, wolves) attacks intensify mostly in **summer and autumn**, when the cattle are taken to the summer pastures. However, there are many cases of attacks on cattle within the villages too. Jackal and fox attacks are not of seasonal nature and are equally expected during the whole year.
- The population pointed out that the problem related to wild animal attack has considerably escalated over the past few years. Such an escalation is probably caused by multiple circumstances and implies the convergence of several major factors. It should be mentioned that due to the lack of reliable and accurate statistics about animal attacks, it is impossible to describe the dynamics of attacks. In this case, project implementation teams mainly rely on subjective perception and evaluation of problems by local people (both residents and the government).
  The main factors causing the growth of attacks include:

[18] Note: The "Hot Spot" villages were identified in April, 2015 based on the interviews with local stakeholders. The statistical information on wild animal attacks available at Municipal DRR WGs are not included in the map as DRR WGs started maintaining statistics on Human-Wild Animal Interface since April 2015.

- significant increase in the number of wild animals due to several reasons:
  - Restriction on hunting in recent years; substantial tightening of the control over illegal hunting and severe sanctions in case of illegal hunting;
  - The respondents (at all levels) often cited 2008 Russian-Georgian war as one of the main reasons for this. In particular, as a result of ecocide committed by the Russian armed forces, Borjomi forests were partly burnt. Wild animals fleeing fires found shelter in neighboring Ajara that contributed to growth of their population there. However, the expert opinion on this matter is as follows: Generally, forest fires together with other natural disasters is one of the very important precondition for animals migration, but in 2008 Russia - Georgia war, the fire damaged 1,000 hectares (10 km²) of the forest, mostly in the town-Tsaghveri - this area is quite small and very small number of animals are inhabited there. It should be noted that, from the north-east and north-west this area borders Nedzvi Managed Reserve, where the regime and monitoring of protected areas is ongoing and after the fire the significant increase in number of inhabited animals in this area have not been reported. Also, this territory is separated from Ajara region with Borjomi-Kharagauli National Park, which is 85 hectares (850 km²), and Akhaltsikhe and Adigeni Forest districts. Accordingly, it would be practically impossible to consider that animals escaped from fire sheltered in Ajara forests. So the point of views expressed by the local population can be also attributed to a lack of environmental information.
- During the workshops, it was noted that logging and related activities that was a nuisance for the animals (noise, vehicle movement, etc.) and they were avoiding the surrounding villages in the respondents' opinion, have dramatically reduced over recent years. Currently, because of tightened administration, such activities are almost stopped as well as the factors causing nuisance for animals. Therefore, they have moved into the surrounding villages;
- During the workshops, problem concerning the chestnut dying also was mentioned that caused reduction in animals' (bear) food resource, resulting in the activation of their attacks;
- Changes in recent-years in the agricultural sector in Ajara. In particular, a growing number of small and medium farmers are planting nut plantations replacing other, prevalent plants. The plantations are mostly cultivated on the land adjacent to forests, in the rural outskirts. According to population, hazelnut orchard has led to attraction of wild animals mainly bear to the villages. It should be noted, that there have not been conducted any kind of surveys connected to correlation between growing number of wild animals and nut farms. However, based on the initial estimates it can be stated that the increase of nut farms may not cause an increase of number of wild animals (specifically bear), but cause the increase of their concentration at farms vicinity. This increase is more visible during nut maturing period - the end of August to September.
- It should be noted, that according to local respondents' interviews the number of wild animal attacks was less in historical past and the main reason they refer to is qualitatively different composition of the cattle farms in the past. In particular, they have named buffalo as the one of the important animals at the livestock farms in the past. As, usually, wild animals avid to attack buffaloes. Respondents said that wild animal attack on the buffaloes is mostly unsuccessful, because buffalo with their sharp horns and the way they are organized, easily avoid their attack and usually as a result the wild animals are defeated.

- While discussing the reasons of wild animal attacks, it is important to note the practice of local livestock farming. In particular, as it turned out, population does not practice shepherding within villages. It refers to the farmers, who do not take the cattle to the summer pastures, spend the summer in the villages and take their cattle to pasture every morning. In such cases, livestock is just

let out in the vicinity of villages, near the forest and in the forests, in most cases without any supervision. Such circumstances are likely to greatly increase the probability of wild animal attacks.

Attitude and knowledge of wildlife

The attitude of respondents towards animals is very negative; this situation is particularly noticeable in the cases of bear, wolf, and jackal. It should be noted that the Municipality of Shuakhevi is distinguished by high level of positive attitudes toward animals compared to other municipalities.

The population partly correctly describes representatives of wildlife habitat of Ajara and Georgia and their way of life. However, despite this, lack of knowledge is still important, especially about wildlife habitat values. It is worth noting that, during the research, there were not any differences between the answers of different groups about attitude towards animals –according to gender, age, education, social or economic situation.

Information Notification on Wild Animal Attack

The absolute majority of respondents state that cases of wild animals attack is not actually officially notified to any Offices in written form. The Respondents, who talk about notification, they basically mean a verbal message or phone messages. Established practice is as follows -population usually notifies mayor of their village, who transmits the information to the management of Municipality. Written notification was reported only in Khulo Municipality.

The main reason the respondents explain about failure to notify, is that practically there is no hope or expectation of response. The majority of respondents note that they cannot see the sense of notification.

Neither the population nor Municipality Authority knows or has information about the environment and natural resources protection hotline "153", as the tool of notification.

Respond to Wild Animal Attack

Current legislation recognizes several mechanisms of response in case of wild animal attack.

- Removal of wild animal from the environment may be implemented immediately at the moment of attack and this does not require the prior consent of the MoENRP.
- In cases when there is not attack, but the problem is important, concerned municipality may apply to the MoENRP about the necessity of the implementation of regulatory measures. In order to carry out regulatory measures, the Ministry, if necessary, shall send an expert or group of experts on the site. After review the municipality application and/or expert or group of experts report, the Ministry prepares draft agreement to be executed between the Ministry and Municipality and agree it with the Municipality. Based on the Ministry's application, under article 17 of the organic Law of Georgia on "Local Self-Government Code", the government of Georgia takes decision on Delegation of authority between the Ministry and Municipality. After delegation of the right, implementation of regulatory measures is monitored by Environmental Supervision Department, which shall draw up a protocol on the results of the implementation of the regulation. As a result of implementation of regulatory measures, the wild animal removed from the environment shall be slaughtered.
- Since 2014, for the purpose of receiving information of environmental issues including wild animals attack, the 24-hour telephone service operates - Hotline 153 for which Department of Environmental Supervision carries out response. It is worth noting that in case of calling 112 (Emergency and Operative Response Center), the operator redirects animal attack case to 153.
- According to the local (Ajara division) Department of Environmental Supervision, in the case a call is received, protocol is drawn up at Supervision Service and they contact the Department of

Biodiversity Protection under MoENRP, then appropriate experts go to the place from Tbilisi and corresponding reports are developed about removal of animal (quantity), afterwards the Ministry issues delegation permit to the municipality. It is worth to note the possibility, in case of direct calling 153, resident/farmer can provide information directly to the authority bypassing local government, which is responsible for responding to such facts.

These legal mechanisms are known more or less to local authority officials. However, they point out, that response to the case requires so much time (an average of 3 months according to municipality), developing of these mechanisms are meaningless.

The absolute majority of the population cannot speak about any practical response. They usually say that there are no responses. The fact, that the population does not have adequate information about the current mechanisms, is also evidenced that not a single notification from the local population was reported at Department of Environmental Supervision hotline during their operation (since 2014).

It should be noted that during the research process, a call was made to the hot line -153 by the project team, information was transmitted that there was a very acute problem of wild animal attack in certain village. After general explaining the situation, operator redirected team members the local government and advised to apply to the local government in writing, which would contact the local Department of Environmental Supervision for further response in writing. As a result of the experiment, in terms of wild animal attack, all the advantages of hotline were practically nullified. Geographic area and frequency of attacks was not reported in details. The information on attacks was not written and was not sent to the relevant body. The only thing that was received was the advice on using mechanisms via local authorities. Correspondingly, the advantage that resident/farmer can directly and efficiently send information on the issues to responsible institution, could not be implemented.

Preventive Measures

The major part of respondents note, that they do not have any information on the type of preventive measures or preventive measures are not carried out.

In the case of any type of prevention, mainly following is noted:

- In Khulo municipality, "program for homeless and stray animals" operates, which provides for the purchase of hunting cartridges for preventive measures - in order to frighten wild animals by shooting. "Hunting groups" set up for this purpose, carry out appropriate measures (frighten). Currently, the program for ammunition procurement financed by the Ministry of Infrastructure and Regional Development is underway.
- It is worth noting that the population tries to carry out preventive and risk reduction measures independently, though their efficiency is unknown to community members. Such measures are:
    - Shepherd practice: Shepherds are hired seasonally, or the population itself shepherd cattle on shift basis; this practice is mainly established at summer pasture;
    - Patrolling. This practice has established in recent years and is mainly associated with nut plantations. During nut maturity before harvesting (from 3 weeks to 1 month), Population patrols (in some cases on shift basis) in order to avoid bear attack;
    - Fencing of shelters for animals and poultry and location at such places, where it is difficult to be approached by wild animals;
    - Make/installation of scare devices;
    - Fencing of the plot with road ribbon (of phosphorous) which has positive effect. However, it was noted that wild animals are get used to these marks in similar tools and are no longer afraid.

- Noise. Some of the respondents talk about simple preventive measures carried out by the local population. Most notably of which are - noise (shouting, whistling), fire. Regarding the noise it was noted that Turkish gas powered canon equipment are spread recently, which works with gas. Equipment periodically cause the noise, making the shot imitation (determination of periodicity is set by the user) and frighten the animals. The population who were talking about these equipment claiming they are quite effective.

When speaking abour risk reduction measures it should be noted that Livestock Guarding Dogs (LGDs) are practically un-used in the region. From this point of view, Ajara is very different from other mountainous regions of Georgia. As it is turned out, there is almost no tradition of using LGDs in order to avoid wild animal attack. With regards to it, respondents noted that their dogs wouldn't be able to resist animals (though the main function of dogs is not resistance but notification of attack to the owner). The reason is also that valuable breed of dogs which are used in other regions of Georgia is expensive and their keeping shall be more expensive than the benefits of them. Almost none of the respondent owners of dogs do not consider it an effective way of wild animal attack prevention. Therefore, special trainings, variety of selection and etc are not carried out for dogs.

It should be noted regarding risk reduction practice that there is no operational insurance system. Most of the respondents expressed their concern and pointed out the insurance as risk reduction mechanism.

7.2 Recommendations

The list of recommendations were developed based on the main findings of the research and which, in project implementation team's opinion, would help mitigate human-wildlife animal interface and minimize the harm caused by the wild animals.

The first thing to note is that research of public opinion and knowledge, i.e. "Human dimensions" and the impact on it is a most important element of conservation management (Sillero-Zubiri, et al., 2006; Bath, 2009; Musiani, et al., 2009). It is widely recognized that wildlife conservation and management is not so much related to management of animal populations (however, it by no mean does not exclude them), as far as the management of people who have contact with them. Wolves and bears can live together with humans, if the latter wish to share landscape with them, to realize the loss of livestock or crop losses compassionately and to understand potential and real risks related to them and their property safety. Therefore, for successful conservation of large wild animals, whether it is a protected area or wild conditions, it is necessary to accept wildlife (Sillero-Zubiri, et al., 2006).

7.2.1 Prevention strategy

7.2.1.1 Artificial and natural barriers (physical and biological)

Barriers are fairly common way to protect livestock or crops from wild animals. Humans used barriers, fencing of cereals and fruit gardens, fencing of livestock pasture or housing from the ancient times. Many ways are used for barriers arrangement: Tree branches, stones, wire grid and etc.

In Eastern Europe and Russia, "fladry" (see picture 7) or "turbo-fladry" is used in order to protect livestock from wolves. Fladry is of a simple construction consisting of line of rope mounted along the top of a fence, 0.5 meter distance between the flags. In contrast to the above mentioned, instead of rope, there is an electro wire's component included in turbo-fladry. Researches has shown that wolves are afraid of swinging flags mounted along the rope and do not cross those barriers, domestic livestock are still protected by similar barriers (Musiani, et al., 2003). Arrangement of such barriers is easy at livestock housing but it is difficult to use at pastures. It should be noted that bear is not afraid of the barrier. Also, domestic livestock

is not afraid of this barrier and easily leaves it. Flag barriers are generally used in combination with other barriers.

Picture 7: Fladry

Electric fencing is considered as the most sophisticated and efficient means, it operates well for both small and large wild animals, e.g. such as the brown bear, wolf and as well as domestic livestock avoids contact with, which is also one of the important factors. Electric fencing is used for protection of housing (gathering) of livestock as well as at pastures, for confinement of large area of pasture. Electric fencing is also efficiently used for beehives and (see the picture 8) agricultural land protection (Kenya wildlife service, 1996). Positive feature of Electric fencing is its long-term exploitation possibility. The negative feature is the cost of primary installation, which can be considered cost-effective during its long-term and simple operation conditions. It should be noted that the price of equipment necessary for electric fencing is getting cheaper yearly (Hoare, 1992). The type and design of electric fence will vary depending on the wild animal the tool has to be applied to.

Picture 8: Solar powered electric fence protecting hives from wild animals

It is important to introduce and establish agricultural management system, which shall reduce wild animal contact with livestock and agricultural land (night lights, solar-powered electric fencing, scarecalls (picture 9) and etc.).

Picture 9: The ScareCall, a fully programmable light and sound device that can be suspended on a fence or tree in a pasture to prevent the advance and intrusion of wary carnivores. The device can use randomly activating lights and repellent sound effects.

It is worth noting noise systems, which the local population talks about as an effective system against wild animals attack. It is possible to study and test this system efficiency. In case of its positive assessment specialized programs of system introduction may be implemented providing connection with system producers, their import to the country. It is also possible to implement specialized state programs allowing farmers to purchase these systems at favorable terms and / or payment in installment.

7.2.1.2 Guarding

The herds on the pastures under the immediate supervision of the shepherd are an active means of their protection from the wild animals, especially when the shepherd is lightly armed (Patterson, et al., 2004). For this method of shepherding, it is possible to accrue more shepherds and they work in shifts. While guarding, dogs can be used. This is a good strategy and decreases the risk of being attacked by the animals. However, there are the cases when dogs are inefficient against attacks, especially from wolves (Musiani, et al., 2013). In the target villages of Ajara region, most of the dogs are of mixed breed and none of those had taken the special training programs. For guarding, it's highly preferable the dogs to be of a special guarding breed, for example, Caucasian or Georgian shepherd breeds, and surely they should be appropriately trained.

According to the research, the population of Ajara rarely uses dogs. What is more important, they do not even consider dogs as an efficient means for protection and risk reduction against wild animals. Accordingly, in this direction it would be more appropriate to raise people's awareness and offer a program course, which provides better information related to canine guard efficiency. The established practices for local farmers may also be effective for other mountainous regions of Georgia (Tusheti, Pshav-Khevsureti), in order for them to demonstrate the clear advantages of the use of dogs. This will also help to overcome the barriers, which is connected with local's image concerning the high cost/complexity of the good breed watchdog keeping. Whereas, the farmer, living in the mountainous east part of Georgia and his income, substantially less differs from the revenue of the Adjarian farmer, accordingly, whatever is effective the east Georgia, is likely to be effective in Ajara.

7.2.1.3 Cattle farm species Improvement

In this case, recommendation is to introduce the species of the new animals in the cattle farms, which wild animals usually avoid to attack. One of such kind of animal is buffalo, which was historically widespread in the Ajara region. Besides, their existence in the composition of cattle farms will be supportive for the sustainability of these farms, against possible attacks of wild animals. Buffalo is animal with heavy weight, thick skins and aggressive character, and that is why wild animals avoid attacking buffalo.

It should be noted, that in the last 20 years there was no evidence of wild animals (bears, wolves) attacking buffaloes in Georgia. Keeping buffaloes in the cattle farms in Ajara is easily possible because of the

natural conditions in the region. In addition, it should be noted, that keeping buffalo from the economic point of view is profitable. In particular, from buffalo milk the finest quality of yogurt, butter, cheese, Sulguni, cottage cheese and other milk products are produced, which with their characteristics of taste and price are usually better than the same product produced by milk of cow. However, meat of the adult buffalo cannot be compared to beef, because of its relatively rough-fiber structure and accordingly the degree of the quality is lower. But indicator of the quality of the buffalo calf meat, which is bred under normal conditions, is higher compared to the beef. In terms of efficiency - buffalo can digest 10-15% more gross fibre and is the best work force for the household.

7.2.2 Mitigation Strategy

7.2.2.1 Compensation system

Wild animal attacks cause have a significant economic impact on humans and a compensation system could mitigate damages, because the people would be fully or partially reimbursed for their losses. In order to introduce a compensation system it would be possible to seek funds from natural resources use licenses and fees (Hunting, firewood and etc.), by incomes from protected areas or support from donors. In this regard, it should be noted that the existence of large wild animals itself is a subject of interest for the development of ecotourism (travel in the areas, where wild animals live, observation of animals or their living environment, etc.). In such case, the existence of large wild animals can be considered as ecosystem services (cultural services - ecotourism, recreation). Therefore a tax system could be introduced in the future - Payment for Ecosystem Services (PES), through which, a portion of the accumulated funds would be directed for compensations to local population. In case this type of tourism is developed, the local population to some extent will act as service provider (they will not kill wild animals, they will take care of them and promote proper service delivery). Accordingly, it is logical to design the proper compensation schemes for population - as a service provider. In such case, willingness of population to coexist with wildlife and acceptance of the potential losses is expected to increase and the local population's attitudes towards wild animals improve.

However, despite the fact that the population actively speaks about the compensation solutions, these mechanisms should be used with caution. They should be used only as a complement to other measures. In our opinion, compensation mechanisms cannot be enacted in form of separate and/or only one mechanism.

7.2.2.2 Harvest and Livestock insurance

Harvest and livestock insurance could be an effective and innovative way for mitigation of wild animal attacks, however in Georgia, this type of insurance is still experimental, is not well organized and the population do not have full information on it. This type of insurance insures harvest or livestock from wild animal attack. The government, municipality may be involved in such insurance system which shall reduce insurance fees payable by farmer.

7.2.3 Governance and Information

7.2.3.1 Quantifying Threat Through Data Management and Analysis

Quantifying threat through data management and analysis is very important as analyzing data will highlight patterns in the attacks showing where key areas are and what the key times of year are, which can feed into a mitigation strategy and help reduce fear and a sense of helplessness among the population by reducing the threat to its proper size.

7.2.3.2 Conservation education for the local population

Educational activities at different levels, for example in schools, farms, in various social and economic groups, the purpose of which shall be dissemination of information on modern knowledge, innovative technologies about Human – Wildlife Interface should be carried out. This would include strengthening local capabilities for mitigation and increasing public awareness related to Human – Wild Animal Interface and its benefits for potential sources of income.

Providing information to the representatives of local community on practical methods of mitigation and know how, would support the growth of their resistance against wild animal and increase the protection of farms. These approaches would condition change of behavior in humans over the time and would promote risk reduction, improvement of local living conditions and reduction of vulnerability to attacks. Education and training would support the growth of conservationist attitudes, raise awareness for ecosystem functioning about the most important role of wildlife and its ethical and economic values.

7.2.3.3 Development of systems for determination/detection of Human – Wild Animal Interface Hot Spots data retrieval and impact assessment.

