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Strategy for Development of High Mountain Settlements of Georgia 2019-2023



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1. Introduction

1.1. Importance of high mountainous settlements for the sustainable development of the country

High mountainous settlements significantly differ from each other as well as from lowland residential areas by natural, economic and agricultural resources, as well as by social conditions and ethno-cultural features.

Soil exhaustion, climate change, unsustainable use of resources deteriorates the living and agricultural conditions in high mountainous settlements. The mountain population are more vulnerable towards the risks caused by the natural disasters (landslide, raging torrent, avalanche) comparing to population in the valley. Use of economic capacities, revitalization of monuments of cultural heritage, access of population to the public and private services are more complicated due to the condition of current infrastructure and natural-climate conditions. All these supports increase of migration of population from the high mountainous settlements.

In such situation the implementation of special policy targeted towards the improvement of welfare, living or social-economic conditions of people in mountain regions is especially important.

Policy implemented towards the high mountain regions¹ is the part of country's regional development policy and is targeted to ensure equal social-economic development on entire territory of Georgia and to resolve social and economic problems of people living in high mountain regions.

The ground for introducing special conditions for residents of high mountain regions by the law is set forth in Article 5, Paragraph 3 of the Constitution of Georgia. The Law of Georgia on the Development of High Mountainous Regions lays down benefits in order to improve welfare, social and economic conditions of communities residing in high mountainous, and support employment in the target regions. Physical bodies permanently residing in these regions as well as local businesses are eligible for legally defined benefits.

International organizations have acknowledged the need of implementation of special policy. In 2012 the necessity of sustainable development of mountainous regions has been proved at the UN Conference on Sustainable Development held in Rio de Janeiro. This obligation was strengthened by adoption of concluding declaration. Government of Georgia is party to the Declaration N66/288 "the Future We Want" "Rio+20" and accordingly has taken on international level the obligation of sustainable development of mountain regions.²

The purpose of "Mountain Development Strategy for 2019-2023" is the creation of strategic vision of inclusive and sustainable development of regions of Georgia based on the analysis of the social-economic conditions of the highlands and current potential. In addition it strives towards the creation of equal opportunities, improvement of living conditions and overall welfare and ensuring equal social

¹Law of Georgia on Development of High Mountain Regions

²http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E

and economic development on entire territory of Georgia. This document is the basis for the implementation of special state programs.

The studies conducted for the development of strategy, collected documents and data, expressed opinions were brought in compliance with the legislation on development of the high mountainous regions and other strategies of the country. In addition, analysis of current situation, challenges, vision and tasks were developed based on the intensive consultations with the interested parties. As a result of analysis government agencies, academia, private sector, non-governmental and international organizations with high, medium and low interests and possible impact were revealed. Close cooperation and consultations with them will continue during the implementation of strategy. The entities responsible for the implementation of strategy according to the intensity of impact and interests will have different forms of cooperation with the interested parties.

The Ministry of Regional Development and Infrastructure of Georgia has developed the final version of strategy and action plan taking into consideration opinions and proposals discussed at the meetings of National Mountain Development Council and the working group.

1.2. The place of Mountain Development Strategy in the hierarchy of state strategies and the connection of strategy to the development of high mountain settlements

„Social-economic Development Strategy of Georgia – Georgia 2020” approved by the Governmental decree #400 of 17 June 2014 determines priority tasks to resolve major factors creating obstacles for inclusive economic growth in Georgia. The introduction of modern early warning system to decrease the natural disaster risk in high mountainous regions of Georgia and development of relevant infrastructure and implementation of measures to reduce the impact of natural disasters is planned for the purpose of implementation of the strategy. The improvement of healthcare infrastructure and services provided is planned to ensure the support for inclusion of especially vulnerable population living in high mountainous settlements of Georgia.

“The Regional Development Program of Georgia for 2018-2021” approved by Ordinance #1292 of the Government of Georgia on 11 June 2018 determines the development of high mountain settlements in the regional development context. The main objective is to support balanced development of regions of Georgia and raise its competitiveness. According to the program one of the priorities is the support of concrete territories, including high mountain regions based on the endogenous development. Among the priority directions are reduction of social-economic disparity, support of economic development and improvement of living conditions of local communities. The measures envisioned in this Program are targeted towards the improvement of infrastructure, roads, water supply, and sewage in high mountainous regions. In addition, the significant attention is paid towards the reinforcement of economic activities and organization of services for the local community.

Spatial-territorial planning of the country, including the hierarchy of structure of settlements and development centers, is determined by the master plan.

Strategies of different fields of a country also include goals and measures important for the development of high mountainous settlements. In particular:

- „Agriculture Development Strategy of Georgia 2015-2020” approved by Ordinance #167 of the Government of Georgia of 11 February 2015 includes the establishment of village development policy and unified action plan, where the special attention will be paid to drafting the action plan for the development of high mountainous regions;

The majority of high mountainous settlements belong to the category of village or town. Their development policy is determined by the Agriculture Development Strategy of Georgia 2020, approved by Decree #631 of 30 December 2016 of the Government of Georgia, the purpose of which is to ensure lasting improvement of living and social conditions of people in rural areas, which can be achieved by the diversity of economic opportunities, access to social welfare, rich cultural life, protection of environment and sustainable use of natural resources, effective management of cultural resources.

- „National Waste Management Strategy for 2016-2030” and the Action Plan for 2016-2020 includes creation of effective system of waste collection, building of new landfills and arrangement of waste transfer stations in those municipalities where high mountain regions are located, as well as safe accommodation of waste from places polluted by mining industry.

- “The National Strategy for Waste Management 2016-2030” approved by Decree #160 of the Government of Georgia on 1 April 2016 and the National Action Plan for 2016-2020 envisages the introduction of an effective waste collection system, construction of new landfills and waste transfer stations in those municipalities which qualify as high mountainous areas, as well as safe disposal of waste in areas polluted by the mining industry.

- The majority of forests are located in high mountain areas. Therefore, the National Forest Concept adopted by the Parliament of Georgia will have positive impact on sustainability of forests. The Concept envisages the introduction of a forest use and sustainable management system. . The system will also serve to ensure the improvement of the quantitative and qualitative characteristics of Georgian forests, protection of biological diversity, and effective use of the economic potential of forests taking into account their ecological value.

- Aging of population and demographic safety issues are of utmost importance for high mountain regions. The measures determined under the “Concept on Aging of Population of Georgia” and “Concept of Demographic Security of Georgia” which has been approved by the decree of the Parliament will contribute to resolving these problems.

- Development of small and medium size businesses is important for entire country, in particular for high mountainous settlements. The attainment of objectives set forth by “Small and Medium-sized Enterprises (SME) Development Strategy of Georgia 2016-2020” will have positive impact on their economic growth.

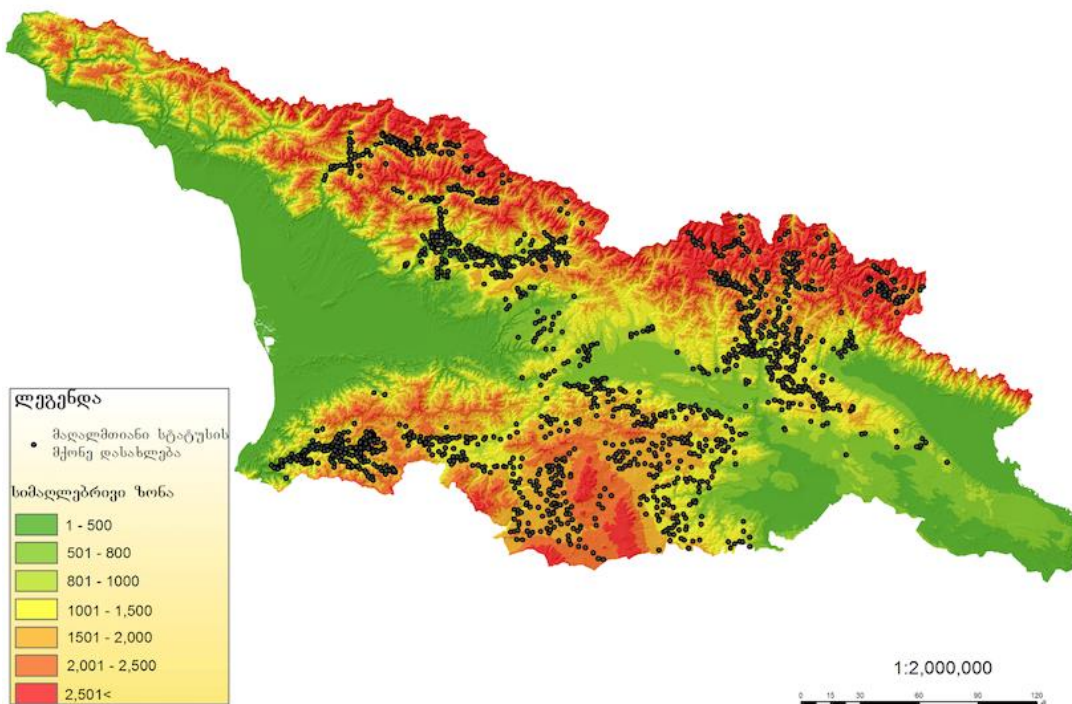
2. Situation Analysis

2.1 High mountainous settlements in Georgia

According to the law of Georgia on the Development of High Mountainous Regions the high mountainous settlement is the settlement defined by the organic law of Georgia on the Local Self-Government Code which and enlisted as a high mountainous region of Georgia approved by the Government of Georgia.

According to the law of Georgia on the Development of High Mountainous Regions the parameters and criteria for the identification of high mountainous settlement are based on their location on hypsometric curve. According to this law a high mountainous settlement (Figure 1) status is given to the settlement which is located at approximately 1500 meters at sea level or higher. The status of high mountainous settlement is also granted to settlements located within the following historic and geographic areas: Khevi, Mtiuleti, Pankisi Gorge, mountainous Adjara, Gudamakari Valley, Pshav-Khevsureti, Tusheti, Upper Svaneti, Kvemo Svaneti, Lechkhumi and Racha. According to the Government decree the status of high mountainous settlement is also granted to the settlements located below 1500 meters at sea level that meet the criteria determined by the law.

Figure 1. High mountainous settlement according to the height, Meter



Source: The National Statistics Office of Georgia. The Ministry of Regional Development and Infrastructure of Georgia

By the time the strategy was being drafted 1730 settlements located in 43 municipalities had been granted the status of high mountainous settlements based on the decree of the Government of Georgia. The majority (40%) of high mountainous settlements – 697, are located from 1000 to 1500 meters above the sea level, around 552 settlements (30%) are located at 1000 meters above sea level and 511 (30%) settlements are located above 1500 meters from sea level.

The majority of settlements in high mountain historic and geographic areas are located on Greater Caucasus: East Caucasus (municipalities: Kazbegi, Dusheti, Tianeti, Mtskheta, Akhmeta) and West Caucasus (municipalities: Mestia, Lentekhi, Tsageri, Ambrolauri, Oni, Tskaltubo, Kazbegi, Dusheti, Tiantei, Mtskheta, Akhmeta) while fewer are located on Lesser Caucasus (municipalities: Keda, Khulo, Shuakhevi, Chokhatauri, Tslaka, Dmanisi, Bolnisi, Tetrtskaro, Borjomi, Akhaltskhe, Adigeni, Aspinda, Ninotsminda, Akhalkalaki). In West Georgia the historic-geographic areas mainly match the borders of municipalities. The exception is Lechkhumi, where some of the settlements belong to Tskaltubo municipality. There are three municipalities in Adjara high mountainous region (Keda, Shuakhevi and Khulo).

Among the high mountainous settlements, the majority belong to village category (98.5%, 1705 villages), and fewer are towns (1%, 17 towns) and city types (0.5%, 8 cities).

Seasonal labor migration is common for some of high mountainous settlements due to lack of suitable living conditions or poor employment opportunities – in some of the high mountain settlements population spends less than 9 months in their homes during the entire year. The isolation of municipality from the administrative center is determined by the coefficient of peripherality. This coefficient is high for 40% of settlements, which is mainly caused by challenges related to use and access to road infrastructure.

The economic condition and access to services of population in small settlements greatly depend on close urban centers and resorts, even when they do not belong to the same municipality. For instance, high mountainous settlements in Guria are connected to the markets in Chokhatauri and Batumi. Strengthening of connections and building new relationships will create new opportunities for economic growth for the high mountainous settlements. In addition, their integration with other settlements in Georgia will be supported by the creation of Spatial Planning Project announced by the Government of Georgia³, which comprises the following central axes: (Figure 2):

- The North Backbone to connect the settlements of Greater Caucasus;
- Batumi-Akhalsikhe-Tbilisi axis, which will connect high mountainous settlements of southern Caucasus with each other and with Tbilisi;
- North-South axis through Kutaisi, which will connect Greater Caucasus, Lesser Caucasus and settlements in the lowland, including high mountainous settlements;
- Larsi-Gardabani axis through Tbilisi which will connect Mtskheta-Mtianeti historic and geographic area with Tbilisi.

³http://gov.ge/index.php?lang_id=GEO&sec_id=434&info_id=57765

Figure 2. Spatial Planning Project of Georgia and Central Sections



Source: http://gov.ge/index.php?lang_id=GEO&sec_id=434&info_id=57765

2.2. Population of high mountainous settlements

According to the 2014 census around 331.4 thousand people live in high mountainous settlement which is 28% less comparing to 2002 census data. In addition, the share of population living in high mountainous settlements has not decreased since 2002 and in 2014 it accounted for 9% of the entire population.

Approximately 32.3% (107 065) of population in high mountainous settlements of Georgia live above 1500 meters from sea level; 52.1% (172540) live in the area of Lesser Caucasus, 33,7% (111 827) in the area of Greater Caucasus and 14.2% (47 049) in the lowlands.