This measure means:

- Development of wild animals monitoring system and implementation (active use of camera traps is possible);
- Development and implementation of measures for improvement food base of wild animals in wildlife (for example: programs of wild ungulates breeding, protection of wildly growing fruit-bearing plants and restoration and etc.);
- Introduction and setting up of continuous situation monitoring system.

7.2.4 Institutional mechanisms

7.2.4.1 Response team of wild animal attack

It is desirable to set up a group of trained people for quick response to wild-animal attack. The group should be composed of representatives of environmental protection (protected area ranger, forest ranger or a representative of the Environmental Supervision Department), a representative of the municipality, a representative of the Ministry of Agriculture and several people from the community.

The local population should have the opportunity to provide information on the attacks directly to the group. The group shall quickly and effectively respond to the problems, which shall increase the population's confidence towards the Ministry of Environment and Natural Resources Protection. The group shall make professional description of the case, deployment of data in the database, identification of problematic animal, obtaining required permit for removal of problematic animal if necessary and removal of the problematic animal from the environment

Municipal DRR Working Groups facilitated by the ALCP

The existence of disaster risk reduction groups established with the facilitation of ALCP is a step forward. These groups could take on a big part of the described functions.

The functions for the groups were defined based on legislation of the Self-government Code and Environment and Natural Resources Management of Georgia. Currently the groups are engaged in collecting and recording data on the attacks. In order to achieve planned goals, the groups could also liaise with all national and local government institutions responsible for disaster risk management. It would be desirable if these groups have a directive document (guidelines) and specific instructions on how to act in the situation (Standard Operation Procedures) of attack. It is worth noting that the necessity of creating such guidelines was expressed by the members of the group during the working meetings held with them.

Coordination with other initiatives in Georgia working in a similar field would also be positive. Currently, there are several non-governmental organizations actively working in this direction in Ajara, including the Black Sea Eco Academy and the Association Borjghali. Also, there is a similar experience in Dedoplistskaro municipality in the region of Kakheti, where disaster response groups (FFI/NACRES) were founded on the basis of local non-governmental organizations. As it is known, data collection software, within the frameworks of "The Georgian Carnivore Conservation Project (GCCP)", is created for working groups set up in Dedoplistskaro, which may be synchronized and introduced to the municipalities of Ajara Autonomous Republic. This step shall be a good example of creating data collection and processing program existing in Georgia, which may eventually be implemented in all regions. The DRRWG's could also be trained to study modern and advanced experiences, technologies, mechanisms related to human-wild animal interface and to test in target area, in case of testing positive results implementation of special programs in order to ensure their introduction.

7.2.4.2 Removal of wild animal from the nature

In urgent cases where removal is deemed necessary there should be an improvement of the permit system for removal of wild animal from nature with exact written instructions, as well as an increase the powers of local authorities in this regard.

7.2.4.3 Strengthening the existing mechanisms

Existing mechanisms, as it has been shown, mainly mean communication with the Ministry of Environment and Natural Resources Protection via the Environmental Supervision Department after a field trip and investigation by a special Ministry group followed by delegation of powers to municipality in terms of removal of animals. The Hotline – 153 was set up for greater efficiency of this service.

During the research, a simple experiment conducted by the project team confirmed that in spite of existence of this mechanism, i.e. they called it; it is ineffective. It is also noteworthy that in most cases even municipality officials do not know exact procedures and existing mechanisms in terms of human-wild animal interface management.

Based on the above mentioned, it is important:

- Provision of information to all stakeholders (population, local government) and training on existing mechanisms and possibilities to use.
- Certain trainings for operators of hotline – 153, on how to manage information received about wild animals attack.

Moreover, on the basis of municipal DRR Working Groups and with their participation, a certain work platform could be developed (inter-agency platform, group, commission, etc.), in which all stakeholders / institutions will be involved. Meetings of such a platform could be convened at certain intervals to discuss the current situation, analyze the human-wild animal interface (in this regard, there has been formed a good foundation of data already obtained by the DRRWGs, which will help the participants to understand the magnitude of the problem) and to prepare relevant recommendations based on the analysis for improvement of existing legal mechanisms. Improvement of mechanisms may be linked with the change of existed regulatory framework. This better informed interagency platform better aware of the actual scope and nature of the problem could result in initiation of proper and result-oriented reforms.

Summary of Recommendations

Based on the above mentioned, the summary of the recommendations are presented in the Table 4.

Table 4: Summary of the recommendations

Strategy	specific recommendation	Stakeholder Responsible	Key issues
Prevention	Artificial Barriers (physical and natural) - (barrier with Flags, "electric shepherd", etc.)–	• Local communities • local government (municipal)	• Installation of barrier with Flags is relatively difficult on pastures. This type of barrier is good for wolves, though less effective against bear. • When introducing "electric fencing" it is important to take account specific environmental conditions and animal species • It is recommended to use combination of various barriers • It is recommended to test new systems (E.g. Noise systems), and in case of successful tests, to implement the programs of their introduction
	(Guarding)	• Local communities • local government (municipal)	• introduction of shepherd practice • raise public awareness of the dog, as an effective means of reducing the attack
	species changes in cattle farms	• Local communities • local government (municipal)	• It is recommended to introduce in cattle farms the animals, on which wild animals usually avoid to attack (e.g., buffalo). • Special programs aiming at selection of such animals and study of their effectiveness in local conditions • Educational campaigns and raising public awareness on modernization of farms
Mitigation Strategy	Compensation system	• local government (municipal) • regional authorities • agency of protected areas	• With the view of introducing a system of compensation, the funds can be obtained through licenses and fees for use of natural resources. Also, from the incomes of protected areas and / or donors. • It is recommended to promote eco-tourism development and introduction of eco tax system - Payment for Ecosystem Services • Compensation mechanism should only be used in parallel with other measures, or as a complement to other measures.
	Crop and livestock insurance	• local government (municipal)	• Such insurance system is relatively new and remains in its experimental form, thus it is

Strategy	specific recommendation	Stakeholder Responsible	Key issues
		• regional authorities	important that pilot projects are carried out to define the effectiveness of such a system and modify it accordingly • It is important to carry out educational campaigns and increase the awareness regarding the advantages of the insurance system among the population.
Governance and Information	Quantifying Threat through Data Management and Analysis	• DRR WG's	• Analysing data will highlight patterns in the attack showing where key areas are and what the key times of year are this can feed into a mitigation strategy and help reduce fear and a sense of helplessness among the population by reducing the threat to its proper size.
	Conservation education for the local population	• local government (municipal) • regional authorities • Agency of Protected Areas	Increasing awareness and knowledge among the representatives of the local community will • promote the increase in resilience against wild animals. • Lead to accumulating experience resulting in the implementation of new techniques and technologies to use in farm protection.
	Development of a system to define/reveal and predict the so-called "hot spots" for wild animal attacks; data retrieval and impact assessment	• local government (municipal) • regional authorities • Agency of Protected Areas	• Developing and implementing awild animal monitoring system. • Managing wild animal habitats (e.g. improving the food base).
Institutional Mechanisms	Wild animal attack response team	• local government (municipal) • regional authorities • Environmental Supervision Department	The team will • Provide professional descriptions for each attack and integrate data into a unified database. • Identify a problem animal, if required, obtain the necessary permission for the removal of the problem animal and then remove it.
	Municipal DRR Working Groups	• local government (municipal) working group • regional authorities • Environmental Supervision Department	• Coordinate with the institutions of the national and local authorities responsible for the management of the respective issues. • It is recommended to develop particular guidelines and instructions on acting in specific situations (the so-called Standard Operating Procedures). • Engaging local non-governmental organizations in the working process with the purpose of strengthening the group • Contacting other similar programs in Georgia, with the purpose of assessing the possibilities of implementing/scaling the actions on the national level (e.g. the Georgia Carnivore Conservation Project (GCCP)).

Strategy	specific recommendation	Stakeholder Responsible	Key issues
	Strengthening existing mechanisms, Wild animal removal from nature	• local government (municipal) working group • regional authorities • Environmental Supervision Department • National government (Ministry of Environment, Ministry of Agriculture etc.).	• Provide information and training on existing mechanisms and their use for all interested parties (local population, local government). • It is recommended that interested parties assess the pros and cons of the existing mechanisms and recommendations are developed for the initiation of adequate changes. • Arranging trainings for the 153 hotline operators on how to manage incoming messages regarding wild animal attacks.

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9 ANNEXES

1.Terms of Reference (TOR)

The SDC Funded Alliances Lesser Caucasus Programme (ALCP) implemented by Mercy Corps Georgia is a market systems development programme working in the meat, dairy, wool and honey sub-sectors to generate systemic change in the market system for the benefit of poor farmers. Please go to www.alcp.ge for more details.

BACKGROUND

The ALCP engages in diagnosing key constraints to market systems development. Disaster Risk Reduction in direct relation to problems facing those reliant on animal husbandry and in Ajara honey production is a key area. The development of agro tourism is a key goal of the Ajaran Government and the programme seeks to ensure access of farmers to a thriving and inclusive market for agro tourism into which local government and communities can contribute and profit. The flora and fauna of Ajara are a unique selling point of the region as is wild and domestic honey production and traditional subsistence farming methods and lifestyles. Market assessment to date has revealed the extent and importance of wild animal attacks on livestock and the disruption of hives. It is vital that rural producers and wildlife can coexist and that local communities learn to manage and profit from a resource which could significantly contribute towards their livelihoods.

AIMS & ACTIVITIES

The ALC program works with National, regional and local governments, local NGOs and private sector actors to enable the livestock market system to function more efficiently for & inclusively of small-scale livestock producers (SSLP's) in Ajara region (as well as Kvemo Kartli and Samtskhe-Javakheti regions) resulting in improved productivity, incomes and resilience to livelihood shocks. The programme is working with Disaster Risk Reduction Working Groups in each municipality to manage DRR issues related to animal husbandry and honey producers and more generally to benefit from access to public goods.

The first step in determining programming to develop this capacity at a municipal level will be a piece of in depth research which will provide an overview and inventory of the situation as it stands at present. It will include:

- A detailed study and inventory of the fauna to be found according to municipality,
- References to the value of wildlife in the context of both conservation and biodiversity, image and agro tourism,
- Will detail the nature of the wild animals attacks and damages and problems and challenges from the perspectives of all stakeholders i.e. farmers, honey producers, including the perspectives of women and men, examining their roles and responsibilities, access and control related to the issue, local government, regional and national government, hunters, tourism market actors, private landowners with a stake in the community.
- Look at and detail present laws connected to hunting and control, look at flash points and recourse currently taken
- Suggest practical management solutions which can be implemented at the community level to develop mutually beneficial solutions.

In producing the research plan and final paper outlined above the selected party should be prepared to:

- Develop an understanding of the programme its aims and specific modus operandi.
- Shape the research proposal according to programme strategy and needs.
- Work in close reference to ALCP staff.

KNOWLEDGE AND EXPERIENCE

- Research experience in to human wild animal interface in Georgia and internationally.
- Experience in managing and developing systems of interaction between human and wild animals on high pasture.
- Knowledge and experience in M4P Approach is an advantage.
- Excellent communication skills.
- Excellent data management and presentation skills.
- Computer literate and proficiency with Microsoft Office programs, mapping, computer aided design a distinct advantage.

RESULTS/DELIVERABLES:

- Research paper as outlined above.

RESOURCES:

ALCP-AJ staff will assist with organization, logistics and translation and provide additional manpower when required.

ACCOUNTABILITY:

Mercy Corps ALCP Team Leader and Mercy Corps ALCP-AJ: Programme Manager.

SELECTION CRITERIA

- Qualifications
- Interpretation of the brief
- Links to professional organizations and international certification bodies
- Experience of similar operations
- Timeframe
- Value for money

2.Initial open ended questionnaire

Name:	
Occupation:	
Age:	
Contact information: (tel., Email)	

Questions:

1. Are there any kind of statistical data (records) about the attacks of the wild animals on humans, human activities and domestic animals?
2. Which are wild animals mostly attacking humans, human activities and domestic animals (please, specify by municipality)?
3. Please, describe the nature/characteristics of the attacks?
4. On which seasons/months are mostly the attacks happening (please, specify by municipality)
5. What is the frequency of the attacks? (please, specify the species of the wild animals and the municipalities)?
6. What is the intensity of the attacks, how much damage do they make to humans and their activities(please, specify the species of the wild animals and the municipalities)?
7. Please evaluate the damage caused by wild animals in 1-5 scale (5 is the highest rate)

Bear: 1— 2— 3— 4—5

Wolf: 1— 2— 3— 4—5

Jackal: 1— 2— 3— 4—5

Other:_____: 1— 2— 3— 4—5

8. Which villages (areas) are mostly under risk of attacks and damages caused by wild animals (please name the administrative units)
9. Please describe the existing practices of response to wild animals attacks (injuries) on humans (human activities)?
10. Describe what measures the local population/government takes to reduce the risk of, and damages from human-wild animal interface
11. Please, list the existing laws and regulations connected to human-wild animal interface (during response, prevention measures, hunting Law, etc.)
12. Please, describe the institutions involved in human-wild animal interface management (during response, prevention acantivites and etc.)
13. What kind of initiatives/activities is implemented, or is planned in the future, for management of human-wild animal interface?
14. What are the main problems connected to the human-wild animal interface management? (Legislative, Institutional, etc.)
15. In your opinion, what positive value does the existence of wild animals' have (Please, describe)?
16. How would you evaluate the value of wild animals in 1-5 scale (5 is the highest rate), explain your decision

Bear: 1— 2— 3— 4—5

Wolf: 1— 2— 3— 4—5

Jackal: 1— 2— 3— 4—5

Other_____: 1— 2— 3— 4—5

17. In your opinion, what kind of activites need to be implemented to solve these problems?

3.Semi-Structured Questionnaires on human-wild animal interface

1. Name of Researcher_____ **2.** Questionnaire N: _____
3. Date_____ **4.** Municipality_____
5. Village/town_____ **6.** GPS coordinates:
X_____Y_____

I Section: Socio-demographical information for each respondent

7. Respondents Name _____ **8.** Respondents age _____
9. Gender: 1) Female □ 2) Male □ **10.** Contact details _____
11. Education: **12.** Occupation:
1)Primary □ 2)Secondary □ 3)Higher □ 1)Livestock farmer □ 2)Honey Producer □ 3)Crop Farmer □ 4) Fruit Grower □ 5)Herder □ 6)Other_____

13. How many members are in your family_____ **14.** How many family members are employed _____
15. Do you usually attend/participate in community meetings, public hearings during the village municipal development planning or other related activities? 1. Yes □ 0. No □
16. If No, who usually does it in your family? _____

Section II: Farming and Livestock[19] information

17. What types of agricultural land you own/lease and how much (hectares)?

	1.Perennial crop (h)	2. Pasture (h)	3. Homestead (h)	4. Arable (h)	5. Orchard (h)	6. Other (h)
17.1 Own						
17.2 Lease						

18. What number of livestock does your family own?

Livestock	18.1 Goat	18.2 Sheep	18.3 Poultry	18.4 Cattle	18.5 Bee hives	18.6 Pig	18.7 Fish pond	18.8 Other_____
Quantity								

19. What are the main products produced and how much is produced yearly?

19.1 Milk (l) _____	19.2 Chees (kg) _____	19.3 Yogurt (l) _____	19.4 Cottage cheese (kg) _____	19.5 Source Cream (l) _____	19.6 Butter (kg) _____
19.7 Meat (kg) _____	19.8 Fish (kg) _____	19.9 Vine (l) _____	19.10 Vegetable (kg) _____	19.11 Hay (kg) _____	19.12 Wheat (kg) _____
19.13 Corn (kg) _____	19.14 Honey (kg) _____	19.15 Nutt (kg) _____	19.16 Tea (kg) _____	19.17 Citrus (kg) _____	19.18 Tobacco (kg) _____
19.19 Medical	19.20 Vine (kg)	19.21 Berry (kg)	19.22 Other _____		

[19] *Livestock in this survey includes poultry and beekeeping*

Plants (kg) _____	_____	_____	

20. What types of farming are you following:
1) Only subsistence farming □ 2) Commercial farming □ 3) None of them □

21. How do you sell your product?
21.1 Retailers □ 21.2 Tourists □ 21. 3 Local Businesses □ 21. 4 Community members □

21.5 Local Markets □ 21.5 Other _____

22. How the access of your product to the market could be improved?

_____

23. Did you lose the livestock because of the disease? 1. Yes □ 0.No □

24. If, yes what type of disease was it?

Livestock	24.1 Goat	24.2 Sheep	24.3 Poultry	24.4 Cattle	24.5 Bee hives	24.6 Pig	24.7 Fish pond	24.8 Other_____
Disease								

25. Are you usually using any preventive measure against disease? 1. Yes □ 0.No □

26. If yes, please describe _____

27. Where do you graze the livestock during the Autumn/Winter period?

	27.1 Forest	27.2 Pastureland	27.3 Yard/Feeding rack	27.4 Others: _____
Distance from the farm				

28. Where do you graze the livestock during the Spring/Summer period?

	28.1 Forest	28.2 Pastureland	28.3 Yard/Feeding rack	28.4 Others: _____
Distance from the farm				

29. Do you vaccinate livestock before migration to summer pasture? 1. Yes □ 0.No □

<u>Section III</u>: Information about tourism

30. Is tourism common in your local area? 1. Yes □ 0.No □

31. If yes what type of tourism exactly?
1. Agro-tourism 2) Eco-tourism 3) Cultural tourism 4) Other _____

32. If No, would they be interested to get involved in tourism sector? 1. Yes □ 0.No □

33. How exactly? Please explain briefly _____

<u>Section IV</u>: Detailed information about the livestock losses to wild animal:

34. In general are wild animals a big problem for you? 1. Yes □ 0.No □ 2. partly □

35. Are the problems worse in winter or in summer pastures?

1.Winter □ 2.Summer □

36. Do you lose more money because of wild animals or because of disease or other causes?

1..disease___ 2.predation___ 3. theft ___ 4. other _____

37. Wild animal species (wild animals) if seen: 37.1 Bear □ 37.2 wolf □ 37.3 lynx □ 37.4 jackal □

37.5 Fox □ 37.6 Wild boar □ 37.7 other _____

38. Which is the most troublesome wild animal?

38.1 Bear ___ 38.2 wolf___ 38.3 lynx ___ 38.4 jackal ___ 38.5 Fox ___ 38.6 Wild boar ___ 38.7 other _____

39. In which month(s) do you tend to lose most stock to wild animals? _____

40. If you consider the last 5 years, have problems with wild animals been:

1.Getting less common □ 2.staying the same □ 3.getting more common □

41. Number of damaged livestock by the wild animals in the last year in your family

	1.Goat	2.Sheep	3.Poultry	4.Cattle	5.Beehives	6.Pig	7.Fish	8.Other_____
41.1 Bear								
41.2 wolf								
41.3 Lynx								
41.4 Jackal								
41.5 Fox								
41.6 Wild boar								
41.7 Other: _____								

42. Number of damaged crops (in hectares or number of trees) by the wild animals in the last year in your family

	1.Corn	2.Wheat	3.Hay	4.Tobacco	5.Tea	6.Citrus	7.Nutt	8.Grape	9.Berries	10.Other_____
42.1 Bear										
42.2 wolf										
42.3 Lynx										
42.4 Jackal										
42.5 Fox										
42.6 Wild boar										
42.7 Other: _____										

43. Is above mentioned damages: 1.less than usual □ 2.about average □ 3. more than usual □

44. For your income is this loss: 1.very big □ 2.big □ 3.medium □ 4.small □ 5.very small □

45. Indicate the season of the damages caused by the wildlife

	1.Winter	2.Spring	3.Summer	4.Autumn
45.1 Bear	□	□	□	□
45.2 wolf	□	□	□	□
45.3 Lynx	□	□	□	□
45.4 Jackal	□	□	□	□
45.5 Fox	□	□	□	□

45.6 Wild boar	☐	☐	☐	☐
45.7 Other: _____	☐	☐	☐	☐

46. Have you ever personally experienced the attack from wild animal? 1. Yes[20] ☐ 0.No ☐

Session V: Respond and Preventive measures

47. Do you usually report on the animal attacks (or potential risks) to the local government? 1.Yes ☐ 0.no ☐

48. If yes, please explain briefly the process

_____

49. What is the response to the attack reports from the local government?

_____

50. Do you think the response from the local officials to the attacks is effective? 1. Yes ☐ 0.no ☐ 2. partly ☐

51. What should be improved for better response from the government?

_____

52. What measures do you use to protect your livestock from wild animals?

52.1 dogs _____ 52.2 scare devices____ 52.3shooting_____ 52.4 hen-house/barn_____ 52.5 patrolling_____ 52.6 removing dead livestock_____ 52.7 other _____

53. Do you think these measures are effective? 1.Yes ☐ 0.No ☐ 2.partly ☐ 3. doesn't know ☐

54. Do you use dogs on the pastures? 1.Yes ☐ 0.No ☐

55. Do you use dogs in the barns or yards at night? 1.Yes ☐ 0.No ☐

56. If yes, how many dogs do you have: _____

57. What breed of dog do you have: 1.Caucasian ☐ 2.Georgian ☐ 3.mixed breeds ☐ 4.other _____

58. Do you vaccinate dogs for rabies? 1.Yes ☐ 0.No ☐

59. Do you think you have good dogs? 1.Yes ☐ 0.No ☐ 2. partly ☐

Explanation: _____

60. How do you train them? _____

_____

[20] *If the response is yes, then additional questionnaire have to be filled in*

61. Are the bees or honey hives protected? 1.Yes □ 0.No □

62. What would happen if you didn't protect your livestock?

1.Nothing □ 2. Would lose more □ 3.doesn't know □ 4. other_____

63. How do you think the wild animals attacks could be reduced?

_____

64. Would you like the outside assistance to protect your livelihood from wild animals? 1.Yes □ 0.No □

65. If yes, specify? _____

Remarks

66. Do you have anything else you would like to add about what we have talked about?

_____

4. Survey for measuring public attitudes and awareness towards wildlife

N:_____

Dear respondent,

We would like to thank you for feeling the questionnaire towards the animals living in your area, such as bears, wolves, jackals, etc. Your opinion and attitude (whether they are positive, neutral or negative) towards those animals are valuable to our survey and we are grateful that you allocate the time for answering the questions. Your answers are confidential and we encourage to present and voice your own opinion in the survey.

Best Regards

If you have any questions regarding questionnaire feel free to contact us
Gulo Surmanidze – 593585628
Black Sea Eco Academy (BSEA)

_____

***Section I:** This section asks about your attitude towards wild animals. Please circle the answer that best reflects your attitude.*

1. Which answer best describes your feelings towards these animals (Please circle the answer)**?**

N	Names	Very negative	Negative	Neutral	Positive	Very positive
1.1	Bear	1	2	3	4	5
1.2	Wolf	1	2	3	4	5
1.3	Lynx	1	2	3	4	5
1.4	Jackal	1	2	3	4	5
1.5	Fox	1	2	3	4	5
1.6	Wild boar	1	2	3	4	5
1.7	Other _____	1	2	3	4	5

2. The animals listed below belong to predator in Georgia (Please circle the answer)

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
2.1	Bear	1	2	3	4	5
2.2	Wolf	1	2	3	4	5
2.3	Lynx	1	2	3	4	5
2.4	Jackal	1	2	3	4	5
2.5	Fox	1	2	3	4	5
2.6	Wild boar	1	2	3	4	5
2.7	Other _____	1	2	3	4	5

3. The animals listed below belong to predator in your local area (Please circle the answer)?

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3.1	Bear	1	2	3	4	5
3.2	Wolf	1	2	3	4	5
3.3	Lynx	1	2	3	4	5
3.4	Jackal	1	2	3	4	5
3.5	Fox	1	2	3	4	5
3.6	Wild boar	1	2	3	4	5
3.7	Other _____	1	2	3	4	5

4. Please briefly explain your answer (why do you think selected animals belong to wild?)

_____

5. Which of the following animals do you think are dangerous to humans (Please circle the answer):

N	Species	Very dangerous	Dangerous	Mostly harmless	Always harmless	I don't know
5.1	Bear	1	2	3	4	5
5.2	Wolf	1	2	3	4	5
5.3	Lynx	1	2	3	4	5
5.4	Jackal	1	2	3	4	5
5.5	Fox	1	2	3	4	5
5.6	Wild boar	1	2	3	4	5
5.7	Other _____	1	2	3	4	5

6. If you answered very dangerous or dangerous, in which situations are they dangerous?

_____

7. A lot of livestock are killed by (Please circle the answer):

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7.1	Bear	1	2	3	4	5
7.2	Wolf	1	2	3	4	5
7.3	Lynx	1	2	3	4	5
7.4	Jackal	1	2	3	4	5
7.5	Fox	1	2	3	4	5
7.6	Wild boar	1	2	3	4	5
7.7	Other _____	1	2	3	4	5

8. A lot of agricultural land/bee hives are damaged by (Please circle the answer):

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8.1	Bear	1	2	3	4	5
8.2	Wolf	1	2	3	4	5
8.3	Lynx	1	2	3	4	5
8.4	Jackal	1	2	3	4	5
8.5	Fox	1	2	3	4	5
8.6	Wild boar	1	2	3	4	5
8.7	Other _____	1	2	3	4	5

9. <u>The existence of wildlife in Ajara is</u> <u>(Please circle the answer):</u>

N	Species	Very bad	Bad	Neither good nor bad	Good	Very good
9.1	Bear	1	2	3	4	5
9.2	Wolf	1	2	3	4	5
9.3	Lynx	1	2	3	4	5
9.4	Jackal	1	2	3	4	5
9.5	Fox	1	2	3	4	5
9.6	Wild boar	1	2	3	4	5
9.7	Other _____	1	2	3	4	5

10. <u>Please briefly explain your answer:</u>

_____

11. <u>I would be afraid to go in to the forest, were the wild animals live.</u> <u>Please circle the answer</u>

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11.1	Bear	1	2	3	4	5
11.2	Wolf	1	2	3	4	5
11.3	Lynx	1	2	3	4	5
11.4	Jackal	1	2	3	4	5
11.5	Fox	1	2	3	4	5
11.6	Wild boar	1	2	3	4	5

11.7	Other _____	1	2	3	4	5

<u>Section II:</u> This section deals with your knowledge of wild animals.

12. <u>How many of these wild animals live in Ajara?</u> <u>Please circle your answer</u>

12.1	Bear	0	1 to 50	51-100	More than 100	I don't know
12.2	Wolf	0	1 to 50	51-100	More than 100	I don't know
12.3	Lynx	0	1 to 50	51-100	More than 100	I don't know
12.4	Jackal	0	1 to 50	51-100	More than 100	I don't know
12.5	Fox	0	1 to 50	51-100	More than 100	I don't know
12.6	Wild boar	0	1 to 50	51-100	More than 100	I don't know
12.7	Other_____	0	1 to 50	51-100	More than 100	I don't know

13. <u>What is the main food of these animals in Ajara?</u> <u>Please mark the answer in the box</u>

		1.Fruits, berries, grass	**2.Mice and hares**	**3.Honey**	**4.Agricultural crops**	**5.Wild boar**	**6.Sheep or cattle**	**7.I don't know**
13.1	Bear	□	□	□	□	□	□	□
13.2	Wolf	□	□	□	□	□	□	□
13.3	Lynx	□	□	□	□	□	□	□
13.4	Jackal	□	□	□	□	□	□	□
13.5	Fox	□	□	□	□	□	□	□
13.6	Wild boar	□	□	□	□	□	□	□
13.7	Other_____	□	□	□	□	□	□	□

14. <u>Do these animals hibernate in the winter?</u> <u>Please circle your answer</u>

14.1	Bear	1.yes	0.no	2.I don't know
14.2	Wolf	1.yes	0.no	2.I don't know
14.3	Lynx	1.yes	0.no	2.I don't know
14.4	Jackal	1.yes	0.no	2.I don't know
14.5	Fox	1.yes	0.no	2.I don't know
14.6	Wild Boar	1.yes	0.no	2.I don't know
14.7	Other_____	1.yes	0.no	2.I don't know

15. <u>How many offspring do these animals have each year?</u> <u>Please circle your answer</u>

15.1	Bear	1	1 - 4	5 - 10	more than 10	I don't know
15.2	Wolf	1	1 - 4	5 - 10	more than 10	I don't know
15.3	Lynx	1	1 - 4	5 - 10	more than 10	I don't know

15.4	Jackal	1	1 - 4	5 - 10	more than 10	I don't know
15.5	Fox	1	1 - 4	5 - 10	more than 10	I don't know
15.6	Wild boar	1	1 - 4	5 - 10	more than 10	I don't know
15.7	Other _____	1	1 - 4	5 - 10	more than 10	I don't know

16. Do these animals leave in groups? Please mark the answer in the box

		1.Alone	2.In groups	3.I don't know
16.1	Bear	□	□	□
16.2	Wolf	□	□	□
16.3	Lynx	□	□	□
16.4	Jackal	□	□	□
16.5	Fox	□	□	□
16.6	Wild boar	□	□	□
16.7	Other _____	□	□	□

17. In Georgia, is it normally legal to hunt this animals? Please circle your answer

17.1	Bear	1.yes	0.no	2.I don't know
17.2	Wolf	1.yes	0.no	2.I don't know
17.3	Lynx	1.yes	0.no	2.I don't know
17.4	Jackal	1.yes	0.no	2.I don't know
17.5	Fox	1.yes	0.no	2.I don't know
17.6	Wild Boar	1.yes	0.no	2.I don't know
17.7	Other_____	1.yes	0.no	2.I don't know

18. In Georgia, nowadays are owners paid money for livestock killed (crop, hives damages) by the listed animals? Please circle your answer

18.1	Bear	1.yes	0.no	2.I don't know
18.2	Wolf	1.yes	0.no	2.I don't know
18.3	Lynx	1.yes	0.no	2.I don't know
18.4	Jackal	1.yes	0.no	2.I don't know
18.5	Fox	1.yes	0.no	2.I don't know
18.6	Wild Boar	1.yes	0.no	2.I don't know
18.7	Other_____	1.yes	0.no	2.I don't know

19. About how many people were killed in Ajara in the last 10 years by (Please circle your answer):

19.1	Bear	0	1	1 - 10	11 - 100	more than 100	I don't know
19.2	Wolf	0	1	1 - 10	11 - 100	more than 100	I don't know
19.3	Lynx	0	1	1 - 10	11 - 100	more than 100	I don't know

19.4	Jackal	0	1	1 - 10	11 - 100	more than 100	I don't know
19.5	Fox	0	1	1 - 10	11 - 100	more than 100	I don't know
19.6	Wild boar	0	1	1 - 10	11 - 100	more than 100	I don't know
19.7	Other _____	0	1	1 - 10	11 - 100	more than 100	I don't know

Section III: this section is dedicated to describe your attitudes towards the management of wild animals in Ajara;

20. In your region, there are too many ….(Please circle your answer)

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
20.1	Bear	1	2	3	4	5
20.2	Wolf	1	2	3	4	5
20.3	Lynx	1	2	3	4	5
20.4	Jackal	1	2	3	4	5
20.5	Fox	1	2	3	4	5
20.6	Wild boar	1	2	3	4	5
20.7	Other _____	1	2	3	4	5

21. Do you think the numbers of these animals is changing or staying the same? Please mark the answer in the box

N	Species	1.Increasing	2.decreasing	3.staying the same	4.I don't know
21.1	Bear	☐	☐	☐	☐
21.2	Wolf	☐	☐	☐	☐
21.3	Lynx	☐	☐	☐	☐
21.4	Jackal	☐	☐	☐	☐
21.5	Fox	☐	☐	☐	☐
21.6	Wild boar	☐	☐	☐	☐
21.7	Other: _____	☐	☐	☐	☐

22. Hunting on the following animals should be strictly regulated (e.g. open and closed season) (Please circle your answer)

N	Species	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
22.1	Bear	1	2	3	4	5
22.2	Wolf	1	2	3	4	5
22.3	Lynx	1	2	3	4	5
22.4	Jackal	1	2	3	4	5
22.5	Fox	1	2	3	4	5
22.6	Wild boar	1	2	3	4	5
22.7	Other _____	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23.	**Money should be paid to owners whose livestock is killed by wild animal**	1	2	3	4	5
24.	**Money should be only paid to owners who tried to protect their livestock/livelihood**	1	2	3	4	5
25.	**People should be allowed to kill wild animals if they attack human or their livestock**	1	2	3	4	5
26.	**If the wild animal repeatedly causes damage, it should be killed**	1	2	3	4	5

Section IV: Tell us about where your knowledge on the following animals comes from

27. What has formed your impression on the following animals? (Please circle your answer)

		1.Newspapers / magazines	2.Fairy tales / legends	3.Hunters	4.Radio /Television	5.Own experience	6.Protected Areas	7.Other _____
27.1	Bear	□	□	□	□	□	□	□
27.2	Wolf	□	□	□	□	□	□	□
27.3	Lynx	□	□	□	□	□	□	□
27.4	Jackal	□	□	□	□	□	□	□
27.5	Fox	□	□	□	□	□	□	□
27.6	Wild boar	□	□	□	□	□	□	□
27.7	Other _____	□	□	□	□	□	□	□

28. Are you interested in learning more about on the following animals?

		1.Yes	0.No	2.Partly
28.1	Bear	□	□	□
28.2	Wolf	□	□	□
28.3	Lynx	□	□	□
28.4	Jackal	□	□	□
28.5	Fox	□	□	□
28.6	Wild boar	□	□	□
28.7	Other _____	□	□	□

29. If yes, in what form would you like to obtain the information? (Please circle your answer)

1. Newspapers /magazines
2. Internet
3. Special Activities
4. Radio/ Television
5. own experience
6. Protected Areas staff
7. Other___

Section V: Personal experience with wild animals

30. How often do you go to places with wild animals such as wolves, bears, jackals, etc.? (Please circle your answer)

1. Almost Daily 2. At least once a week 3. Once a month 4. Seldom 5. Never 6. Other_____

31. What do you usually do there? (Please circle your answer)

1. hunting 2. wildlife watching 3. hiking 4. herding 5. berry/mushroom picking 6. fishing 7. Other_____

32. Have you ever seen any of these animals in the wild? (Please circle your answer)

32.1	Bear	1.yes	0.no
32.2	Wolf	1.yes	0.no
32.3	Lynx	1.yes	0.no
32.4	Jackal	1.yes	0.no
32.5	Fox	1.yes	0.no
32.6	Wild boar	1.yes	0.no
32.7	Other_____	1.yes	0.no

33. Have you ever shot any of these animals? (Please circle your answer)

33.1	Bear	1.yes	0.no
33.2	Wolf	1.yes	0.no
33.3	Lynx	1.yes	0.no
33.4	Jackal	1.yes	0.no
33.5	Fox	1.yes	0.no
33.6	Wild boar	1.yes	0.no
33.7	Other_____	1.yes	0.no

34. Have you or your family ever experienced damage caused by (Please circle your answer)**:**

34.1	Bear	1.yes	0.no
34.2	Wolf	1.yes	0.no
34.3	Lynx	1.yes	0.no
34.4	Jackal	1.yes	0.no
34.5	Fox	1.yes	0.no
34.6	Wild boar	1.yes	0.no
34.7	Other_____	1.yes	0.no

35. If you or your family has experienced damage from wild animals, please describe briefly

35.1	Bear	
35.2	Wolf	

35.3	Lynx	
35.4	Jackal	
35.5	Fox	
35.6	Wild boar	
35.7	Other_____	

36. What would you do, how would you react if you saw

36.1	Bear	
36.2	Wolf	
36.3	Lynx	
36.4	Jackal	
36.5	Fox	
36.6	Wild boar	
36.7	Other_____	

37. If in childhood you were told stories about these animals, how were they described (Please circle your answer)**?**

		1.Mostly Positive	2.Mostly Negative	3.Various	4.I was not told	5.I don't remember
37.1	Bear	☐	☐	☐	☐	☐
37.2	Wolf	☐	☐	☐	☐	☐
37.3	Lynx	☐	☐	☐	☐	☐
37.4	Jackal	☐	☐	☐	☐	☐
37.5	Fox	☐	☐	☐	☐	☐
37.6	Wild boar	☐	☐	☐	☐	☐
37.7	Other: _____	☐	☐	☐	☐	☐

Section VI: Information and attitude towards protected areas;

38. Do you live near a protected area? (Please circle your answer) **1.**Yes ☐ 0.No ☐

39. If yes, please name the Protected Area and estimate distance

_____

40. If yes, which kind of resources from Protected Area are used by you and your family members?

Resources	1.yes	0.no
40.1 Pastures	☐	☐
40.2 Hay	☐	☐
40.3 Firewood	☐	☐
40.4 Hunting	☐	☐
40.5 Fishing	☐	☐
40.6 Blackberries, mushrooms and other wild products	☐	☐
40.7 Sand/stones	☐	☐
40.8 Water	☐	☐
40.9 Other: _____	☐	☐

41. Except natural resources, are there any economic benefits for you from protected areas? (Please circle your answer)

1. Yes ☐ 0.No ☐

42. If yes, please describe

_____

43. What kind of problems does the PA cause you (if you leave nearby)? Please circle your answer(s)

43.1Limitations on using pasture

43.2 Limitations on the forest logging/lumbering

43.3 Hunting restrictions

43.4 Fishing restrictions

43.5 Limitations on collecting fruits, berries and mushrooms

43.6 Limitation for the only source family income

43.7 Other _____

43.8 None/don't know

44. What do you think is the main function of protected areas? Please circle your answer(s)

44.1 Improvement of human life environmental
44.2 Provision of firewood
44.3 Providing pastures
44.4 Attraction of visitors (tourists)
44.5 Protection of animal and plant
44.6 Preservation of Cultural and natural heritage
44.7 other_____

45 Do you think you or your family can benefit from protected areas? Please circle your answer

1.Yes □ 0.No □ 2.I don't know □

46 Please explain your answer:

_____

47 How has the availability of natural resources changed in your area in the last 3 years?

47.1 Harder to find
47.2 Remained the same
47.3 Easier to find
47.4 I don't know

48 Do you think hunting could be allowed in Protected Areas? Please circle your answer

1. Yes □ 0.No □

Section VII: gives some information about the respondents of this survey. You answers will be confidential

49 Municipality_____
50 Village/town _____
51 How old are you: _____
52 Are you female or male? 1) Female □ 2) Male □
53 What is your education? 1) primary □ 2) secondary □ 3) higher □
54 Your Occupation is (Please circle your answer):

1	Teacher	2	Forest ranger	3	Protected area staff	4	Hunter	5	Housewife	6	school pupil
7	Student	8	Hostel Owner	9	Local government representative	10	Livestock owner	11	Currently unemployed	12	Driver
13	Fruit grower	14	Retired	15	Creal farmer	16	Honey Producer	17	Local NGO	18	Other____

55 Does your family own livestock or agricultural land?

1. Yes □ 0.No □

56 If yes, what type of livelihood does your family own? Please circle your answers

56.1 Livestock	**1**	Goat	**2**	Sheep	**3**	poultry	**4**	Cattle	**5**	Bee hives	**6**	Pig	**7** Others
56.2 Agricultural land	**1**	Perennial crop	**2**	pasture	**3**	homestead	**4**	arable	**5**	Orchard	**6**	Others__	

57 What types of farming are you following

1) Only subsistence farming □ 2) Commercial farming □ 3) None of them □

58 Do you usually attend/participate in community meetings, public hearings during village, municipal development planning? 1.Yes □ 0.No □

59 If not you, who usually does it in your family? _____

Thank you for cooperation

Please feel free to write any comments below

5. Review of wild animal density in other countries

Brown bear – Ursus arctos

Population densities vary and seem to depend on food availability, rate of harvest by humans and stage of population expansion/retreat. The highest densities (100-200 bears/ 1000 km²) are found in Romania and the Dinaric countries, whereas extremely low densities (0.5-1 bear/1000 km²) are found in some areas of Fennoscandia. The populations listed in Table 5 are ranked by population size.