35.5% (117 795) of high mountainous communities reside in historic and geographic areas of highlands with the majority -47.8% (56 219) live in Adjarian highlands.

A small part of high mountainous settlements is urban (26 cities and towns). The share of population living in such settlements comprises 15.3% (50 537) of the entire population of the high mountainous settlements. The majority 53% (27 out of 51) of high mountainous settlements with more than 1000 inhabitants are mainly located in Adjara and Samtskhe-Javakheti regions. Such settlements are almost equally represented on west (4) and east (5) parts of Greater Caucasus. In addition, the population does not exceed 2.7 thousand in the most densely populated area of Greater Caucasus.

The problem of population decline (de-population) is severe in the highlands of the Greater Caucasus. In between the last two censuses there has been a drastic decline of population in Racha-Lechkhumi and Kvemo Svaneti Regions (37.4%)⁴⁵ as compared to other regions.

Lesser Caucasus has the smallest number of settlements with 10 or less inhabitants (25). There are 56 such settlements on the west part of Greater Caucasus while the highest number -227 - is located on east part. The density of population is high in Akhalkalaki, Dmanisi, and municipalities of Adjara Autonomous Republic.

The ageing of population and rise of demographic burden⁶ in the majority of high mountainous settlements are evident. According to the data of 2014 census the average age in Georgia is 38.1 years, in 48.7% of highlands the average age exceeds this number. The average age is the highest in Racha-Lechkhumi and Kvemo Svaneti Regions (48.2 years)⁷. These regions seem to be the most affected by aging of population: approximately 53% of local residents are more than 50 years old while the share of reproductive age (25-44 years old) population in these regions is less than 20%.⁸

One of the main reasons of structural ageing of population is the migration of young labor force. The drivers of migration from highlands are the increase of natural disasters and poor access to employment and education⁹.

⁴ Ralph Hakkert, *Population Dynamics in Georgia - An Overview Based on the 2014 General Population Census Data*; 2017, pg.14

http://census.ge/files/results/publication/ge/3.%20Population%20Dynamics%20_GEO-Print_F.pdf

⁵ Main results of 2014 population census; Geostat pg.3

http://census.ge/files/results/Census%20Release_GEO.pdf

⁶ Demographic burden – ratio of children and aged people (non labor population) with regard to 1000 active, able to work population

⁷ Main results of 2014 population census; Geostat pg .7

http://census.ge/files/results/Census%20Release_GEO.pdf

⁸ Ralph Hakkert, *Population Dynamics in Georgia - An Overview Based on the 2014 General Population Census Data*; 2017, pg 10-11

http://census.ge/files/results/publication/ge/3.%20Population%20Dynamics%20_GEO-Print_F.pdf

⁹OXFAM, Food safety and security in the highlands of Georgia; Tbilisi 2016

According to the Law of Georgia on the Development of High Mountainous Regions a citizen of Georgia registered in the high mountainous region that actually live in a high mountainous settlement for an aggregate 9 months or more during each calendar year is granted the status of permanent resident of a high mountainous settlement. Permanent residents of high mountainous settlements enjoy the following social and tax benefits: a monthly perk to the state pension, monthly supplement of the social package, cash assistance for child birth, salary bonuses for teachers, coaches, doctors and nurses, co-funding of electricity, exemption of employees and enterprises from income tax, exemption from property tax of land owners of high mountainous settlement areas.

2.3. Gender equality

Female and male gender roles, status, relationship and access to resources are shaped by the dominant culture in the high mountainous regions. Communities residing in these regions have to cope with additional burden of collecting water, firewood and food in the terrain characterized by steep slopes while women, in addition to contributing to livelihood generation, have to cope with additional burden of taking care of children, household and other routine chores. It has been found that women of Georgia's mountainous regions are more likely to receive higher education, but the employment rate is nevertheless low. Women in high mountainous settlements are affected by deeply rooted and widely held discriminatory views largely manifested in the pattern of labor division in the household. In addition, women have limited access to various resources including real estate.¹⁰ According to a study commissioned by UN Women "when assessing socio-economic conditions, it should be emphasized that, compared to male respondents, the number of female respondents who possess real estate is significantly low (60% males and 34% females), which, on its own, is related to the inheritance problem – according to the majority of male (50%) as well as female (39%) respondents' opinion, property should be inherited by sons".¹¹

Inequality among women and men further exacerbate issues related to health, poverty and increases susceptibility to violence and abuse. Even though most of these problems affect women in the country's lowlands, harsh climate and stringent cultural setting make women in high mountainous regions even more vulnerable. For instance, when it comes to healthcare, problems related to mother and infant nutrition are among the most pressing in many regions of Georgia including high mountainous areas. Nutrition of pregnant women is yet another outstanding challenge that requires an effective response as this is the largest risk group for iron deficiency and iron deficiency induced anemia, which, in turn, increases infant mortality risks.¹² Also, the UN Women study has found that more women than men report having chronic diseases/problems regarding health.¹³

¹⁰ Assessment of the Law of Georgia on the Development of High Mountainous Regions, GEOWEL, 2018

¹¹ Women's Needs and Priorities in High Mountainous Regions of Georgia, UN WOMEN, 2014

¹² FAO (2018), Gender, agriculture and rural development in Georgia: Country Gender Assessment Series. Available at: <http://www.fao.org/3/ca0577en/CA0577EN.pdf>

¹³ Women's Needs and Priorities in high Mountainous Regions of Georgia, UN WOMEN, 2014

Women of mountainous regions know how to utilize natural resources of the highland ecosystem, the knowledge that is instrumental for taking care of their families and adapting to extreme situations. In spite of invaluable contribution that women make to wellbeing of their families and communities, their knowledge and skills remain extremely underappreciated. An increase in the number of preschools and improved access to water can effectively help to acknowledge and decrease women's unpaid work. Findings of the study commissioned by UNDP suggest that lack of preschool care is considered a greater problem than that of schools.¹⁴ Kindergartens are important not only as a preschool education mechanism but also, they provide access to food. In addition, kindergartens allow parents to participate in labor market. As findings of UNICEF's welfare monitoring survey suggest the more children are there in a household the higher the risk of poverty and unemployment is.¹⁵

Even though the Law on the Development of High Mountainous Regions includes the provision of monetary assistances for childbirth, a provision that beneficiaries appreciate, the lack of child development resources in households continues to remain a problem. In order for families to be able to pursue family planning in line with existing socio-economic standing, women should be empowered through a number of measures such as resolving land ownership and heritage issues (as of now only sons can be heirs of their families), supporting women to get employed (women employment rate in the regions are extremely low) and encouraging entrepreneurship.¹⁶

International experience suggests that gender inequality hampers sustainable development of regions, including high mountainous areas. Therefore, developing basic capacities and creating equal opportunities for women and men, especially in vulnerable groups, is of utmost importance. Gender perspective acknowledges that barriers faced by both women and men are results of not only scarce material resources, but also stem from the status, relationships, stereotypical or discriminatory attitudes. Gender mainstreaming in development programs help professionals and practitioners to recognize equal opportunities for women and men as well challenges that they face, identify and analyze root causes of gender inequality with a focus of specific needs. In addition, it should be noted that women's participation in local self-governance is of great importance for sustainable development of mountainous regions.

2.4. Economic profile of high mountainous settlements

Tbilisi accounts for approximately 49% of Gross Domestic Product (GDP) of Georgia. In addition, the share of trade and manufacturing sectors in the country's GDP is 33%. These sectors are mainly developed in big urban settlements, except these two sectors the share of regions of Georgia in the GDP of Georgia is less than 40%. The economy of high mountain regions is not diversified.

¹⁴ Study on citizens' satisfaction with public services in Georgia. Study report 2017. Available at:

http://www.ge.undp.org/content/georgia/en/home/library/democratic_governance/citizen-satisfaction-with-public-services-in-georgia-2017.html

¹⁵ UNICEF (2018), The welfare monitoring survey 2017: summary. Available at:

<https://www.unicef.org/georgia/media/1051/file>

¹⁶ Assessment of the Law of Georgia on the Development of High Mountainous Regions, GEOWEL, 2018

The most severe problem of population in high mountain regions is low income and unemployment.¹⁷ Only 22% of population is employed on a paid job. Pension and state benefits are only income for 51% of households. The monthly income of 35% of families does not exceed 250 GEL. The main activity and source of income for the population of high mountain regions is agriculture.

The share of food in the household expenses in the country is 41.4%¹⁸. 63% of households in high mountainous settlements spend more than 50% of all expenses on food with 22 % of households spending 75% on food while 8% of households do not have enough income to suffice for food.¹⁹

The income of households is reduced due to waste caused by spoilage of harvested agricultural goods during their storage. The low income²⁰ is also caused by the barriers related to the sale of goods out of which the most important reason is the long distance to the markets, lack of processing enterprises and expensive transportation.

The data pertaining to the business sector in the high mountainous settlements is significantly lower compared to the similar data of the rest of the territory of Georgia and has small share in relevant data of entire country²¹. The turnover and production of business in high mountainous settlements does not exceed 5%, which is the same in the country.²² The exception is the high mountain regions popular for tourists.

The number of people employed in the industry sector, as well as number of hired employees in the high mountain regions is very low and does not exceed 5% of the similar data for entire country.

In 2016 the government issued grants in the amount of 7 825 506 GEL and funded 1102 projects for the development of enterprises in the high mountain regions. In 2017 the government funded 1003 projects with 7 345 700 GEL. This assistance was possible through the “Enterprise Georgia” Program’s micro and small enterprise support component (Figure 3). The projects cover agriculture, production as well as service sector. The following projects were supported: bee farming, wine making, animal farming, crop production, and greenhouse, production of construction materials, hospitality business, car services, cadaster services, trade and other. Importantly, the program includes different types of technical assistance for the beneficiaries prior to the start of business as well as for the management, marketing, funding and etc. The Program “Enterprise Georgia” includes the component of tourism, which allows the funding for construction of new hotels or/and expansion of old ones in the high mountainous regions.

¹⁷UN WOMEN – study of women m=needs and priorities in the high mountain regions of Georgia; 2014; December

¹⁸ Geostat 2017 http://www.geostat.ge/?action=page&p_id=751&lang=geo

¹⁹OXFAM, Food safety and security in the highlands of Georgia; Tbilisi 2016

²⁰OXFAM, Food safety and security in the highlands of Georgia; Tbilisi 2016

²¹Only those municipalities were reviewed during the analysis by the regions where the share of high mountain settlements is high

²² National Statistics Office of Georgia

Table 1. Entrepreneurs funded by the Program „Enterprise Georgia“; GEL

2016 year	Projects	Beneficiaries	Co-funding amount
Adjara	155	226	1 101 588,00
Guria	10	10	49 000,00
Samegrelo-Zero Svaneti	139	227	1 118 313,00
Imereti	30	43	202 864,00
Racha-Lechkhumi and Kvemo Svaneti	306	388	1 701 995,90
Kakheti	96	212	900 983,00
Shida Kartli	78	148	640 487,00
Mtskheta-Mtianeti	125	202	860 275,00
Samtskhe-Javakheti	116	166	798 500,00
Kvemo Kartli	47	91	451 500,00
Total:	1102	1713	7 825 505,90

2017 year	Projects	Beneficiaries	Co-funding amount
Adjara	138	249	1 078 610,00
Guria	1	3	15 000,00
Imereti	18	24	107 996,00
Kakheti	75	158	679 773,00
Mtskheta-Mtianeti	137	256	1 092 913,97
Racha-Lechkhumi and Kvemo Svaneti	244	325	1 389 975,00
Samegrelo-Zemo-Svaneti	130	232	1 060 420,00
Samtskhe-Javakheti	167	248	1 150 645,00
Kvemo Kartli	79	137	644 850,00
Shida Kartli	14	27	125 517,00
Total:	1003	1659	7 345 699,97

In 2016 the status of high mountainous settlement enterprise was granted to 146 enterprises, in 2017 to 152 and in the first 6 months of 2018 to 36 enterprises. They mainly work in the following fields: wine production, milk and confectionary production, furniture production, traditional crafts, production of construction materials, bark processing, bee farming, crop production, animal farming, production of alcoholic and non-alcoholic drinks and etc. The majority of these enterprises are micro, small or medium enterprises. Almost half of them already had the status of micro or small enterprise before granting the status of high mountainous settlement enterprise.

The status of high mountainous settlement enterprise/individual entrepreneur is granted to the entrepreneur who runs business in a high-mountain settlement. The current legislation includes the following benefits: distribution of profit earned by high mountain settlement enterprise from an activity carried out in the same high-mountain settlement, and expenses incurred/disbursements made within the scope of the same activity; the property owned by a high-mountain settlement enterprise and located in that high-mountain settlement.

According to the main economic data of business sector the following groups are identified as rich municipalities with high mountainous settlements: Shuakhevi, Kazbegi, Akhalkalaki, Tetrtskaro and Tsalka- municipalities with better developed economy; Kazbegi, Dusheti and Mestia – municipalities with large number of hotels and restaurants.

2.5. Tourism capacity of high mountainous settlements

The majority of settlements on Greater and Lesser Caucasus are most attractive for domestic and inbound tourism. High mountainous settlements are r with winter as well as summer resorts, cultural heritage including historic, archeological and natural monuments. More than 20 high mountainous settlements have the status of resort according to the Decree of the President of Georgia. They are climate or balneology resorts and their major profiles include: phthisiology, arthrology, neurology, dermatology, gynecology, prevention, allergies, gastroenterology and pulmonology.

Both, the state and the private sector implement number of important activities and investment projects in the settlements with tourism potential, including construction/rehabilitation of roads, and rehabilitation of historic monuments. As a result of these activities the landscape of settlements have considerably improved with modern ski lift having been installed and ski runs built in Bakuriani, Gudauri, Goderdzi Pass and Mestia. Airports operate in Mestia and Ambrolauri. The government of Georgia works actively on the development of four-season resort projects in order to beef up the tourist potential and attract significantly more tourists from inside as well as outside of country.