Like most other large carnivores, brown bears occur at low densities, especially in northern populations (e.g. 0.5 bears/1000 km² in southeastern Norway, 20-25 bears/1000 km² in one area of central Sweden, 100-200 bears/1000 km² in Romania) and have large home ranges (Swenson et al., 2000).

Adult bears individual areas vary according to gender. E.g. In central Sweden the average male area is 543 km² while for female is - 345 km². The individual territorial area also depends on the food basis, bigger the abundant in food, the smaller the individual area. For example in Croatia, where bear habitat is more productive compared to the coniferous forests of North, the male bear occupies 128 km², and the female 58 km².

Table 5: Information on bear density in other countries (Swenson et al., 2000)

Population name	Countries	Size (2012)	Trend
Scandinavian[21]	Norway, Sweden	3400	Increasing
Karelian	Norway, Finland	1700	Increasing
Baltic	Estonia, Latvia	710	Increasing
Carpathian	Romania, Poland, Slovakia, Serbia	7200	Stable
Dinaric-Pindos	Slovenia, Croatia, Bosnia & Herzegovina, Montenegro, "the former Yugoslav Republic of Macedonia", Albania, Serbia, Greece	3070	Increase
Alpine	Italy, Switzerland, Austria, Slovenia	45-50	Stable
Eastern Balkan	Bulgaria, Greece, Serbia	600	Stable or decrease
Central Apennine	Italy	40-80	Stable

Wolf – Canis lupus

The overall number of wolves living in European countries is relatively high, however, only 6 countries have a population of more than 1000 wolves, only 11 have more than 500 and 8 countries have very small populations of less than 50 animals (See Table 6).

Wolves are territorial and each pack actively defends its own territory from wolves of neighboring packs. Territory size varies greatly, depending on wolf and prey densities, geographical features, human disturbance, and human-related infrastructures, whereas territory size in North America ranges from 80 to 2,500 km^2, in Europe it is generally from 100 to 500 km². Territories are actively advertised by wolves, through markings with urine and faeces left in strategic sites within the territory and along the boundaries. Territory boundaries are rarely trespassed; when this occurs, it may lead to violent aggressions and intra-specific mortality.

Wolf density is clearly related to the density of available food; higher prey biomass allows for larger litter sizes and greater pup survival. The numerical response of the wolf to variations in prey numbers lags behind

[21] Density is 345 – 540 km^2

by 3-5 years. Where wolf populations are controlled by man, it has been found that a mortality rate of over 35% of the total population in autumn may cause a decline and eventually extinction.

Densities vary significantly. In North America they are generally from 0.3-4.3 wolves/100 km^2, and appear to be regulated essentially by the prey biomass. In Europe the densities are generally 1-3 wolves/100 km^2, although a comparison is extremely difficult due to the differences in methods and time of the year to which the estimates refer. In Europe, wolf density is positively related to food availability and negatively related to wolf-human conflicts that usually increase in free-ranging livestock areas (Boitani, 2000).

Table 6: Information on wolf density in other countries (Boitani, 2000)

Population name	Countries	Size (2012)	Trend
Scandinavian	Norway, Sweden	260-330	Increase
Karelian	Finland	150-165	Decrease
Baltic	Estonia, Latvia, Lithuania, Poland	870-1400	Stable to increase
Central European lowlands	Germany, Poland	36 packs	Increase
Carpathian	Slovakia, Czech Republic, Poland, Romania, Hungary, Serbia	3000	Stable
Dinaric-Balkan	Slovenia, Croatia, Bosnia & Herzegovina, Montenegro, "the former Yugoslav Republic of Macedonia", Albania, Serbia (incl. Kosovo*), Greece, Bulgaria	3900	Stable
Alps	Italy, France, Switzerland, Austria, Slovenia	280	Increase
Italian peninsula	Italy	600-800	Stable
W Iberian	Spain, Portugal	No recent update, but 2007 estimate was 2500	Decrease
Sierra Morena	Spain	1 pack	Decrease

Lynx – Lynx lynx

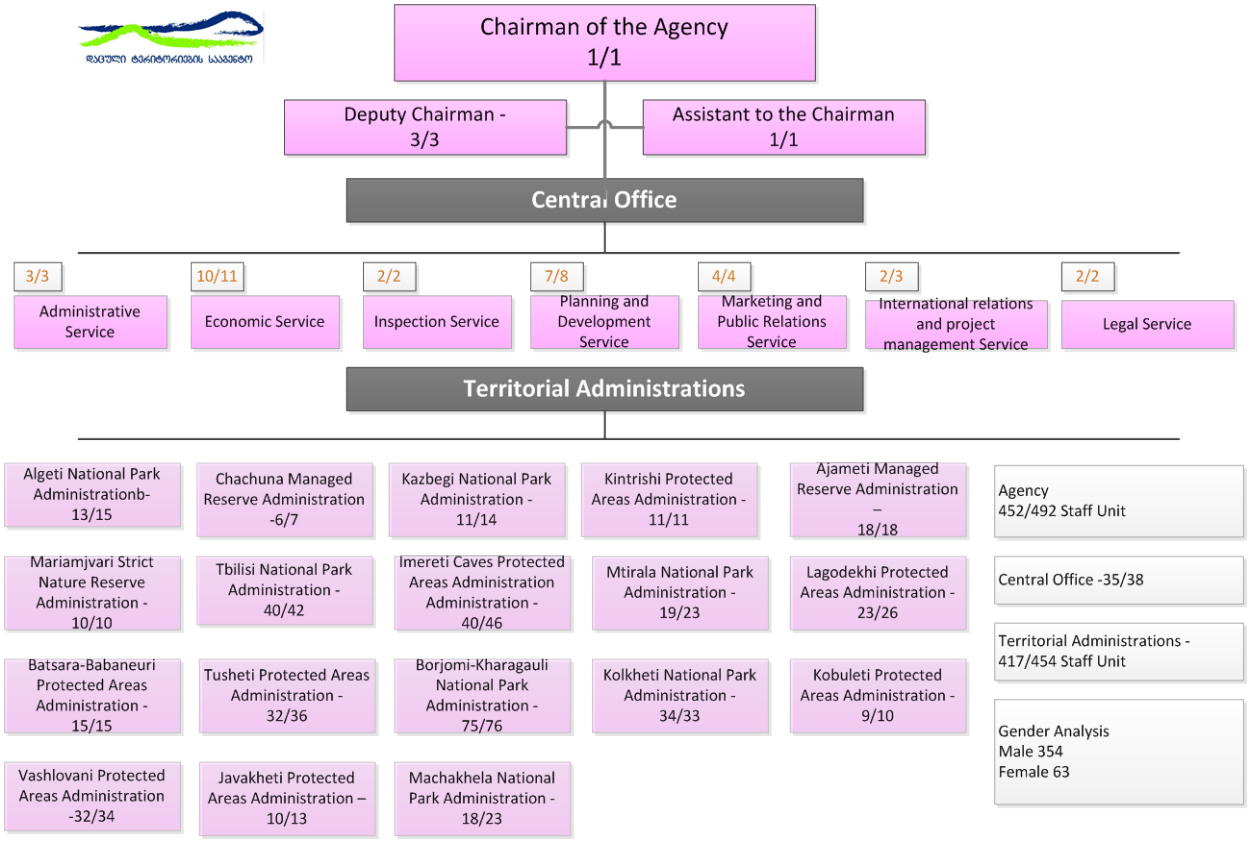
Lynx are solitary living animals, except for females with the offspring of the year. Both males and females occupy individual territories, which are marked with gland secretions, urine and probably faeces. Usually home ranges of males overlap to a certain extent, whereas ranges of females overlap only slightly if ever. Home ranges of males are larger than those of females. According to the literature, home range size ranges from 25-2000 km^2 . Studies based on telemetry have brought precise estimates of home range size of lynx in Europe: 180-2,780 km^2 for males and 98-759 km^2 for females (Table 7) (Breitenmoser et al., 2000).

Table 7: Information on lynxr density in other countries (Breitenmoser et al., 2000)

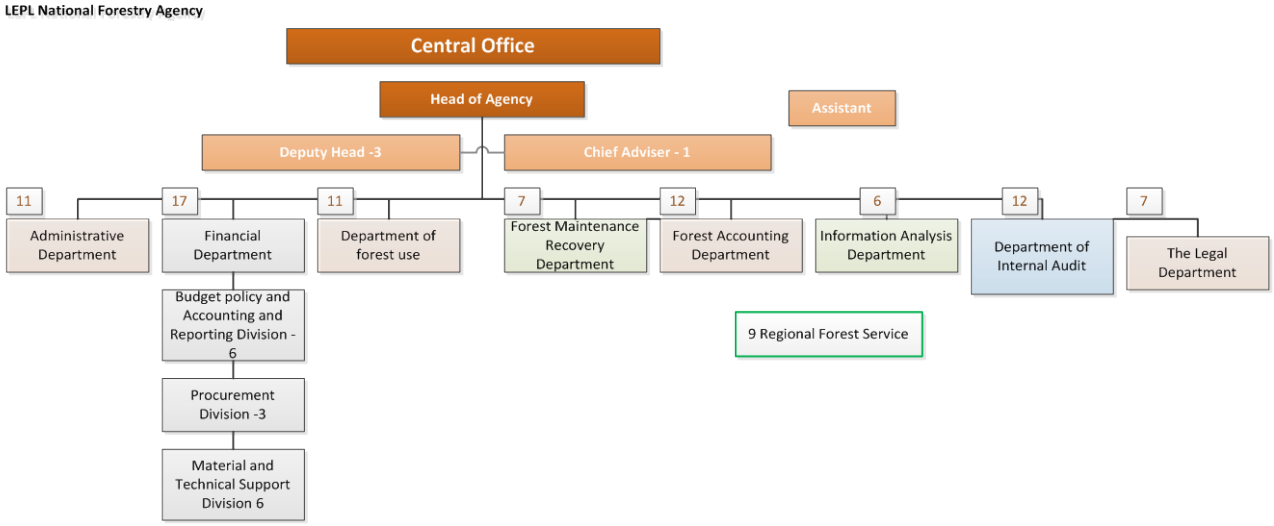
Population name	Countries	Size (2012)	Trend
Scandinavian	Norway, Sweden	1800 – 2300	Stable
Karelian	Finland	2400-2600	Increase
Baltic	Estonia, Latvia, Lithuania, Poland, Ukraine	1600	Stable
Bohemian-Bavarian	Czech Republic, Germany, Austria	50	Stable or decrease
Carpathian	Romania, Slovakia, Poland, Ukraine, Czech Republic, Hungary, Serbia, Bulgaria	2300-2400	Stable
Alpine	Switzerland, Slovenia, Italy, Austria, France	130	Stable

Jura	France, Switzerland	100	Increase
Vosges Palatinian	France, Germany	19	Stable or slight decrease
Dinaric	Slovenia, Croatia, Bosnia & Herzegovina	120-130	Stable or decrease
Balkan	"the former Yugoslav Republic of Macedonia", Albania, Serbia (incl. Kosovo)	40-50	Decreasing

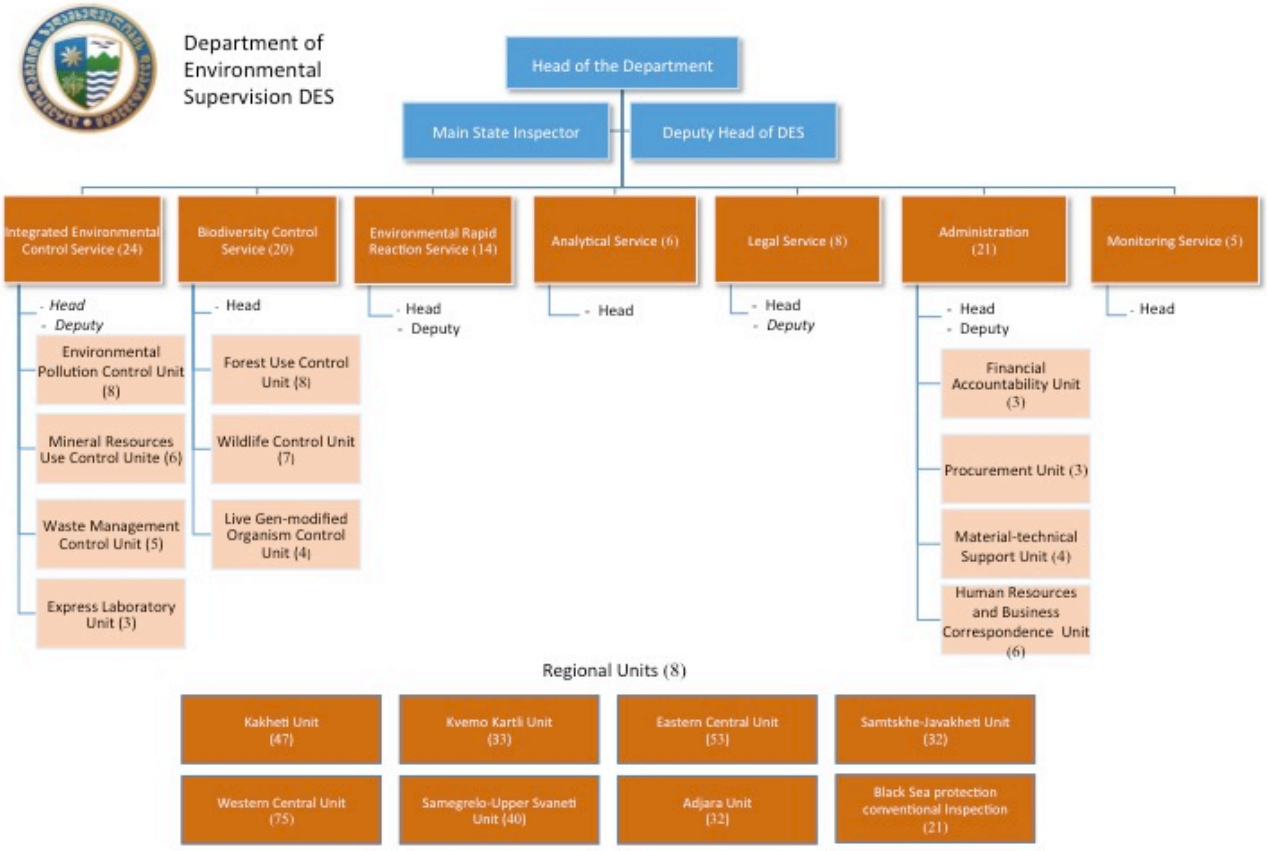
6. Organogram of Agency of Protected Areas



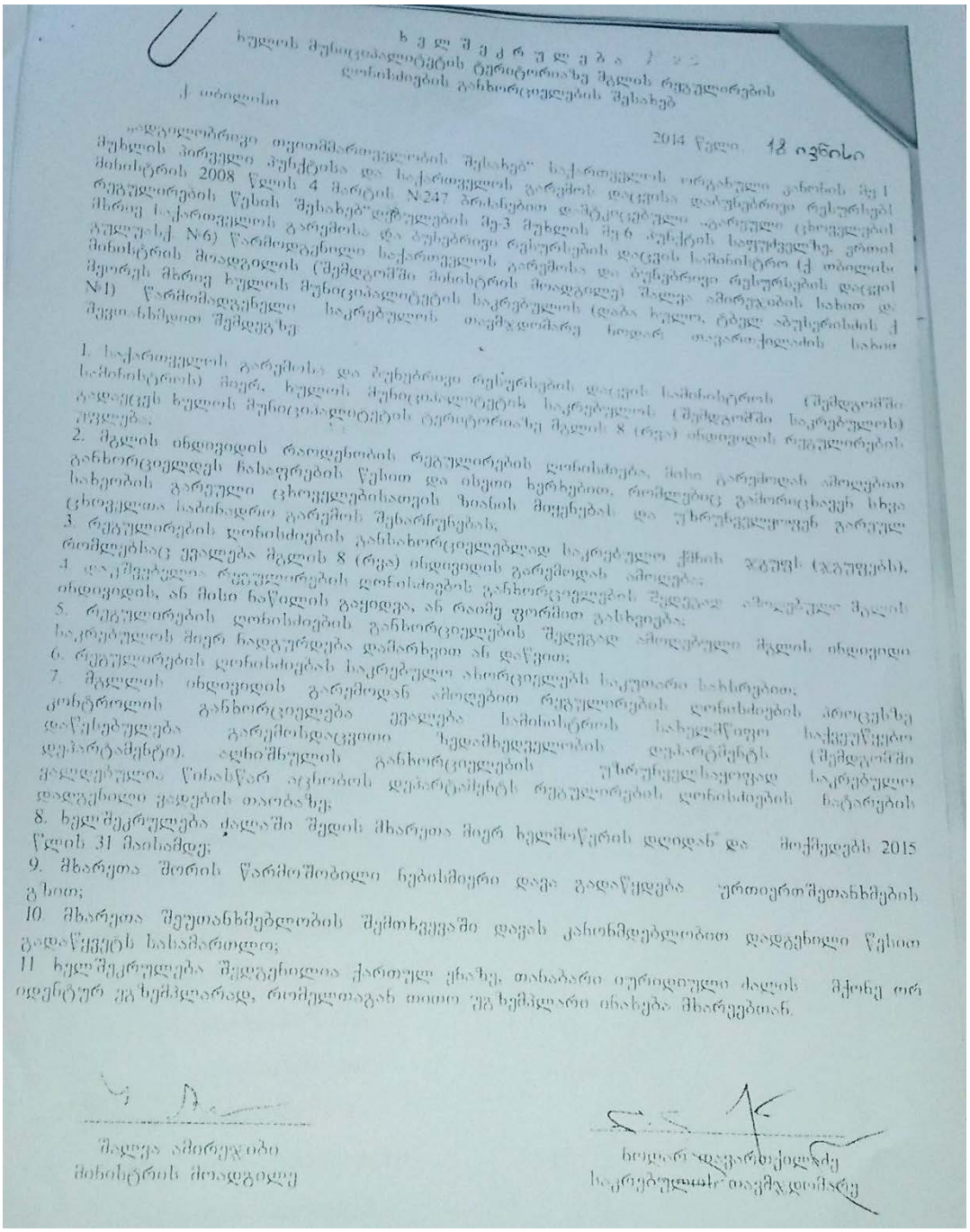
7. Organogram of National Forestry Agency



8. Organogram of the Department of Environmental Supervision



9. Agreement regarding the wolf regulation measurement implementation on the territory of Khulo Municipality



ხელშეკრულება

ხულოს მუნიციპალიტეტის ტერიტორიაზე მგლის რეგულირების
ღონისძიების განხორციელების შესახებ