The state made significant investments in Bakuriani, Gudauri and Tetnuldi for artificial snow, the toboggans were installed, bicycle tracks and bicycle parks were organized, which significantly increased the competitive potential of these places for mountain-ski purpose. The development of new ski runs is undergoing. Tetnuldi ski run is the longest run - 9.5 km in South Caucasus. Planned construction of a biathlon track and ice-skating rink will contribute to the diversification of winter sports.

Despite the popularity of winter resorts the number of inbound visitors and visits in these regions is low, comparing to other regions. For instance, the number of inbound visitors and visits in Mtskheta-Mtianeti region is 6.2% and 6.1% respectively; in Samtskhe-Javakheti - 4.7% and 4.5%; while in Racha-Lechkhumi and Kvemo Svaneti only 1.7%-1.6%.²³ Notably, Samegrelo-Zemo Svaneti region with just one high mountain municipality (Mestia), is very popular among the visitors.

2.6. Agriculture in high mountainous settlements

The territorial distribution of land resources of the country like other natural resources is subject to the rule of vertical zoning. Approximately 61% of agricultural land is in highlands and foothills of Georgia. The lands up to 1000 meters above the sea are used for horticulture, viticulture, market-gardening and intensive field-husbandry while lands in west Georgia are mainly used for the subtropical cultures. The grasslands are located at 1000 meters and above sea level.

The difference in the correlation of land and human resources in highlands of Greater and Lesser Caucasus is significant. Three types of areas can be distinguished based on this correlation: area 1 – Akhmeta²⁴, Dusheti, Kazbegi, Oni, Mestia: characterized with highland settlements with small population. Area 2 – Keda, Shuakhevi, Khulo: characterized with scarcity of agricultural lands caused by large population and area 3 – Adigeni, Aspinda, Akhalkalaki, Dmanisi – with an equal ratio of the population and land resources.

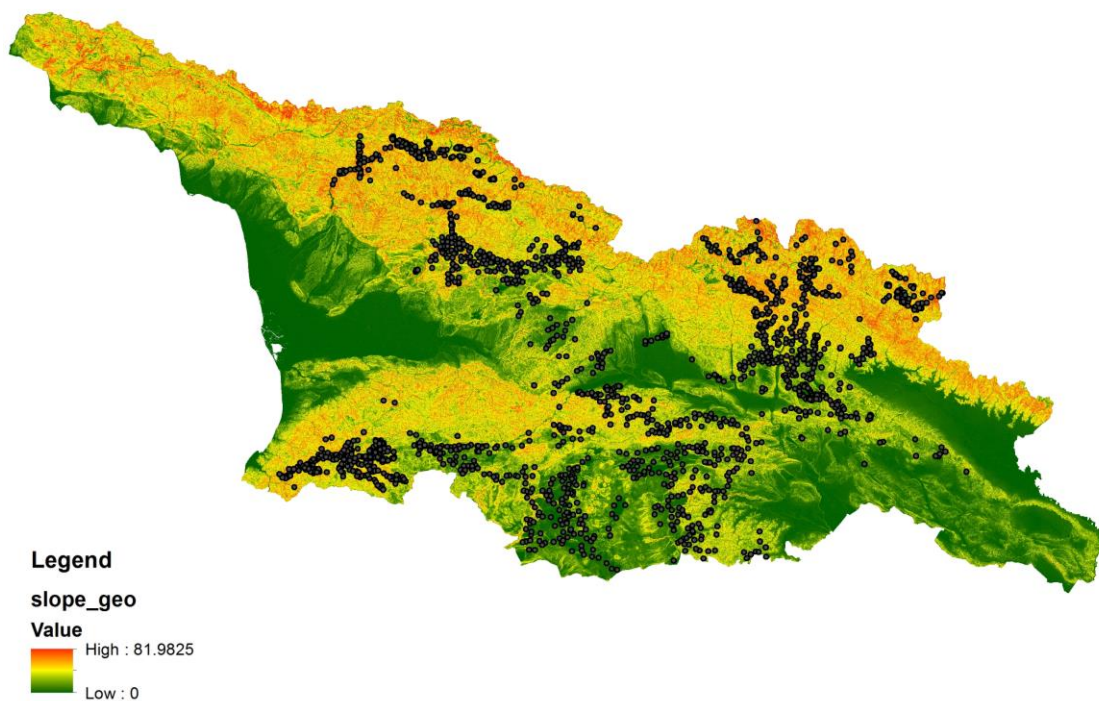
The east, west and Lesser Caucasus municipalities are specialized in animal husbandry (both small and large livestock) at high altitude. Sheep grazing is the most widespread in the east Caucasus region and Samtskhe-Javakheti while goat grazing is a widespread practice in the west Georgia. There are average 2 heads of cattle per a household in mountainous settlements. The absence of an agency or institution that would be kept accountable for the reasonable use of collective pastures, results in a series of negative effects including low milk yield and poor weight growth capacity. The pastures of collective use also worsen the problem of control of invasive diseases.

²³ Geostat 2017

http://www.geostat.ge/cms/site_images/files/georgian/turizmi/ganawileba%20monaxulebuli%20regionebiT.xls

²⁴ That part of Akhmeta municipality that includes Tusheti

Figure 4. High Mountainous Settlements by land incline; Degree



Source: The National Statistics Office of Georgia. The Ministry of Regional Development and Infrastructure of Georgia

The average degree of slope (Figure 4) is higher in the west Georgia, where a slope of 20 degree starts at 800 meters above sea level. In the east Georgia a slope of 20 degree starts as low as 2000 meters above sea level. The lowest average slope in historic-geographic highlands is in Adjara and Racha regions. The historic-geographic areas on the east Caucasus Mountains are distinguished with a medium slope.

The agricultural lands are very limited. Especially limited is cultivated land which underlines the need to intensify the agricultural work. In municipalities with high mountainous settlements one household owns approximately one hectare of agricultural land. More than three quarter (77.1%) of households use less than 1 ha of agricultural land. These households own 21.5% of total used agricultural lands.²⁵ The problem is aggravated by the fact that 1 ha of agricultural land owned by these households is divided in two or three land plots.²⁶ The agricultural land cultivation in high mountainous settlements differs from that in other regions due to difficult terrain. The share of uncultivated agricultural land is especially high in Adjara (60%) and Guria (76%), followed by Imereti (52%), Kakheti (41%) and Mtskheta-Mtianeti (36%). The share of uncultivated agricultural land is low in high mountainous settlements of Kvemo Kartli and Shida Kartli and comprises around 19%. These differences results in the specificities of agriculture industry. The demand and supply of enterprise equipment are also different. In particular, small agricultural machinery, which is in deficit are needed for mechanical

²⁵ The National Statistics Office of Georgia, National Agriculture Census of Georgia, 2014

²⁶ Agriculture Development Strategy 2015-2020

cultivation of land in the areas where great amount of uncultivated lands are located due to complex terrain (Adjara-Guria, mountainous Imereti, historic areas on east Caucasus – Khevsureti, Tusheti, Pshavi, Khevi, Mtiuleti – Gudamakari and etc.).

The land registration remains a problem in the high mountainous settlements. Despite the state projects citizens do not hurry to register land. No land balance has been done since 2004. The area of agricultural land and its distribution according to the use is not clear taking into account the changes to purposes of land plots. All these complicate planning of activities for the development of agriculture.²⁷ Although, it is important to underline that on July 28, 2016 the Government of Georgia adopted decree #351 on “Identification of settlements where the systemic registration of property rights to plots of land are performed” based on the Law of Georgia on “Improvement of Cadastral Data and the Procedure for Systematic and Sporadic Registration of Rights to Plots of Land within the Framework of the State Project”. In addition to other settlements high mountainous settlements were determined according to this decree (Tetritskaro Municipality Manglisi, Tianeti Municipality Zaridzeebi; 34 highland settlements in Mestia Municipality within the administrative borders of Lakhamura and Shuakhevi municipalities), where at this stage systematic registration process takes place.

The practice of cooperative entrepreneurship is poorly developed in the high mountainous settlements. As of today, there are just up to 500 joint agricultural cooperatives operating. Within the state support programs the joint companies were given agricultural equipment, different machinery and the trainings were held. Simplified requirements of Food Products/Animal Feed Safety, Veterinary and Plant Protection Code apply to those business operators that are engaged on non-factory basis, in the production, processing and/or distribution of food/feed, and in primary production. In addition to performed activities it is necessary to: increase the volume of production and improvement of quality; diversification of goods, branding and quality certification; establishment of food products safety standards; creation of added value for which the access to basic means of processing, storage and marketing of products is necessary. In addition, the improvement of qualification, preparation and training on organization, management of production and marketing is required, for which the sustainable system shell be created. The most effective implementation of this goal is possible through the stimulation of creation of joint agricultural enterprises and providing them with financial support. Small agricultural holdings without the form of joint enterprises (which comprises absolute majority of holdings in high mountainous settlements) will not be successful, will only have access to simple technology and will not succeed in further development. Joint company is multidimensional unity which creates micro and macro capacity in the country.

There is big potential of production of bio, ecologically clean and brand products. There are several examples of production of brand goods, but it is not well developed. The examples are: “Dambal’khacho” (mildewed cheese made of quark), Tushetian Guda Cheese; Honey from Machakhela; Salt from Svaneti; Sulguni cheese from Svaneti; Tenili and Chechili Cheese thermally processed cheese threads) from Meskheta etc. The potential of these goods to be exported to Europe is considerable taking into account the demand on such products and the opportunity provided by The Deep and

²⁷Agriculture Development Strategy 2015-2020

Comprehensive Free Trade Areas (DCFTA). Increase of production of such goods supports development of culinary tourism and people will be given opportunity of additional income resources.

In addition to traditional agricultural production the attention shall be paid to the potential of use of non-wood resources of forests (wild fruits, berries, curative and food plants, mushrooms and etc.) which are common for the high mountainous settlements. It is important to underline that currently no structural unit is created to manage this direction. So when determining the development of supportive programs the special attention shall be paid to the opportunity of sustainable and safe commercial use of these resources.

The population in high mountainous settlements is frequently affected by natural disasters, in particular. Agricultural products are particularly susceptible to loss resulting from drought, landslide, raging torrent, and heavy snow and water floods.

2.7. Transport Infrastructure

Roads. Central roads in high mountainous settlements are in good condition and central government ensures the maintenance of these roads. Roads to urban and village settlements are mainly in satisfactory condition. The problem of roads in high mountainous settlements creates complications for population with regard to connection to the administrative centers and access to different services. Only 33% of population of high mountainous settlements evaluates positively the condition of roads and 57% of population thinks the same way in non-mountainous regions. 67% of population is more critical about local road (inside the settlements) which are in “poor” condition according to the respondents.²⁸

The government of Georgia plans to create new transportation highway sections connecting high mountainous settlements of different regions to historic-geographic areas²⁹: Lagodekhi-Gagra, Khulo-Zarmaza, Akhaltsikhe-Mestia, and Zemo Imereti –Racha. These highways will significantly decrease the time required to reach high mountainous touristic areas.

Airports. The government of Georgia gives special function to Mestia and Ambrolauri Airports in order to decrease time needed to connect to resorts. The capacity of each airport ranges from 50 to 100 passengers at a time.

Railway. Tetrtskaro-Tsalka-Akhalkalaki-Kartsakhi 150 km section of rail which is the part of Baku-Tbilisi-Kars Railway, the new project of a great international initiative of the Great Silk Road, is important for the development of Kvemo Kartli and Samtskhe Javakheti high mountainous settlements. The railway was officially launched on October 30, 2017 and the opportunity to travel by new modern train on Baku-Tbilisi-Istanbul railway became possible. At the initial phase the line is intended to transport an initial annual volume of 5 million tons, rising to a long-term target of 15 million tons. The

²⁸http://www.ge.undp.org/content/georgia/ka/home/library/democratic_governance/citizen-satisfaction-with-public-services-in-georgia--2017.html

²⁹http://gov.ge/index.php?lang_id=GEO&sec_id=434&info_id=57765

launch of rail made China, Kazakhstan, India, Central Asia as well as South Caucasus State more accessible for Europe and vice versa. The fact that in Akhalkalaki new modern station was built which makes possible for railway carriage to move from wide tracks to European standard narrow tracks to transfer goods and passengers, plays an important role for the development of high mountain regions.

2.8. Utility and communication services in high mountainous settlements

Water supply and sewerage - Central water supply is not accessible for the majority of population in high mountainous settlements.³⁰ There is no wastewater treatment and sewerage treatment plant in the municipalities of high mountain settlements. For instance: the sewerage system of Shuakhevi, Khulo and Keda municipalities is out of service, the systems in Racha-Lechkhumi and Kvemo Svaneti work partially and in municipal centers they are functional.

Electricity - Currently 88 villages of highlands (with 186 potential customers) are without electricity. The process of identification of villages without electricity is undergoing. As a result of measures and investments the solar panels are installed in some high mountainous settlements.

Since 2017 the customers having the status of permanent residents of high mountainous settlements are compensated against 50% of monthly charges for consumed electricity (residential customers) in high mountainous settlements. However, the compensation does not cover more than 100 kWh of consumed electricity.

Communications - Currently the majority of high mountainous settlements of Georgia are not covered by the optical fiber cable and mobile service is not accessible in all settlements. This limits the access to the Internet for the local population and creates barriers for the development and hampers delivery of services.

Transportation - According to the opinion of people in high mountainous settlements the access to transportation has improved during 2013-2015 from 31% to 61%. But access to public transportation remains to be challenge.