ქ. ბათუმი

2014 წელი 18 ივნისი

ადგილობრივი თვითმმართველობის შესახებ" საქართველოს ორგანული კანონის მე-1 მუხლის პირველი პუნქტისა და საქართველოს გარემოს დაცვისა დაბუნებრივი რესურსებ მინისტრის 2008 წლის 4 მარტის N-247 ბრძანებით დამტკიცებული ცხოველებ რეგულირების წესის შესახებ"(დანართების მე-3 მუხლის მე-6 პუნქტის საფუძველზე, ერთ მხრივ საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტრო (ქ. ბათუმი ბულვარ№6) წარმოდგენილი საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტრო (ქ. ბათუმი მინისტრის მოადგილის (შემდგომში მინისტრის მოადგილე) შალვა ამირეჯიბის სახით და მეორეს მხრივ ხულოს მუნიციპალიტეტის საკრებულო (შემდგომში საკრებულო) N1) წარმომადგენელი საკრებულოს თავმჯდომარე ხოდაბერ თავართქილაძის სახით შეეთანხმეთ შემდეგზე:

1. საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტროს (შემდგომში სამინისტრო) მიერ, ხულოს მუნიციპალიტეტის საკრებულოს (შემდგომში საკრებულო) გადაეცეს ხულოს მუნიციპალიტეტის ტერიტორიაზე მგლის 8 (რვა) ინდივიდის რეგულირების უფლება;
2. მგლის ინდივიდის რაოდენობის რეგულირების ღონისძიება, მისი გარეშოდან ამოღებით განხორციელდეს ჩახაფრების წესით და ისეთი ხერხებით, რომლებიც გამორიცხავენ სხვა სახეობის გარეული ცხოველებისათვის ზიანის მიყენებას და უზრუნველყოფენ გარეულ ცხოველთა სამინისტრო გარემოს შენარჩუნებას;
3. რეგულირების ღონისძიების განსახორციელებლად საკრებულო ჭრის ჯგუფს (ჯგუფებს), რომლებსაც ევალება მგლის 8 (რვა) ინდივიდის გარემოდან ამოღება;
4. დაშვებული რეგულირების ღონისძიების განხორციელების შედეგად ამოღებული მგლის ინდივიდის, ან მისი ნაწილის გაყიდვა, ან რაიმე ფორმით გასხვისება;
5. რეგულირების ღონისძიების განხორციელების შედეგად ამოღებული მგლის ინდივიდი საკრებულოს მიერ ნადგურდება დამარხვით ან დაწვით;
6. რეგულირების ღონისძიების საკრებულო ახორციელებს საკუთარი ხარჯებით;
7. მგლის ინდივიდის გარემოდან ამოღებით რეგულირების ღონისძიების პროცესზე კონტროლის განხორციელება ევალება სამინისტროს სახელმწიფო საქვეუწყებო დაწესებულება გარემოსდაცვითი ზედამხედველობის დეპარტამენტს (შემდგომში დეპარტამენტი). ამხანშხულის განხორციელების უზრუნველსაყოფად საკრებულო ვალდებულია წინასწარ აცნობოს დეპარტამენტს რეგულირების ღონისძიების ჩატარების დაგეგმილი დროების თაობაზე;
8. ხელშეკრულება ძალაში შედის მხარეთა მიერ ხელმოწერის დღიდან და მოქმედებს 2015 წლის 31 მაისამდე;
9. მხარეთა შორის წარმოშობილი ნებისმიერი დავა გადაწყდება ურთიერთშეთანხმების გზით;
10. მხარეთა შეუთანხმებლობის შემთხვევაში დავას ქართულ კანონმდებლობით დადგენილი წესით გადაწყვეტს სასამართლო;
11. ხელშეკრულება შედგენილია ქართულ ენაზე, თანაბარი იურიდიული ძალის მქონე ორ იდენტურ ეგზემპლარად, რომელთაგან თითო ეგზემპლარი ინახება მხარეებთან.

შალვა ამირეჯიბი
მინისტრის მოადგილე

ხოდაბერ თავართქილაძე
საკრებულოს თავმჯდომარე

10. The order on the creation of Working Groups on livestock diseases monitoring and Disaster Risk Reduction

Keda Municipality Mayor order

ქედის მუნიციპალიტეტის გამგებლის

ბ რ ძ ა ნ ე ბ ა №01-08//24

2015 წლის 28 იანვარი

დაბა ქედა

პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის

შემცირების სამუშაო ჯგუფის შექმნის შესახებ

საქართველოს ორგანული კანონის - „ ადგილობრივი თვითმმართველობის კოდექსის" მე-16 მუხლის მე-2 პუნქტის „რ" ქვეპუნქტის მე-3 და მე-4 პუნქტების, 54-ე მუხლის პირველი პუნქტის „ ე, ვ "ქვეპუნქტის, სურსათის/ცხოველის საკვების უვნებლობის, ვეტერინარიისა და მცენარეთა დაცვის კოდექსის 22[1]-ე მუხლის, 55-ე მუხლის, საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის მინისტრის 2014 წლის 31 ოქტომბრის ბრძანება №146 „გარეულ ცხოველთა რეგულირების წესის შესახებ დებულების დამტკიცების თაობაზე" და არასამთავრობო ორგანიზაცია „მერსი ქორფსის მცირე კავკასიის ალიანსების პროგრამა - აჭარის" 2015 წლის 26 იანვრის №MC/LP/1478/15 სარეკომენდაციო წერილის თანახმად

ვ ბ რ ძ ა ნ ე ბ:

შეიქმნას პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფი შემდეგი შემადგენლობით:

ა) დავით დუმბაძე - ქედის მუნიციპალიტეტის გამგებელი - ჯგუფის ხელმძღვანელი;

ბ) მამუკა ფარტენაძე - ქედის მუნიციპალიტეტის გამგებლის მოადგილე - ჯგუფის ხელმძღვანელის მოადგილე;

გ) სულიკო ბოლქვაძე - ქედის მუნიციპალიტეტის გამგეობის ეკონომიკური განვითარების სამსახურის უფროსი - ჯგუფის წევრი;

დ) სულიკო სურმანიძე - ქედის მუნიციპალიტეტის გამგეობის ზედამხედველობის სამსახურის უფროსი - ჯგუფის წევრი;

ე) დავით თედორაძე - ქედის მუნიციპალიტეტის გამგეობის ჯანმრთელობისა და სოციალური დაცვის სამსახურის უფროსი - ჯგუფის წევრი;

ვ) ეკატერინე ქაჯაია-კომახიძე - ქედის მუნიციპალიტეტის გამგეობის განათლების, კულტურის, სპორტის, ტურიზმის, ძეგლთა დაცვისა და ახალგაზრდულ საკითხთა სამსახურის უფროსი - ჯგუფის წევრი;

ზ) სოფიო ხაბაზი - ქედის მუნიციპალიტეტის გამგეობის ადმინისტრაციული სამსახურის საზოგადოებასთან ურთიერთობის განყოფილების უფროსი - ჯგუფის წევრი;

თ) მერაბ ტაკიძე - ქედის მუნიციპალიტეტის გამგებლის თანაშემწე სოფლის მეურნეობის საკითხებში -ჯგუფის წევრი;

ი) გამგებლის წარმომადგენელი შესაბამის ადმინისტრაციულ ერთეულში;

კ) სამუშაო ჯგუფის მუშაობაში მონაწილეობის მიღება ეთხოვოს სსიპ - საგანგებო სიტუაციების მართვის სააგენტოს აჭარის ავტონომიური რესპუბლიკის საგანგებო მართვის მთავარი სამმართველოს ქედის სახანძრო-სამაშველო განყოფილებას, აჭარის სოფლის მეურნეობის სამინისტროს ქედის საინფორმაციო საკონსულტაციო სამსახურის წარმომადგენელს, სურსათის ეროვნული სააგენტოს ქედის მუნიციპალიტეტის სამსახურის წარმომადგენელს.

2. დამტკიცდეს პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები დანართი 1-ის შესაბამისად.

3. დაევალოს ქედის მუნიციპალიტეტის გამგეობის ადმინისტრაციული სამსახურის უფროსს ბადრი სურმანიძეს ბრძანების გაცნობა დაინტერესებულ პირებზე.

4. ბრძანება შეიძლება გასაჩივრდეს ხელვაჩაურის რაიონულ სასამართლოში ადმინისტრაციული აქტის გაცნობიდან ერთი თვის ვადაში (მის: ფრიდონ ხალვაშის გამზირი №358)

5. ბრძანება ძალაშია ხელმოწერისთანავე.

მუნიციპალიტეტის გამგებელი დავით დუმბაძე

დანართი 1

პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები:

1. პრევენციული ღონისძიებების დაგეგმვა და განხორციელება კატასტროფების რისკის შემცირების მიზნით.
2. მუნიციპალიტეტის გამგეობისათვის გამოყოფილი სპეციალური უფასო ნომრის (ცხელი ხაზის) მოსახლეობისათვის ინფორმაციის მიღება და შესაბამისი სამსახურების ინფორმირება.
3. მუნიციპალიტეტში პირუტყვის დაავადებათა აღრიცხავა და კონტროლი.
4. კარანტინის გამოცხადების შემთხვევეში საკარანტინო ღონისძიებების ეფექტურად ჩატარების ხელშეწყობა და კომპეტენციის ფარგლებში უზრუნველყოფა.
5. პირუტყვის დაავადებების და გარეული ცხოველების მიერ მიყენებული ზარალის დათვლა-აღრიცხვა.
6. ბუნებრივი კატასტროფების დროს სწრაფი რეაგირება. სახანძრო სამაშველო სამსახურის ინფორმირება და კომპეტენციის ფარგლებში დახმარების გაწევა.
7. კოორდინირებული მუშაობა შესაბამის საჯარო უწყებებთან, როგორიცაა სურსათის ეროვნული სააგენტო, გარემოს დაცვითი ზედამხედველობითი სამინისტრო, ტურიზმისა და კურორტების დეპარტამენტი და სხვა.
8. თვეში ერთხელ სამუშაო ჯგუფის შეხვედრის ჩატარება და შესაბამისი ოქმის/ანგარიშის მუნიციპალიტეტის გამგებლისათვის წარდგენა.

Kobuleti Municipality Mayor order

საქართველო

აჭარის ავტონომიური რესპუბლიკა

ქობულეთის მუნიციპალიტეტის გამგებლის

ბ რ ძ ა ნ ე ბ ა №01-06/66

2015 წლის 2 თებერვალი

ქ.ქობულეთი

პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის შექმნის შესახებ

საქართველოს ორგანული კანონის“ადგილობრივი თვითმართველობის კოდექსის”მე-16 მუხლის მე-2 პუნქტის ”რ” ქვეპუნქტის, მე-3 და მე-4 პუნქტების, 54-ე მუხლის პირველი პუნქტის “ე.ე” ქვეპუნქტის, სურსათის/ ცხოველის საკვების უვნებლობის, ვეტერინარიისა და მცენარეთა დაცვის კოდექსის 22^1 მუხლის, 55-ე მუხლის, საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის მინისტრის ბრძანება №146 2014 წლის 31 ოქტომბერი გარეულ ცხოველთა რეგულირების წესის შესახებ დებულების დამტკიცების თაობაზე და მცირე კავკასიის ალიანსების პროგრამა- აჭარა”მერსი ქორფსის” 2015 წლის 26 იანვრის №MC/LP/1476/15 სარეკომენდაციო წერილის თანახმად **ვბრძანებ:**

1. შეიქმნას პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფი შემდეგი შემადგენლობით:

ა) რატი მეგრელიძე- ქობულეთის მუნიციპალიტეტის გამგებლის მოადგილე-ჯგუფის ხელმძღვანელი;

ბ) ასლან ქათამაძე- ქობულეთის მუნიციპალიტეტის არქიტექტურისა და სივრცითი მოწყობის სამსახურის უფროსი-ჯგუფის წევრი;

გ) ზაზა კაიკაციშვილი-ეკონომიკის, ინფრასტრუქტურისა და საინვესტიციო განვითარების სამსახურის უფროსის მ/შ-ჯგუფის წევრი;

დ) დავით ართმელაძე – გამგეობის ქონების მართვისა და სოფლის განვითარების სამსახურის უფროსი-ჯგუფის წევრი;

ე) თამაზ ჯაფარიძე - გამგეობის ქონების მართვისა და სოფლის განვითარების სამსახურის სამსახურის სოფლის განვითარების განყოფილების მტავარი სპეციალისტი-ჯგუფის წევრი;

ვ) ხათუნა მამასახლისი – ჯანმთელობისა და სოციალური დაცვის სამსახურის უფროსი-ჯგუფის წევრი;

ზ) სალომე ბასილაძე – ადმინისტრაციული სამსახურის მთავარი სპეციალისტ საზოგადოებასთან ურთიერთობის საკითხებში-ჯგუფის წევრი;

თ) ზვიადი ცენტერაძე-ქობულეთის მუნიციპალიტეტის გამგეობის ზედამხედველობის სამსახურის წამყვანი სპეციალისტი-ჯგუფის წევრი-ჯგუფის წევრი;

ი) სამუშაო ჯგუფის მუშაობაში მონაწილეობის მიღება ეთხოვოს სსიპ-საგანგებო სიტუაციების მართვის სააგენტოს აჭარის ა.რ. საგანგებო მართვის მთავარი სამმართველოს ქ. ქობულეთის სახანძრო-სამაშველო განყოფილებას, აჭარის სოფლის მეურნეობის სამინისტროს ქობულეთის საინფორმაციო-საკონსულტაციო სამსახურის წარმომადგენელს, სურსათის ეროვნული სააგენტოს ქობულეთის მუნიციპალიტეტის წარმომადგენელს, სსიპ აჭარის სატყეოს სააგენტოს ქობულეთის სატყეო ადმინისტრაციას.

2. დამტკიცდეს პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები დანართი I-ის შესაბამისად.

3. დაევალოს გამგეობის ადმინისტრაციულ სამსახურს (გ.გოგიტიძე) ბრძანების გაცნობა დაინტერესებულ პირებზე.

4. ბრძანება შეიძლება გასაჩივრდეს ბათუმის საქალაქო სასამართლოში გაცნობიდან ერთი თვის ვადაში (მის: ბათუმი. ზუბალაშვილის ქუჩა №30).

5. ბრძანება ძალაშია ხელმოწერისთანავე.

გამგებელი: სულხან ეგეგნიძე

დანართი 1

პირუტყვის დაავადების მონიტორინგისა და კატასტროფის რისკის

შემცირების სამუშაო ჯგუფის ფუნქციები:

1.პრევენციული ღონისძიებების დაგეგმვა და განხორციელება კატასტროფების რისკის შემცირების მიზნით;

2.მუნიციპალიტეტის გამგეობისთვის გამოყოფილი სპეციალური უფასო ნომრის (ცხელი ხაზი) მეშვეობით მოსახლეობისაგან ინფორმაციის მიღება და შესაბამისი სამსახურების ინფორმირება.

3.მუნიციპალიტეტში პირუტყვის დაავადებათა აღრიცხვა და კონტროლი.

4.კარანტინის გამოცხადების შემთხვევაში საკარანტინო ღონისძიებების ეფექტურად ჩატარების ხელშეწყობა და კომპეტენციის ფარგლებში უზრუნველყოფა.

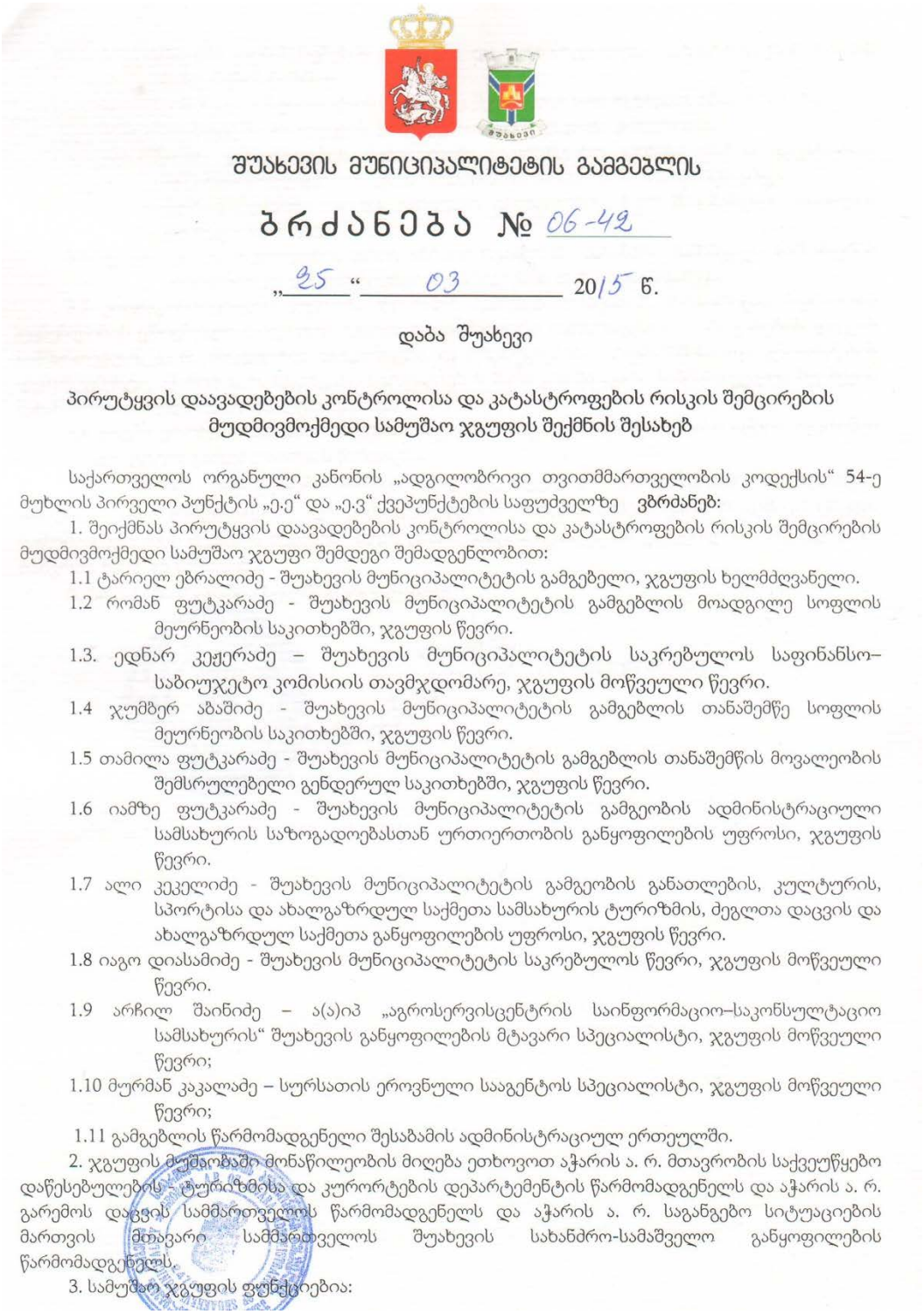
5.პირუტყვის დაავადებისა და გარეული ცხოველების მიერ მიყენებული ზარალის დათვლა აღრიცხვა.

6.ბუნებრივი კატასტროფების დროს სწრაფი რეაგირება,სახანძრო სამაშველო სამსახურის ინფორმირება და კომპეტენციის ფარგლებში დახმარების გაწევა.

7.კოორდინირებული მუშაობა შესაბამის საჯარო უწყებებთან,როგორიცაა სურსათის ეროვნული სააგენტო, გარემოსდაცვითი ზედამხედველობის სამინისტრო, ტურიზმისა და კურორტების დეპარტამენტი და სხვა.