Central gas supply system - Only small part of high mountainous settlements is provided with the natural gas, 1460 (85 045 potential customers) out of 1730 do not have access to natural gas. For instance, there is no central gas supply in Guria, only 10% of population has natural gas in Racha-Lechkhumi and Kvemo Svaneti, while 34% of population in Samegrelo-Zemo-Svaneti can use natural gas. Population in settlements without natural gas use wood for heating purposes.

Waste management- The waste collection service is available in part of high mountainous settlements especially in urban or tourist type settlements. The population in the regions where service is accessible is satisfied with the frequency of services and its fee. It is important to underline that service fee is subsidized by the municipality. People in villages discharge garbage in rivers or roadsides and by this create uncontrolled, unregulated landfills. Municipalities took certain steps to resolve this problem but

³⁰Study of citizens satisfaction with public services in Georgia, UNDP Georgia, 2017 (pg.90)

there are not enough containers and garbage trucks to move in high mountains. Due to hard meteorological conditions some settlements close in winter. It is important to allocate territory for temporary collection of household waste or create waste transportation station. There is no cleaning service in the majority of highland settlements. There is no waste sorting by which waste is separated. According to the Waste Management Code of Georgia the system of separate collection of waste and proper functioning is planned to be implemented stage by stage from 2019. The waste neither processed nor composted.

Pollution of territory with accumulated and sludge waste caused by mining, production, enrichment, located on industrial sites of Soviet times create problem in highland settlements. In Lentekhi and Ambrolauri municipalities (village Tsana, Village Uravshi) the ash and sludge containing arsenic is accumulated (approximately 100 thousand tones) on the territory of enterprises collecting and enriching arsenic. In order to resolve this problem with the financial support of the government and donor organizations the waste containing arsenic in Ambrolauri municipality will be stored in special sarcophagus, although the additional work is required to be implemented.

2.9. Healthcare and social protection in high mountainous settlements

Provision of in-patient and out-patient medical services in high mountainous settlements differs from that other parts of the country:

- The number of available hospital beds on national level for every 100 000 population is 404,6 beds, while this ratio is 248.4 beds in those municipalities where all settlements are high mountainous (Lentekhi and Tsalka);
- Average number of referrals for outpatient services in the municipalities with high mountainous settlements is low per capita as compared to the national rate: the ratio in those municipalities where all settlements are high mountainous comprise 0.4-1.6 while it constitutes 3.1 at the national level.
- The State Program of Village Doctors operates in entire country including high mountainous settlements, the purpose of which is to increase geographic and financial access to healthcare services for village population.

The majority of medical facilities in high mountainous settlements are owned by the state with private companies operating only in Adjara, Guria and Samtskhe-Javakheti regions

According to the Law of Georgia on the Development of High Mountainous Region medical personnel employed at state-managed medical facilities in high mountainous settlements where the state is an equity partner, or are paid from the state budget, shall receive a monthly allowance. This rule is defined by the decree of the Government of Georgia and encourages medical personnel to go for work to the high mountainous settlements.

In addition, the healthcare and social benefits for the population in high mountainous regions, except Adjara Autonomous Republic, are funded from the state budget.

According to the Law of Georgia on the Development of High Mountainous Regions the permanent residents of high mountainous settlements who have reached the retirement age and receive the monthly state pension from September, 2016 will receive additional monthly bonus to the state pension at least in the amount of 20% of the state pension. The permanent residents of high mountainous settlements who are the recipients of the social package determined by the Government of Georgia shall receive the monthly supplement in the amount of 20% of the social package provided to them.

From January 1, 2016 monthly allowance is paid for each newborn provided that either parent of the child is a permanent resident of a high mountainous settlement.

2.10. Education and level of knowledge in high mountainous settlements

Due to demographic situation in high mountainous settlements the demand on kindergartens is less comparing to those living in lowlands. Urban high mountainous settlements are provided with the kindergartens. More than half of high mountainous settlements (53%) have municipal kindergartens.³¹ The teaching process and qualification of teachers require further improvement.

The number of people with professional and higher education is low in such regions. The farmers, private and public sector representatives in the highlands underline the lack of human resources and mismatch of existed resources with the requirements.³² Vocational centers are only in Mestia, Ambrolauri, Kazbegi (Stepantsminda and Gudauri) and Tianeti Municipalities. These centers offer flexible, competent based, model professional educational programs targeted towards the needs of labor market. The employers are involved in the development of these programs. The preparatory work is undergoing to establish vocational center targeted towards the needs of labor market in Khulo Municipality where the agriculture specialists will be trained.

Due to demographic problems in high mountainous regions sometimes one or several pupils are in the schools and in case school receives voucher according to the number of pupils than they fail to cover administrative and other expenses such as heating. Therefore, from 1 September 2016 according to the Law of Georgia on the Development of High Mountainous Regions an increased number of vouchers are allocated to 43 046 pupils (data by January 1, 2018) s attending 505 public schools in highlands.

In addition, an increased number of vouchers is ensured for all institutions of vocational education located in high mountainous settlements.

Pursuant to Order # 103/N of the Minister of Education and Science of 5 August 2013 On Approving the General Rule for the use of school textbooks (student's book) and auxiliary materials handed in to parents/legal guardians of students on a temporary basis and free of charge by the State to ensure the access of school students to textbooks (student's books) and auxiliary literature, and criteria for the

³¹ Study on citizens satisfaction with public services, UNDP Georgia, 2017 (pg. 34)

³² Ministry of Economy and Sustainable Development of Georgia. GIZ „ Pilot Survey of Labor Market Needs in Georgia”. 2014; Ministry of Education and Science of Georgia “Status of Vocational Training Center on Labor Market” Graduate research Analysis, 2014

assessment of maintenance of aforementioned materials, authorized textbooks are provided to all beneficiaries as stipulated by the Order above, including students attending schools in high mountainous communities. In addition, all first graders of the public schools and their teacher are given portable computers (book) within the program “My first computer”. Within the same program portable computers are available for the public school students at primary level with outstanding performance, whose grade at a primary level is 10 without scaling. In addition, the public schools in high mountainous settlements every year receive inventory (personal computer, blackboard, desk and etc.), as well as school logbook.

From 1 September 2016 pursuant to the Law of Georgia on the Development of High Mountainous Regions the teachers at the institution of general education located in a high mountainous settlement are paid a bonus not less than 35% of their monthly remuneration and a teacher who is a participant of a relevant programme receives a bonus of not less than 50% of the remuneration of a teacher.

The teachers at the high mountainous settlements lack the access to vocational and training centers due to climate conditions and distance from training centers.

226 students receive educational grant from the state within the scope of social program,³³ who based on the unified national examination study at accredited institutions of higher education and who graduated and received the certificate of general education from the school in the high mountainous settlements and regions of eco migration and studied in such schools during last 3 years. These students receive full funding for the educational grant (2250 GEL).

School infrastructure in most general education institutions is outdated. Their rehabilitation takes place according to the needs and funding. There are schools in some of the municipalities where there are few students due to de-popularization. The following regions have the least number of students: mountainous Adjara, Samtskhe-Javakheti, Trialeti and Racha-Lechkhumi municipalities. There are no schools in Tusheti due to small number of population. The number of pupils decreases in Dusheti, Racha-Lechkhumi and Kvemo Svaneti high mountainous municipalities.