8.თვეში ერთხელ სამუშაო ჯგუფის შეხვედრის ჩატარება და შესაბამისი ოქმის/ანგარიშის მუნიციპალიტეტის გამგებლისათვის წარდგენა.

Shuakhevi Municipality Mayor order



შუახევის მუნიციპალიტეტის გამგებლის

ბრძანება № 06-42

„25“ 03 2015 წ.

დაბა შუახევი

პირუტყვის დაავადებების კონტროლისა და კატასტროფების რისკის შემცირების მუდმივმოქმედი სამუშაო ჯგუფის შექმნის შესახებ

საქართველოს ორგანული კანონის „ადგილობრივი თვითმმართველობის კოდექსის“ 54-ე მუხლის პირველი პუნქტის „ე.ე“ და „ე.ვ“ ქვეპუნქტების საფუძველზე **ვბრძანებ:**

1. შეიქმნას პირუტყვის დაავადებების კონტროლისა და კატასტროფების რისკის შემცირების მუდმივმოქმედი სამუშაო ჯგუფი შემდეგი შემადგენლობით:

1.1 ტარიელ ებრალიძე - შუახევის მუნიციპალიტეტის გამგებელი, ჯგუფის ხელმძღვანელი.

1.2 რომან ფუტკარაძე - შუახევის მუნიციპალიტეტის გამგებლის მოადგილე სოფლის მეურნეობის საკითხებში, ჯგუფის წევრი.

1.3. ედნარ კეჟერაძე – შუახევის მუნიციპალიტეტის საკრებულოს საფინანსო–საბიუჯეტო კომისიის თავმჯდომარე, ჯგუფის მოწვეული წევრი.

1.4 ჯუმბერ აბაშიძე - შუახევის მუნიციპალიტეტის გამგებლის თანაშემწე სოფლის მეურნეობის საკითხებში, ჯგუფის წევრი.

1.5 თამილა ფუტკარაძე - შუახევის მუნიციპალიტეტის გამგებლის თანაშემწის მოვალეობის შემსრულებელი გენდერულ საკითხებში, ჯგუფის წევრი.

1.6 იამზე ფუტკარაძე - შუახევის მუნიციპალიტეტის გამგეობის ადმინისტრაციული სამსახურის საზოგადოებასთან ურთიერთობის განყოფილების უფროსი, ჯგუფის წევრი.

1.7 ალი კეკელიძე - შუახევის მუნიციპალიტეტის გამგეობის განათლების, კულტურის, სპორტისა და ახალგაზრდულ საქმეთა სამსახურის ტურიზმის, ძეგლთა დაცვის და ახალგაზრდულ საქმეთა განყოფილების უფროსი, ჯგუფის წევრი.

1.8 იაგო დიასამიძე - შუახევის მუნიციპალიტეტის საკრებულოს წევრი, ჯგუფის მოწვეული წევრი.

1.9 არჩილ შაინიძე – ა(ა)იპ „აგროსერვისცენტრის საინფორმაციო–საკონსულტაციო სამსახურის“ შუახევის განყოფილების მტავარი სპეციალისტი, ჯგუფის მოწვეული წევრი;

1.10 მურმან კაკალაძე – სურსათის ეროვნული სააგენტოს სპეციალისტი, ჯგუფის მოწვეული წევრი;

1.11 გამგებლის წარმომადგენელი შესაბამის ადმინისტრაციულ ერთეულში.

2. ჯგუფის მუშაობაში მონაწილეობის მიღება ეთხოვოთ აჭარის ა. რ. მთავრობის საქვეუწყებო დაწესებულების - ტურიზმისა და კურორტების დეპარტამენტის წარმომადგენელს და აჭარის ა. რ. გარემოს დაცვის სამმართველოს წარმომადგენელს და აჭარის ა. რ. საგანგებო სიტუაციების მართვის მთავარი სამმართველოს შუახევის სახანძრო-სამაშველო განყოფილების წარმომადგენელს.

3. სამუშაო ჯგუფის ფუნქციებია:

3.1 პრევენციული ღონისძიებების დაგეგმვა და განხორციელება კატასტროფების რისკის შემცირების მიზნით.

3.2 მოსახლეობისაგან ინფორმაციის მიღება და შესაბამისი სამსახურების ინფორმირება.

3.3 მუნიციპალიტეტში პირუტყვის დაავადებათა აღრიცხვა და კონტროლი.

3.4 კარანტინის გამოცხადების შემთხვევაში საკარანტინო ღონისძიებების ეფექტურად ჩატარების ხელშეწყობა და კომპეტენციის ფარგლებში უზრუნველყოფა.

3.5 პირუტყვის დაავადებებისა და გარეული ცხოველების მიერ მიყენებული ზარალის დათვლა-აღრიცხვა.

3.6 ბუნებრივი კატასტროფების დროს სწრაფი რეაგირება, სახანძრო სამაშველო სამსახურის ინფორმირება და კომპეტენციის ფარგლებში დახმარების გაწევა.

3.7 კოორდინირებული მუშაობა შესაბამის დაწესებულებებთან, როგორიცაა: სურსათის უვნებლობის ეროვნული სააგენტოს აჭარის რეგიონალური სამმართველო, ა. რ. გარემოს დაცვის სამმართველო, ა. რ. მთავრობის საქვეუწყებო დაწესებულების - ტურიზმისა და კურორტების დეპარტემენტი, აჭარის ა. რ. საგანგებო სიტუაციების მართვის მთავარი სამმართველოს შუახევის სახანძრო-სამაშველო განყოფილება და სხვა.

3.8 თვეში ერთხელ სამუშაო ჯგუფის შეხვედრის ჩატარება და შესაბამისი ოქმის/ანგარიშის მუნიციპალიტეტის გამგებლისთვის წარდგენა.

4. ბრძანების ამოქმედებისთანავე ძალადაკარგულად გამოცხადდეს „პირუტყვის დაავადებების კონტროლისა და კატასტროფების რისკის შემცირების მუდმივმოქმედი სამუშაო ჯგუფის შექმნის შესახებ“ შუახევის მუნიციპალიტეტის გამგებლის 2015 წლის 29 იანვრის №06-15 ბრძანება.

5. ბრძანება ძალაშია ხელმოწერისთანავე.

გამგებელი ტარიელ ებრალიძე

Khelvachauri Municipality Mayor order

ხელვაჩაურის მუნიციპალიტეტის გამგებლის

ბ რ ძ ა ნ ე ბ ა № 01-08/140

ქალაქი ბათუმი „28“ 01 2015წ

პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის შექმნის შესახებ

საქართველოს ორგანული კანონის - „ადგილობრივი თვითმმართველობის კოდექსის“ 16-ე მუხლის მე-2 პუნქტის „რ“ ქვეპუნქტის, 3-ე და 4-ე პუნქტების, 54-ე მუხლის პირველი პუნქტის „ე.ვ“ ქვეპუნქტის, სურსათის/ცხოველის საკვების უვნებლობის, ვეტერინარიისა და მცენარეთა დაცვის კოდექსის 22^1 მუხლის, 55-ე მუხლის, საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის მინისტრის ბრძანება №146 2014 წლის 31 ოქტომბერი გარეულ ცხოველთა რეგულირების წესის შესახებ დებულების დამტკიცების თაობაზე და მცირე კავკასიის ალიანსების პროგრამა - აჭარა „მერსი ქორფსის“ 2015 წლის 26 იანვრის №MC/LP/1477/15 სარეკომენდაციო წერილის თანახმად **ვბრძანებ:**

1. შეიქმნას პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფი შემდეგი შემადგენლობით:

ა) ანზორ ფერცელიძე - ხელვაჩურის მუნიციპალიტეტის გამგებლის მოადგილე - ჯგუფის ხელმძღვანელი;

ბ) მირიან კვირიტიძე - ხელვაჩურის მუნიციპალიტეტის გამგეობის ინფრასტრუქტურის, არქიტექტურისა და ზედამხედველობის სამსახურის უფროსი - ჯგუფის წევრი;

გ) სოფიო მურვანიძე - ხელვაჩურის მუნიციპალიტეტის გამგეობის ჯანმრთელობისა და სოციალური დაცვის სამსახურის უფროსი - ჯგუფის წევრი;

გ) ქეთევან დევაძე - ხელვაჩურის მუნიციპალიტეტის გამგეობის განათლების, კულტურის, სპორტის, ტურიზმის, ძეგლთა დაცვისა და ახალგაზრდულ საქმეთა სამსახურის უფროსი - ჯგუფის წევრი;

დ) გიორგი ქურიძე - ხელვაჩაურის მუნიციპალიტეტის გამგეობის ინფრასტრუქტურის, არქიტექტურისა და ზედამხედველობის სამსახურის ზედამხედველობის განყოფილების უფროსი - ჯგუფის წევრი;

ე) რეზო ვარშანიძე - ხელვაჩაურის მუნიციპალიტეტის გამგეობის სოფლის მეურნეობისა და ბუნებრივი რესურსებით სარგებლობის განყოფილების უფროსის მოვალეობის შემსრულებელი - ჯგუფის წევრი;

ვ) გია თედორაძე - ხელვაჩაურის მუნიციპალიტეტის გამგეობის ადმინისტრაციული სამსახურის საზოგადოებასთან ურთიერთობის განყოფილების უფროსი - ჯგუფის წევრი;

ზ) გამგებლის წარმომადგენელი შესაბამის ადმინისტრაციულ ერთეულში;

თ) სამუშაო ჯგუფის მუშაობაში მონაწილეობის მიღება ეთხოვოს სსიპ - საგანგებო სიტუაციების მართვის სააგენტოს აჭარის ა.რ. საგანგებო მართვის მთავარი სამმართველოს ქ. ხელვაჩაურის სახანძრო-სამაშველო განყოფილებას, აჭარის სოფლის მეურნეობის სამინისტროს ხელვაჩაურის საინფორმაციო-საკონსულტაციო სამსახურის წარმომადგენელს, სურსათის ეროვნული სააგენტოს ხელვაჩაურის მუნიციპალიტეტის წარმომადგენელს.

2. დამტკიცდეს პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები დანართი 1-ის შესაბამისად.

3. დაევალოს გამგეობის ადმინისტრაციულ სამსახურს (ზ. ხალვაში) ბრძანების გაცნობა დაინტერესებულ პირებზე.

4. ბრძანება შეიძლება გასაჩივრდეს ხელვაჩაურის რაიონულ სასამართლოში ადმინისტრაციული აქტის გაცნობიდან ერთი თვის ვადაში (მისამართი: ფრიდონ ხალვაშის გამზირი №358).

5. ბრძანება ძალაშია ხელმოწერისთანავე.

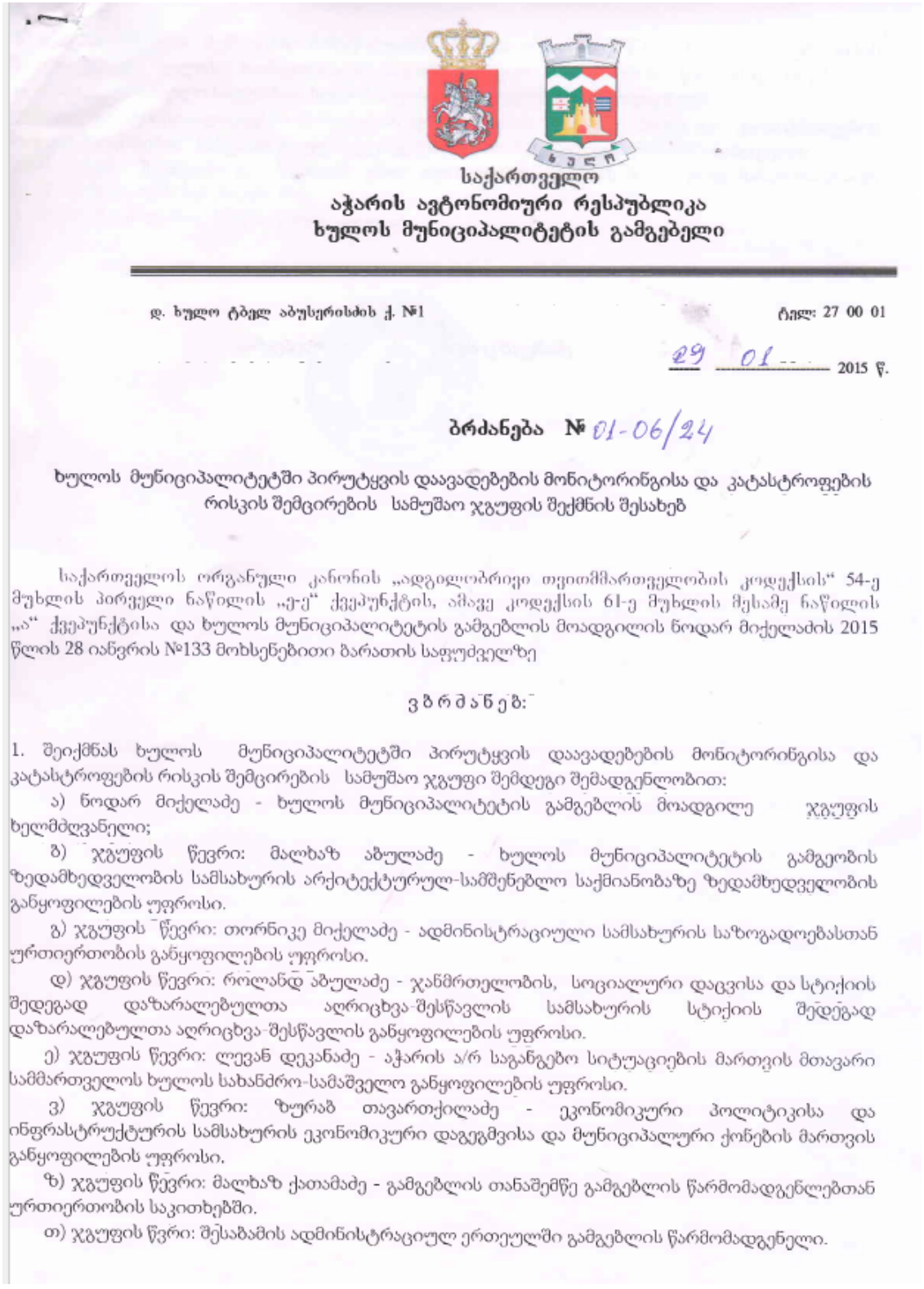
ხელვაჩაურის მუნიციპალიტეტის გამგებელი ნადიმ ვარშანიძე

დანართი 1

პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები:

1. პრევენციული ღონისძიებების დაგეგმვა და განხორციელება კატასტროფების რისკის შემცირების მიზნით;
2. მუნიციპალიტეტის გამგეობისათვის გამოყოფილი სპეციალური უფასო ნომრის (ცხელი ხაზი) მეშვეობით მოსახლეობისაგან ინფორმაციის მიღება და შესაბამისი სამსახურების ინფორმირება.
3. მუნიციპალიტეტში პირუტყვის დაავადებათა აღრიცხვა და კონტროლი.
4. კარანტინის გამოცხადების შემთხვევაში საკარანტინო ღონისძიებების ეფექტურად ჩატარების ხელშეწყობა და კომპეტენციის ფარგლებში უზრუნველყოფა.
5. პირუტყვის დაავადებებისა და გარეული ცხოველების მიერ მიყენებული ზარალის დათვლა-აღრიცხვა.
6. ბუნებრივი კატასტროფების დროს სწრაფი რეაგირება, სახანძრო სამაშველო სამსახურის ინფორმირება და კომპეტენციის ფარგლებში დახმარების გაწევა.
7. კოორდინირებული მუშაობა შესაბამის საჯარო უწყებებთან, როგორიცაა სურსათის ეროვნული სააგენტო, გარემოსდაცვითი ზედამხედველობის სამინისტრო, ტურიზმისა და კურორტების დეპარტამენტი და სხვა.
8. თვეში ერთელ სამუშაო ჯგუფის შეხვედრის ჩატარება და შესაბამისი ოქმის/ანგარიშის მუნიციპალიტეტის გამგებლისათვის წარდგენა.

Khulo Municipality Mayor order



საქართველო
აჭარის ავტონომიური რესპუბლიკა
ხულოს მუნიციპალიტეტის გამგებელი

ქ. ხულო ტბელ აბუსერისძის ქ. №1 ტელ: 27 00 01

29 01 2015 წ.

ბრძანება № 01-06/24

ხულოს მუნიციპალიტეტში პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის შექმნის შესახებ

საქართველოს ორგანული კანონის „ადგილობრივი თვითმმართველობის კოდექსის“ 54-ე მუხლის პირველი ნაწილის „ე“ ქვეპუნქტის, ამავე კოდექსის 61-ე მუხლის მესამე ნაწილის „ა“ ქვეპუნქტისა და ხულოს მუნიციპალიტეტის გამგებლის მოადგილის ნოდარ მიქელაძის 2015 წლის 28 იანვრის №133 მოხსენებითი ბარათის საფუძველზე

ვ ბ რ ძ ა ნ ე ბ:

1. შეიქმნას ხულოს მუნიციპალიტეტში პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფი შემდეგი შემადგენლობით:

ა) ნოდარ მიქელაძე - ხულოს მუნიციპალიტეტის გამგებლის მოადგილე ჯგუფის ხელმძღვანელი;

ბ) ჯგუფის წევრი: მალხაზ აბულაძე - ხულოს მუნიციპალიტეტის გამგეობის ზედამხედველობის სამსახურის არქიტექტურულ-სამშენებლო საქმიანობაზე ზედამხედველობის განყოფილების უფროსი.

გ) ჯგუფის წევრი: თორნიკე მიქელაძე - ადმინისტრაციული სამსახურის საზოგადოებასთან ურთიერთობის განყოფილების უფროსი.

დ) ჯგუფის წევრი: რომანოზ აბულაძე - ჯანმრთელობის, სოციალური დაცვისა და სტიქიის შედეგად დაზარალებულთა აღრიცხვა-შესწავლის სამსახურის სტიქიის შედეგად დაზარალებულთა აღრიცხვა-შესწავლის განყოფილების უფროსი.

ე) ჯგუფის წევრი: ლევან დეკანაძე - აჭარის ა/რ საგანგებო სიტუაციების მართვის მთავარი სამმართველოს ხულოს სახანძრო-სამაშველო განყოფილების უფროსი.

ვ) ჯგუფის წევრი: ზურაბ თავართქილაძე - ეკონომიკური პოლიტიკისა და ინფრასტრუქტურის სამსახურის ეკონომიკური დაგეგმვისა და მუნიციპალური ქონების მართვის განყოფილების უფროსი.

ზ) ჯგუფის წევრი: მალხაზ ქათამაძე - გამგებლის თანაშემწე გამგებლის წარმომადგენლებთან ურთიერთობის საკითხებში.

თ) ჯგუფის წევრი: შესაბამის ადმინისტრაციულ ერთეულში გამგებლის წარმომადგენელი.

...მუშაო ჯგუფის მუშაობაში მონაწილეობის მიღება ეთხოვოს აჭარის სოფლის მეურნეობის ...მინისტროს ხულოს საინფორმაციო-საკონსულტაციო სამსახურის წარმომადგენელს და სურსათის ეროვნული სააგენტოს ხულოს მუნიციპალიტეტის წარმომადგენელს.

3. ხულოს მუნიციპალიტეტში პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები განისაზღვროს დანართი №1 მიხედვით.

4. ბრძანება შეიძლება გასაჩივრდეს ერთი თვის ვადაში ხულოს მაგისტრატ სასამართლოში (დაბა ხულო აღმაშენებლის №5)

5. ბრძანება ძალაშია ხელმოწერის დღიდან.

გამგებელი ბესიკ ბაუჩაძე

„დამტკიცებულია"
ხულოს მუნიციპალიტეტის გამგებლის
2015 წლის 29 იანვრის
№ 01-06/24
ბრძანებით

ხულოს მუნიციპალიტეტში პირუტყვის დაავადებების მონიტორინგისა და კატასტროფების რისკის შემცირების სამუშაო ჯგუფის ფუნქციები

1) პრევენციული ღონისძიებების დაგეგმვა და განხორციელება კატასტროფების რისკის შემცირების მიზნით;
2) მუნიციპალიტეტის გამგეობისთვის გამოყოფილი სპეციალური უფასო ნომრის (ცხელი ხაზი) მეშვეობით მოსახლეობისგან ინფორმაციის მიღება და შესაბამისი სამსახურების ინფორმირება.
3) მუნიციპალიტეტში პირუტყვის დაავადებათა აღრიცხვა და კონტროლო.
4) კარანტინის გამოცხადების შემთხვევაში საკარანტინო ღონისძიებების ეფექტურად ჩატარების ხელშეწყობა და კომპეტენციის ფარგლებში უზრუნველყოფა.
5) პირუტყვის დაავადებებისა და გარეული ცხოველების მიერ მიყენებული ზარალის დათვლა-აღრიცხვა.
6) ბუნებრივი კატასტროფების დროს სწრაფი რეაგირება, სახანძრო სამაშველო სამსახურის ინფორმირება და კომპეტენციის ფარგლებში დახმარების გაწევა.
7) კოორდინირებული მუშაობა შესაბამის საჯარო უწყებებთან, როგორიცაა სურსათის ეროვნული სააგენტოს , გარემოსდაცვითი ზედამხედველობის სამინისტრო, ტურიზმისა და კურორტების დეპარტამენტი და სხვა.
8) სტიქიური მოვლენების მიერ მიყენებული ზარალის დათვლა– აღრიცხვა.
9) თვეში ერთხელ სამუშაო ჯგუფის შეხვედრის ჩატარება და შესაბამისი ოქმის/ანგარიშის ხულოს მუნიციპალიტეტის გამგებლისათვის წარდგენა.
10) სამუშაო ჯგუფი ანგარიშვალდებულია ხულოს მუნიციპალიტეტის გამგებლის წინაშე.

11. The information gathered on central level

The official letter to the Ministry of Environment and Natural Resources Protection (MoENR)

№ 0-02-02

საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის მინისტრს,
ბატონ გიგლა აგულაშვილი

მისამართი: 0114 თბილისი, გ. გულუას ქ. # 6

3 ივნისი, 2015

საკითხი: მონაცემების მოთხოვნა „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევასთან" დაკავშირებით

ბატონო გიგლა,

მოგახსენებთ, რომ ორგანიზაცია შავი ზღვის ეკოაკადემია, ALCP პროგრამის ფარგლებში ახორციელებს „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევას აჭარის ავტონომიურ რესპუბლიკაში".

პროგრამის ძირითადი მიზანია რეგიონის მდგრადი განვითარების ხელშეწყობა, კვლევა კი ემსახურება ადამიანის საქმიანობასა (კერძოდ, სოფლის მეურნეობის პროდუქციის წარმოება) და გარეული ცხოველებს შორის კონფლიქტების მიზეზების გამოვლენას, ამ კონფლიქტების შემცირების, აღმოფხვრის გზებისა და თანაარსებობის შესაძლებლობების პოვნას.

გთხოვთ, მოგვაწოდოთ საჯარო ინფორმაცია:

1. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე საქართველოს ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა"-ების შესახებ, წლების მიხედვით, გარეული სახეობების მითითებით, მათ შორის საქართველოს წითელ ნუსხაში შესული სახეობების;
2. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე აჭარის ავტონომიური რესპუბლიკის ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა"-ების შესახებ, წლების მიხედვით, გარეული სახეობების მითითებით, მათ შორის საქართველოს წითელ ნუსხაში შესული სახეობები.;
3. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე საქართველოს ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა"-ების შედეგად გარემოდან ამოღებული გარეული ცხოველების რაოდენობის შესახებ (წლების და სახეობების მითითებით).
4. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე აჭარის ავტონომიური რესპუბლიკის ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა"-ების შედეგად გარემოდან ამოღებული გარეული ცხოველების რაოდენობის შესახებ (წლების და სახეობების მითითებით).
5. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში საქართველოს გარემოსა და ბუნებრივი რესურსების სამინისტროში მუნიციპალიტეტებიდან შემოსული განცხადების „გარეულ ცხოველთა რეგულირების ღონისძიების თაობაზე" რაოდენობის შესახებ, მუნიციპალიტეტების და წლების მიხედვით.
6. საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის მინისტრის 2014 წლის 31 ოქტომბრის N146 ბრძანებით „გარეულ ცხოველთა რეგულირების წესის შესახებ დებულების დამტკიცების თაობაზე" დამტკიცებული „დებულება გარეულ ცხოველთა რეგულირების შესახებ"-ის მე-3 მუხლის მე-2 პუნქტის მოთხოვნათა შესაბამისად ინფორმაცია: 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში გარემოსდაცითი ზედამხედველობის დეპარტამენში შესული ინფორმაცია გარემოდან გარეული ცხოველის ამოღების შესახებ, მუნიციპალიტეტის, ცხოველის სახეობის და წლების მითითებით.
7. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში საქართველოს გარემოსა და ბუნებრივი რესურსების სამინისტროს მიერ გარეული ცხოველების უკანონოდ მოპოვების ფაქტების გამოვლენის შესახებ, ცხოველის სხეობის, მუნიციპალიტეტის და წლების მითითებით.
8. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში საქართველოს გარემოსა და ბუნებრივი რესურსების სამინისტროს მიერ ნადირობის წესების დარღვევის, მათ შორის იარაღისით უკანონო შესვლა გადაადგილების ფაქტების გამოვლენის შესახებ, მუნიციპალიტეტის, დაული ტერიტორიის და წლების მითითებით.
9. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში გარეული ცხოველის მიერ ადამიანზე და შინაურ პირიტყვზე თავდასხმების შესახებ, მუნიციპალიტეტის, გარეული ცხოველის სახეობის და წლების მითითებით.
10. ინფორმაცია მსხვილი ძუძუმწოვრების (მტაცებლები და ჩლიქოსნები) რიცხოვნობის შესახებ საქართველოს მაშტაბით 2010 წლდან – 2015 წლამდე მონაცემები წლების მიხდევით.
11. ინფორმაცია მსხვილი ძუძუმწოვრების (მტაცებლები და ჩლიქოსნები) რიცხოვნობის შესახებ აჭარის ავტონომიური რესპუბლიკისათვის 2010 წლდან – 2015 წლამდე მონაცემები წლების მიხდევით.
12. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში გარეული ცხოველის მიერ ადამიანზე და შინაურ პირიტყვზე თავდასხმების შემდეგ გაწეული საკომპენსაციო ღონისძიებების შესახებ, ასეთის არსებობის შემთხვევაში.

The official letter to the National Food Agency (NFA) of the Ministry of Agriculture (MoA)

N: O-02-04

საქართველოს სოფლის მეურნეობის
სამინისტროს, სურსათის ეროვნული
სააგენტოს უფროსს, ბატონ ზაზა დოლიძეს

მისამართი: 0159 თბილისი, მარშალ
გელოვანის გამზირი #6

3 ივნისი, 2015

საკითხი: მონაცემების მოთხოვნა „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევასთან” დაკავშირებით

ბატონო ზაზა,

მოგახსენებთ, რომ ორგანიზაცია შავი ზღვის ეკოაკადემიას, ALCP პროგრამის ფარგლებში ახორციელებს „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევას აჭარის ავტონომირ რესპუბლიკაში“.

პროგრამის ძირითადი მიზანია რეგიონის მდგრადი განვითარების ხელშეწყობა, კვლევა კი ემსახურება ადამიანის საქმიანობასა (კერძოდ, სოფლის მეურნეობის პროდუქციის წარმოება) და გარეული ცხოველებს შორის კონფლიქტების მიზეზების გამოვლენას, ამ კონფლიქტების შემცირების, აღმოფხვრის გზებისა და თანაარსებობის შესაძლებლობების პოვნას.

გთხოვთ, მოგვაწოდოთ შემდეგი ინფორმაცია მუნიციპალიტეტების (ადმინისტრაციული ერთეულების /სოფლების) მიხედვითა და წლების მითითებით:

1. ინფომაცია და სტატისტიკა ადამიანებზე, შინაურ პირუტყვზე და ადამიანების საქმიანობაზე გარეული ცხოველების თავდასხმის შემთხვევებზე 2010 – 2015 წწ.. პერიოდისათვის წლების, მუნიციპალიტეტის და გერეული ცხოველის სახეობის მითითებით;
2. მოსახლეობისგან შემოსული გარეულ ცხოველთა თავდასხმასთან დაკავშრებული შეტყობინებებისა და ცოფის შემთხვევების სტატისტიკა 2010 – 2015 წწ.. პერიოდისათვის წლების, მუნიციპალიტეტის და გერეული ცხოველის სახეობის მითითებით;
3. მოქალაქეების სატელეფონო ზარებით შეგროვებული ინფორმაციის ყოველწლიური ანგარიშები 2010 – 2015 წწ.. პერიოდისათვის წლების, მუნიციპალიტეტის და გერეული ცხოველის სახეობის მითითებით;
4. საქართველოს მთავრობის 2013 წლის N433 დადგენილების „ტექნიკური რეგლამენტი ეპიზოოტიური, ზოონოზური, ზოოანთროპონოზური სნეულებების აღმძვრელით დაინფიცირებული და ადამიანისათვის საკვებად უვარგისად მიჩნეული მეცხოველეობის ნედლეულისა და პროდუქტების, ვეტერინარული დანიშნულების ბიოლოგიური და ყველა სახის ქიმიურ-ფარმაცევტული პრეპარატების ამოღებისა და განადგურების წესის“ დამტკიცების შესახებ, რეგლამენტის მე-2 მუხლის პირველი პუნქტის „ა“ ქვეპუნქტის შესაბამისად ინფორმაცია გარეული ცხოველების განადგურების შესახებ (ასეთის არსებობის შემთხვევაში) 2010 – 2015 წწ.. პერიოდისათვის წლების, მუნიციპალიტეტის და გარეული ცხოველის სახეობის მითითებით;

დამატებითი ინფორმაციისთვის, დაგვიკავშრდეთ შემდეგ ელექტრონულ ფოსტაზე: sophio.tskhvariashvili@envdevelopment.org ან ტელეფონზე: 598 219 919

წინასწარ დიდი მადლობა თანამშრომლობისათვის.

პატივისცემით,
სოფიო ცხვარიაშვილი,

პროექტის კოორდინატორი

The official letter to the National Center for Disease Control and Public Health (NCDC) of Ministry of Labor, Health and Social Affairs (MoLSHA)

საქართველოს შრომის, ჯანმრთელობისა და სოციალური დაცვის სამინისტროს, დაავადებათა კონტროლისა და საზოგადოებრივი ჯანმრთელობის ეროვნული ცენტრის გენერალური დირექტორს, **ბატონ ამირან გამყრელიძეს**

N: O-02-03

მისამართი: 0186 თბილისი, მ. ასათიანის 9

3 ივნისი, 2015

საკითხი: მონაცემების მოთხოვნა „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევასთან დაკავშირებით"

ბატონო ამირან,

მოგახსენებთ, რომ ორგანიზაცია შავი ზღვის ეკოაკადემია, ALCP პროგრამის ფარგლებში ახორციელებს „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევას აჭარის ავტონომირ რესპუბლიკაში".

პროგრამის ძირითადი მიზანია რეგიონის მდგრადი განვითარების ხელშეწყობა, კვლევა კი ემსახურება ადამიანის საქმიანობასა (კერძოდ, სოფლის მეურნეობის პროდუქციის წარმოება) და გარეული ცხოველებს შორის კონფლიქტების მიზეზების გამოვლენას, ამ კონფლიქტების შემცირების, აღმოფხვრის გზებისა და თანაარსებობის შესაძლებლობების პოვნას.

გთხოვთ, მოგვაწოდოთ აჭარაში მტაცებლების მიერ ადამიანებზე ან შინაურ ცხოველებზე თავდასხმების შედეგად ცოფის დაფიქსირების სტატისტიკა მუნიციპალიტეტების (ადმინისტრაციული ერთეულების/სოფლების) მიხედვითა და წლების მითითებით.
ასევე, მტაცებლებსა და ადამიანების კონფლიქტთან დაკავშირებით თქვენს ხელთ არსებული სხვა რელევანტური ინფორმაცია და სტატისტიკები, 2010 – 2015 წლებისათვის.

დამატებითი ინფორმაციისთვის, დაგვიკავშირდეთ შემდეგ ელექტრონულ ფოსტაზე: sophio.tskhvariashvili@envdevelopment.org ან ტელეფონზე: 598 219 919

წინასწარ დიდი მადლობა თანამშრომლობისათვის.

პატივისცემით,
სოფიო ცხვარიაშვილი,

პროექტის კოორდინატორი

The official letter to the Agency of Protected Areas (APA) of the Ministry of Environment and Natural Resources Protection (MoENR)

N: O-02-01

საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტროს, დაცული ტერიტორიების სააგენტოს ადმინისტრაციის თავმჯდომარეს, ქალბატონ ნათია კომახიძეს

მისამართი: 0114 თბილისი, გ. გულუას ქ. # 6

3 ივნისი, 2015

საკითხი: მონაცემების მოთხოვნა „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევასთან” დაკავშირებით

ქალბატონო ნათია,

მოგახსენებთ, რომ ორგანიზაცია შავი ზღვის ეკოაკადემია, ALCP პროგრამის ფარგლებში ახორციელებს „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევას აჭარის ავტონომირ რესპუბლიკაში“.

პროგრამის ძირითადი მიზანია რეგიონის მდგრადი განვითარების ხელშეწყობა, კვლევა კი ემსახურება ადამიანის საქმიანობასა (კერძოდ, სოფლის მეურნეობის პროდუქციის წარმოება) და გარეული ცხოველებს შორის კონფლიქტების მიზეზების გამოვლენას, ამ კონფლიქტების შემცირების, აღმოფხვრის გზებისა და თანაარსებობის შესაძლებლობების პოვნას.

ჩვენი კვლევის არეალში შედის შემდეგი დაცული ტერიტორიები:
კინტრიშის დაცული ტერიტორიები, კოლხეთის ეროვნული პარკი, მტირალას ეროვნული პარკი, ქობულეთის დაცული ტერიტორიები.

გთხოვთ, მოგვაწოდოთ აღნიშნული დაცული ტერიტორიების:

1. მენეჯმენტის გეგმების ელექტრონული ვერსიები (დამტკიცებული ან სამუშო ვერსია);
2. ინფორმაცია და სტატისტიკა 2010 წლიდან – 2015 წლამდე პერიოდში ადამიანებზე ან შინაურ პირუტყვზე გარეული ცხოველების თავდასხმის შემთხვევებზე დაცული ტერიტორიებზე და მის მიმდებარედ, გარეული ცხოველის სახეობის და წლების მითითებით;
3. მოსახლეობის გამოკითხვის: „საზოგადოებრივი აღქმისა და სოციალური გავლენის მონიტორინგისა და შეფასება„ სიტუაციის ანალიზის ანგარიში 2010 წლიდან – 2015 წლამდე პერიოდისათვის ზემოთ აღნიშნული დაცული ტერიტორიებისათვის;
4. ინფორმაცია დაცულ ტერიტორიაზე არსებული მსხვილი ძუძუმწოვრების (მტაცებლები და ჩლიქოსნები) რიცხოვნობის შესახებ 2010 – 2015 წლების მიხედვით.
5. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში დაცულ ტერიტორიაზე ან მის მიმდებარედ გარეული ცხოველის მიერ ადამიანზე და შინაურ პირიტყვზე თავდასხმების შემდეგ დაცული ტერიტორიების სააგენტოს მიერ გაწეული საკომპენსაციო ღონისძიებების შესახებ ასეთის არსებობის შემთხვევაში.

დამატებითი ინფორმაციისთვის, დაგვიკავშირდეთ შემდეგ ელექტრონულ ფოსტაზე: sophio.tskhvariashvili@envdevelopment.org ან ტელეფონზე: 598 219 919

წინასწარ დიდი მადლობა თანამშრომლობისათვის.

პატივისცემით,
სოფიო ცხვარიაშვილი,

პროექტის კოორდინატორი

The official letter to the Environmental Supervision Department (ESD)

ს.ს.ს. გარემოსდაცვითი ზედამხედველობის
დეპარტამენტის მთავარ სახელმწიფო
ინსპექტორს

ქალბატონ ნელი კორკოტაძეს

მისამართი: 0114 თბილისი, გ. გულუას ქ. # 6

31 ივლისი, 2015

საკითხი: მონაცემების მოთხოვნა მტაცებლებსა და ადამიანების კონფლიქტის კვლევასთან დაკავშირებით

ქალბატონო ნელი,

მოგახსენებთ, რომ ორგანიზაცია მავი ზღვის ეკოაკადემია, ALCP პროგრამის ფარგლებში ახორციელებს „ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევას აჭარის ავტონომირ რესპუბლიკაში“.

პროგრამის ძირითადი მიზანია რეგიონის მდგრადი განვითარების ხელშეწყობა, კვლევა კი ემსახურება ადამიანის საქმიანობასა (კერძოდ, სოფლის მეურნეობის პროდუქციის წარმოება) და გარეული ცხოველებს შორის კონფლიქტების მიზეზების გამოვლენას, ამ კონფლიქტების შემცირების, აღმოფხვრის გზებისა და თანაარსებობის შესაძლებლობების პოვნას.

გთხოვთ, მოგვაწოდოთ საჯარო ინფორმაცია:

1. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე საქართველოს ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა“-ების შესახებ, წლების მიხედვით, გარეული სახეობების მითითებით, მათ შორის საქართველოს წითელ ნუსხაში შესული სახეობების;
2. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე აჭარის ავტონომიური რესპუბლიკის ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა“-ების შესახებ, წლების მიხედვით, გარეული სახეობების მითითებით, მათ შორის საქართველოს წითელ ნუსხაში შესული სახეობები.;
3. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე საქართველოს ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა“-ების შედეგად გარემოდან ამოღებული გარეული ცხოველების რაოდენობის შესახებ (წლების და სახეობების მითითებით).
4. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე აჭარის ავტონომიური რესპუბლიკის ტერიტორიაზე გაცემული „გარეული ცხოველების გარემოდან ამოღების ნებართვა“-ების შედეგად გარემოდან ამოღებული გარეული ცხოველების რაოდენობის შესახებ (წლების და სახეობების მითითებით).
5. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში საქართველოს გარემოსა და ბუნებრივი რესურსების სამინისტროში მუნიციპალიტეტებიდან შემოსული განცხადების „გარეულ ცხოველთა რეგულირები ღონისძიების თაობაზე“ რაოდენობის შესახებ, მუნიციპალიტეტების და წლების მიხედვით.
6. საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის მინისტრის 2014 წლის 31 ოქტომბრის N146 ბრძანებით „გარეულ ცხოველთა რეგულირების წესის შესახებ დებულების დამტკიცების თაობაზე“ დამტკიცებული „დებულება გარეულ ცხოველთა რეგულირების შესახებ“-ის მე-3 მუხლის მე-2 პუნქტის მოთხოვნათა შესაბამისად ინფორმაცია: 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში გარემოსდაცვითი ზედამხედველობის დეპარტამენტში მესული ინფორმაცია გარემოდან გარეული ცხოველების ამოღების შესახებ, მუნიციპალიტეტის, ცხოველის სახეობის და წლების მითითებით.
7. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში საქართველოს გარემოსა და ბუნებრივი რესურსების სამინისტროს მიერ გარეული ცხოველების უკანონოდ მოპოვების ფაქტების გამოვლენის შესახებ, ცხოველის სახეობის, მუნიციპალიტეტის და წლების მითითებით.
8. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში საქართველოს გარემოსა და ბუნებრივი რესურსების სამინისტროს მიერ ნადირობის წესების დარღვევის, მათ შორის იარაღისით უკანონო შესვლა გადაადგილების ფაქტების გამოვლენის შესახებ, მუნიციპალიტეტის, დაცული ტერიტორიის და წლების მითითებით.
9. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში გარეული ცხოველის მიერ ადამიანზე და შინაურ პირუტყვზე თავდასხმების შესახებ, მუნიციპალიტეტის, გარეული ცხოველის სახეობის და წლების მითითებით.
10. ინფორმაცია მსხვილი მტაცებლების (მტაცებლები და ჩლიქოსნები) რიცხოვნობის შესახებ საქართველოს მაშტაბით 2010 წლიდან – 2015 წლამდე მონაცემები წლების მიხედვით.
11. ინფორმაცია მსხვილი მტაცებლების (მტაცებლები და ჩლიქოსნები) რიცხოვნობის შესახებ აჭარის ავტონომიური რესპუბლიკისათვის 2010 წლდან – 2015 წლამდე მონაცემები წლების მიხდვით.
12. ინფორმაცია 2010 წლის 01 ივნისიდან 2015 წლის 01 ივნისამდე პერიოდში გარეული ცხოველის მიერ ადამიანზე და შინაურ პირუტყვზე თავდასხმების

შემდეგ გაწეული საკომპენსაციო ღონისძიებების შესახებ ასეთის არსებობის შემთხვევაში

დამატებითი ინფორმაციისთვის, დაგვიკავშირდეთ შემდეგ ელექტრონულ ფოსტაზე: sophio.tskhvariashvili@envdevelopment.org ან ტელეფონზე: 598 219 919

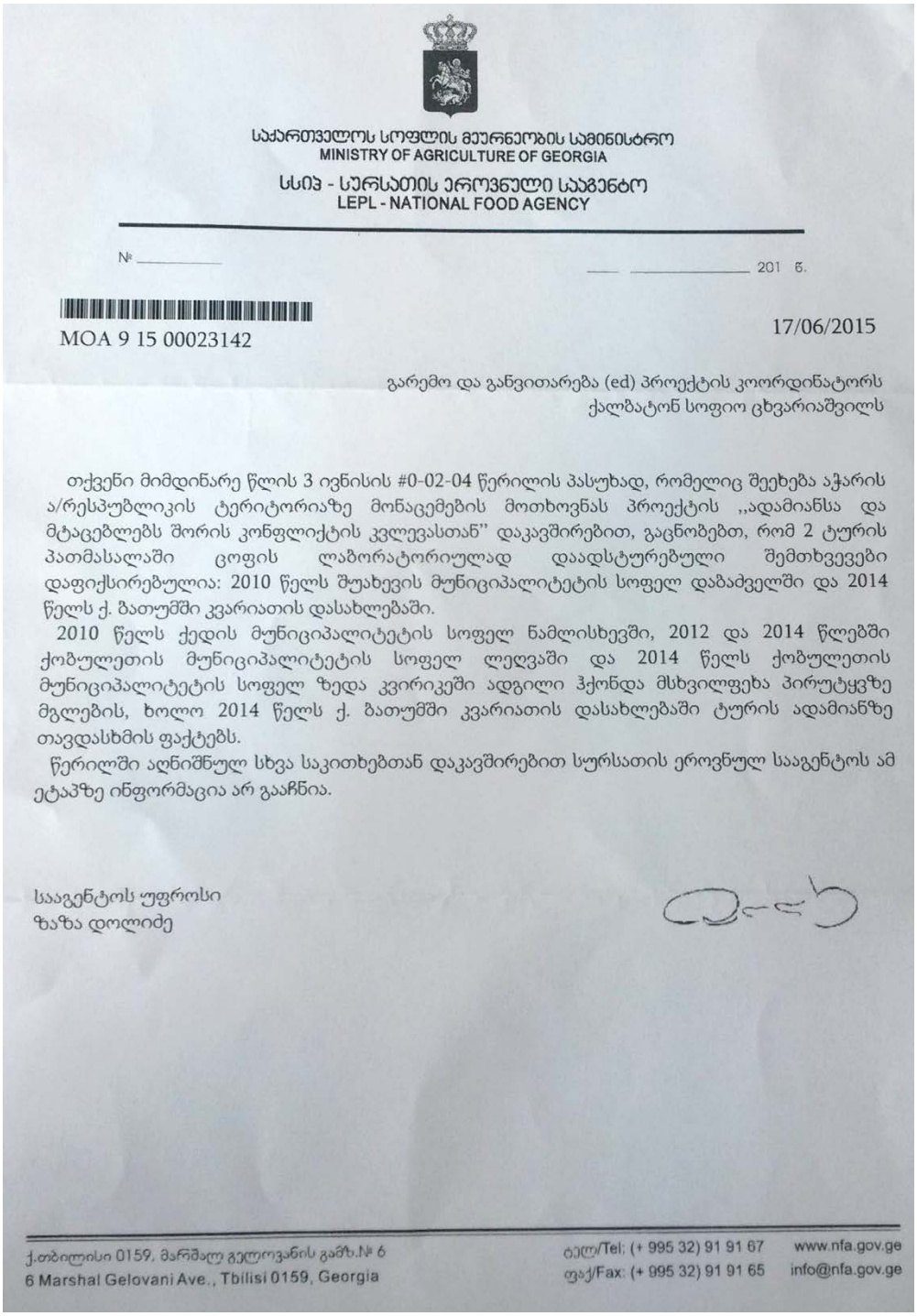
წინასწარ დიდი მადლობა თანამშრომლობისათვის.

პატივისცემით,
სოფიო ცხვარიაშვილი,

პროექტის კოორდინატორი

Received Official Letters

National Food Agency (NFA) of the Ministry of Agriculture (MoA)



საქართველოს სოფლის მეურნეობის სამინისტრო
MINISTRY OF AGRICULTURE OF GEORGIA

სსიპ - სურსათის ეროვნული სააგენტო
LEPL - NATIONAL FOOD AGENCY

№ _____ ___ _____ 201 წ.

MOA 9 15 00023142

17/06/2015

გარემო და განვითარება (ed) პროექტის კოორდინატორს
ქალბატონ სოფიო ცხვარიაშვილს

თქვენი მიმდინარე წლის 3 ივნისის #0-02-04 წერილის პასუხად, რომელიც შეეხება აჭარის ა/რესპუბლიკის ტერიტორიაზე მონაცემების მოთხოვნას პროექტის ,,ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევასთან'' დაკავშირებით, გაცნობებთ, რომ 2 ტურის პათმასალაში ცოფის ლაბორატორიულად დაადსტურებული შემთხვევები დაფიქსირებულია: 2010 წელს შუახევის მუნიციპალიტეტის სოფელ დაბაძველში და 2014 წელს ქ. ბათუმში კვარიათის დასახლებაში.

2010 წელს ქედის მუნიციპალიტეტის სოფელ ნამლისხევში, 2012 და 2014 წლებში ქობულეთის მუნიციპალიტეტის სოფელ ლეღვაში და 2014 წელს ქობულეთის მუნიციპალიტეტის სოფელ ზედა კვირიკეში ადგილი ჰქონდა მსხვილფეხა პირუტყვზე მგლების, ხოლო 2014 წელს ქ. ბათუმში კვარიათის დასახლებაში ტურის ადამიანზე თავდასხმის ფაქტებს.

წერილში აღნიშნულ სხვა საკითხებთან დაკავშირებით სურსათის ეროვნულ სააგენტოს ამ ეტაპზე ინფორმაცია არ გააჩნია.

სააგენტოს უფროსი
ზაზა დოლიძე

ქ.თბილისი 0159, მარშალ გელოვანის გამზ.№ 6
6 Marshal Gelovani Ave., Tbilisi 0159, Georgia

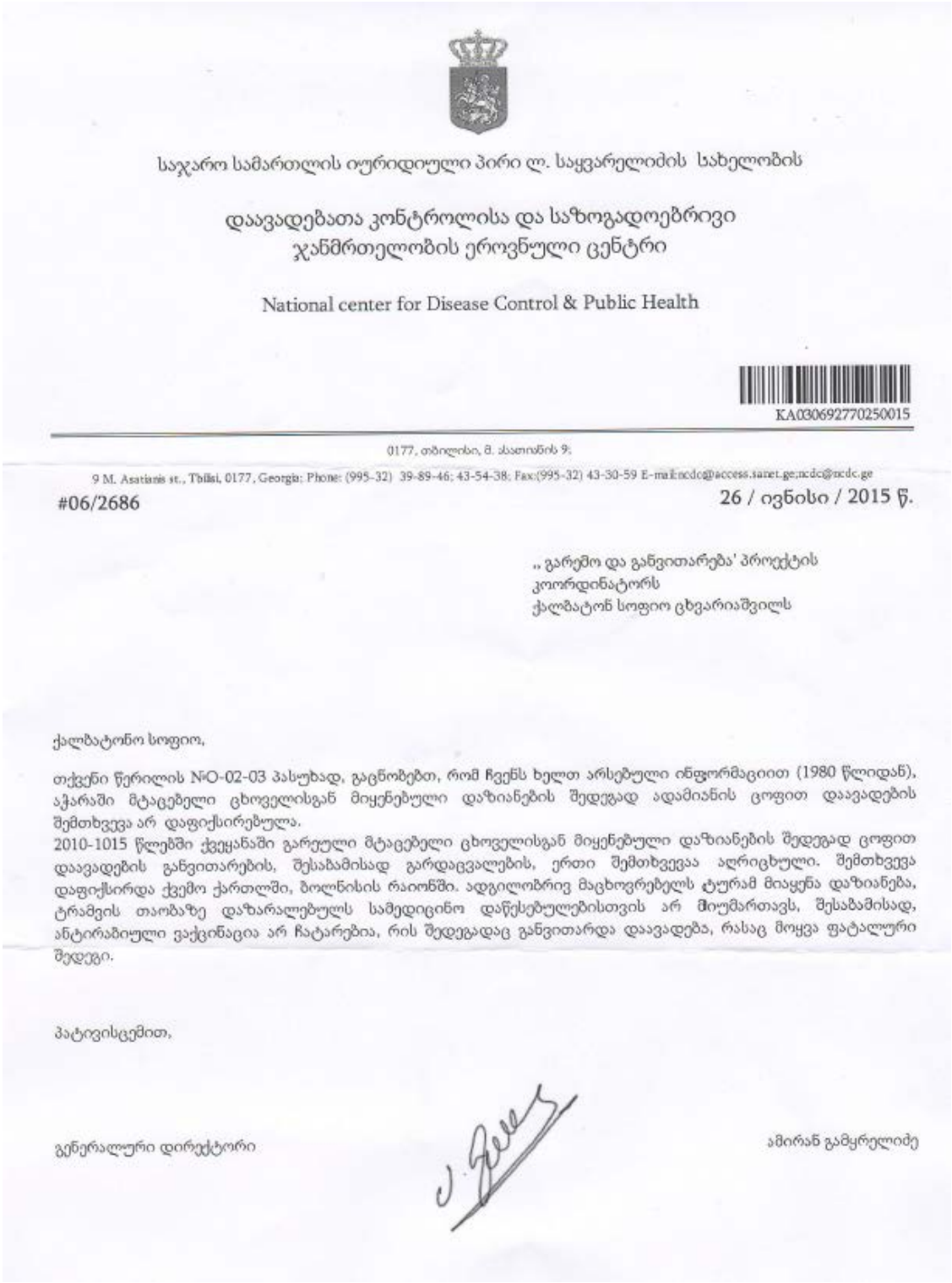
ტელ/Tel: (+ 995 32) 91 91 67
ფაქს/Fax: (+ 995 32) 91 91 65

www.nfa.gov.ge
info@nfa.gov.ge

Table 8: Facts of interface between wild animals and human/ livestock in Ajara Autonomous Republic during the 2011-2015 years. Source: National Food Agency

Name of the Municipality	2010		2012		2013		2014		2015	
	N of Facts and wild animals	Damaged animals and humans	N of Facts and wild animals	Damaged animals and humans	N of Facts and wild animals	Damaged animals and humans	N of Facts and wild animals	Damaged animals and humans	N of Facts wild animals	Damaged animals and humans
Keda Municipality, the village Tsamliskhevi	1 onfall of the wolf	Domestic animals								
Kobuleti Municipality, the village Leghva			1 onfall of the wolf	Domestic animals			1 onfall of the wolf	Domestic animals		
Kobuleti Municipality, the village Zeda Kvirike							1 onfall of the wolf	Domestic animals		
City of Batumi, the Kvariati settlement							Jackal	Human		

National Center for Disease Control and Public Health (NCDC) of Ministry of Labor, Health and Social Affairs (MoLSHA)



საჯარო სამართლის იურიდიული პირი ლ. საყვარელიძის სახელობის

დაავადებათა კონტროლისა და საზოგადოებრივი ჯანმრთელობის ეროვნული ცენტრი

National center for Disease Control & Public Health

KA030692770250015

0177, თბილისი, მ. ასათიანის 9;

9 M. Asatiani st., Tbilisi, 0177, Georgia; Phone: (995-32) 39-89-46; 43-54-38; Fax:(995-32) 43-30-59 E-mail:ncdc@access.sanet.ge;ncdc@ncdc.ge

#06/2686

26 / ივნისი / 2015 წ.

„ გარემო და განვითარება' პროექტის
კოორდინატორს
ქალბატონ სოფიო ცხვარიაშვილს

ქალბატონო სოფიო,

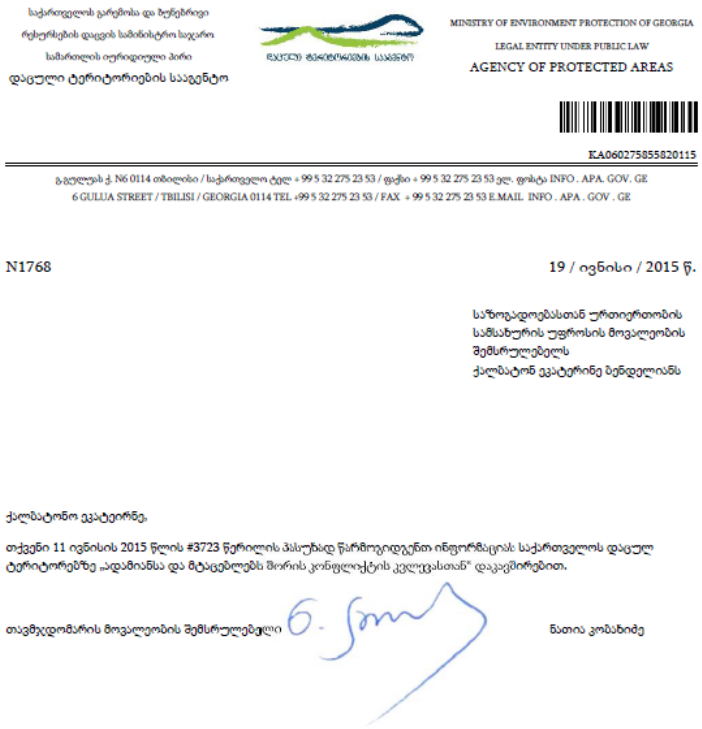
თქვენი წერილის №O-02-03 პასუხად, გაცნობებთ, რომ ჩვენს ხელთ არსებული ინფორმაციით (1980 წლიდან), აჭარაში მტაცებელი ცხოველისგან მიყენებული დაზიანების შედეგად ადამიანის ცოფით დაავადების შემთხვევა არ დაფიქსირებულა.
2010-1015 წლებში ქვეყანაში გარეული მტაცებელი ცხოველისგან მიყენებული დაზიანების შედეგად ცოფით დაავადების განვითარების, შესაბამისად გარდაცვალების, ერთი შემთხვევაა აღრიცხული. შემთხვევა დაფიქსირდა ქვემო ქართლში, ბოლნისის რაიონში. ადგილობრივ მცხოვრებელს ტურამ მიაყენა დაზიანება, ტრამვის თაობაზე დაზარალებულს სამედიცინო დაწესებულებისთვის არ მიუმართავს, შესაბამისად, ანტირაბიული ვაქცინაცია არ ჩატარებია, რის შედეგადაც განვითარდა დაავადება, რასაც მოყვა ფატალური შედეგი.

პატივისცემით,

გენერალური დირექტორი

ამირან გამყრელიძე

Agency of Protected Areas (APA) of the Ministry of Environment and Natural Resources Protection (MoENR)



საქართველოს გარემოსა და ბუნებრივი
რესურსების დაცვის სამინისტრო სსიპ
სამართლის იურიდიული პირი
დაცული ტერიტორიების სააგენტო

MINISTRY OF ENVIRONMENT PROTECTION OF GEORGIA
LEGAL ENTITY UNDER PUBLIC LAW
AGENCY OF PROTECTED AREAS

KA060275855820115

გ.გულუას ქ. N6 0114 თბილისი / საქართველო ტელ: +995 32 275 23 53 / ფაქსი: +995 32 275 23 53 ელ. ფოსტა: INFO . APA. GOV. GE
6 GULUA STREET / TBILISI / GEORGIA 0114 TEL +995 32 275 23 53 / FAX +995 32 275 23 53 E.MAIL INFO . APA . GOV . GE

N1768

19 / ივნისი / 2015 წ.

საზოგადოებასთან ურთიერთობის
სამსახურის უფროსის მოვალეობის
შემსრულებელს
ქალბატონ ეკატერინე ბენდელიანს

ქალბატონო ეკატერინე,

თქვენი 11 ივნისის 2015 წლის #3723 წერილის პასუხად წარმოგიდგენთ ინფორმაციას საქართველოს დაცულ ტერიტორიებზე ადამიანსა და მტაცებლებს შორის კონფლიქტის კვლევასთან დაკავშირებით.

თავმჯდომარის მოვალეობის შემსრულებელი ნათია კომახიძე

Table 9: Facts of interface between wild animals and livestock within and the nearby of the Mtirala National Park during 2011-2015 years. Source: Agency of Protected Area

The Protected Area	2011		2012		2013		2014		2015	
	Number of Facts and wild animals	Damaged animals and humans	Number of Facts and wild animals	Damaged animals and humans	Number of Facts and wild animals	Damaged animals and humans	Number of Facts and wild animals	Damaged animals and humans	Number of Facts and wild animals	Damaged animals and humans
The Mtirala National Park	5 facts (bear)	5 cows	7 facts (bear)	7 cows	8 facts (bear)	8 cows	7 facts (bear)	7 cows		
The Mtirala National Park Nearby Territory	35 facts (wolf, bear)	18 cows, 22 hive brood chambers, 75 hazelnuts and fruit trees, 38 maize	28 facts (wolf, bear)	15 cows, 65 hive brood chambers, 30 hazelnuts and fruit trees, 40 maize	30 facts	12 cows, 43 hive brood chambers, 55 hazelnuts and fruit trees, 60 maize	36 facts	23 cows, 35 hive brood chambers, 62 hazelnuts and fruit trees, 87 maize	4 facts	3 cows, 10 hazelnuts and fruit trees