2.11. Culture and sports in the high mountainous settlements

The mountainous settlements are rich in ethnographic and architectural monuments. The original culture plays an important role in the development of these settlements. Cultural facilities (houses of culture, clubs, libraries, museums) are mainly located in administrative centers. People’s theatres function in all municipalities of Racha-Lechkhumi and Kvemo Svaneti, as well as in municipalities of Mountainous Adjara and Kazbegi.

There is a scarcity of sports infrastructure in Shida and Kvemo Kartli, Racha-Lechkhumi and Kvemo Svaneti. Sports facilities mainly operate at educational institutions. The state of this infrastructure is inadequate. Sports infrastructure is available in very few mountainous settlements of Kakheti.

³³Decree N310 of the Government of Georgia issued on July 7, 2016; Decree N395 of the Government of Georgia issued on August 11, 2017

A greater part of sports and cultural infrastructural facilities requires rehabilitation. Some of the facilities are totally destroyed. In the mountainous settlements the majority of cultural monuments are in need of restoration and improvement of adjacent infrastructure. Individuals working in the field of culture do not have access to modern communications and are rarely retrained

Sports facilities are outdated and non-functional. The level of physical training and development of pre- and school-age youth is low. The personnel, including technical staff working at these facilities are not qualified. The number of specialists is limited. Sports infrastructure is mainly located in municipal administrative centers. More recently the infrastructure required for winter sports has started to develop.

The Government Decree N436 adopted on 12 September 2016 in accordance with the Law of Georgia on the Development of Mountainous Regions approved a state program to provide financial aid to coaches and support development of sports in high mountainous settlements. Under this program, coaches, permanently residing in mountainous settlements of Adigeni, Ambrolauri, Akhalkalaki, Akhmeta, Borjomi, Oni, Tianeti, Lentekhi, Ninotsminda, Keda, Tsageri, and Shuakhevi municipalities receive regular salary supplements.

2.12. Effective use of natural resources and disaster risks management

The mountainous settlements have rich natural resources and diverse flora and fauna. Eastern Caucasus and mountainous Adjara are particularly rich in protected areas.

Forests. 98 % of forests are located in the mountainous regions of the territory controlled by the Government of Georgia. The most forested territories are Adjara (63%) and Racha (56%). 60% of forests are located on mountain slopes with more than 25-degree steepness. 24% of forests grow on slopes with more than 35-degree steepness. Their use is illegal. 60% of forests are located at the elevation of 1000 meters (Table 2). Beech trees dominate the forest ecosystems. Racha is famous for so called intact forests. Their initial state and diversity have been preserved. Negative effects of climate change are reflected in changing upper boundaries of forest ecosystems, more frequent fires, and proliferation of damaging diseases.

Table 2. Forest Area and Forest Reserves at Different Altitudes

Altitude-m	Area-ha	Forest reserves (thousand cubic m.)
0 - 750	532168	82 651
751-1000	236845	36 784

1001-1250	306076	47 537
1251-1500	340692	52 913
1501-2000	280570	43 576
2001 and higher	125532	19 496

Source: Ministry of Environment and Agriculture of Georgia

Mineral Resources. The mountainous settlements extract ores (metals: iron, copper, magnum, lead, silver, zinc, etc.), and non-ores (construction materials, half-precious stones, barite etc.), and hydromineral resources (mineral waters). Also, information about natural resources of mountainous settlements is based on outdated body of research. The data need to be updated.

Alternative Energy. The mountainous regions have alternative energy resources. Kakheti, Racha, Lechkhumi, Tsalka, Dmanisi municipalities and other mountainous settlements have a potential to generate solar energy. The introduction of autonomous micro hydropower plants based on photovoltaic transformers of solar energy in difficult to access and small villages is advisable to ensure the energy provision while the Caucasian highlands provide excellent conditions for wind powerplants. It is also possible to generate biogas by utilizing plant and household waste. Wealth of water-abundant rivers, types of valleys and riverbed slopes have a potential for generating hydro energy. The use of existing hydro resources requires consideration of a specific area's geodynamic potential and disaster risks. Notably, a big part of mountainous rivers is fed by glaciers, the area of which was reduced by 30% in the recent decade.³⁴

Geo-ecological Disasters and Environmental Impact. Geo-ecological complications caused by natural disasters are mostly pertinent to mountainous parts of Georgia. Two-thirds of landslides as well as such disasters as torrents, snow and rock avalanches, and glacial destructions transformed into glacial torrents happen in the mountains. Some mountainous settlements belong to medium and high-risk categories due to the risks of development and reactivation of dangerous geological processes and formation-development of new zones of danger. Some mountainous settlements belong to medium and high categories of risk. Practically all mountainous settlements, belong to risk zones of disastrous geological processes to a certain degree. In these regions weather, climate, and water-related natural disasters have become far more frequent, partially due to increased precipitation. Proximity of mountainous regions to the state border and the scale of certain environmental problems hamper solutions at the national level and require trans-border cooperation. The effect of natural factors on the environment is aggravated by damage caused by local residents' business activities leading to intensive formation and activation of erosion and landslides.

³⁴ Climate Change and Sustainable Development, 2016, p.135

Eastern Caucasus and Mountainous Adjara are particularly susceptible to natural disasters. Landslides often happen in Mountainous Adjara, while both landslides and droughts are frequent in Eastern Caucasus. Floods are common in highlands located between mountain ranges.

2.13. Communications, access to public services and civic engagement

In mountainous regions central and local self-government services are concentrated in administrative centers of regions/municipalities. Some of the mountainous settlements categorized as villages cannot make use of these services due to the remoteness from administrative or regional centers. This problem is aggravated by inadequate state or in some cases, absence of transport infrastructure.

In these settlements the level of use and quality of electronic services is low due to the poor state of internet infrastructure and lack of adequate knowledge. In 2015 the Government of Georgia initiated a large-scale process of networking (internet) involving both public and private sectors. This infrastructure will contribute to the development of retail networks by private operators and make internet accessible for subscribers. Introduction of broadband internet connection in settlements with at least 200 residents will ensure an access to modern technologies and services, such as online electronic education, E-governance, commerce etc. As a result of actions to be carried out by the public and private sectors, the populations of the Georgian regions will access internet and become more engaged in the socio-economic development of the country. In settlements with less than 200 residents, where private telecom operators have little interest to invest because of lack of potential profit, installation of broadband internet is being implemented through community internalization projects. For instance, a project for the internalization of Pshav-Khevsureti and Gudamakari communities launched in 2018 is expected to contribute greatly to social, cultural and economic development, and in particular to fostering tourist potential of these areas.

Climatic, geographic, and settlement-specific characteristics of mountainous regions prevent circulation of information among residents. Distribution of printed media products is unprofitable and local electronic media are underdeveloped. Mail and parcel delivery services are also unprofitable. In response to these challenges, it is planned to develop regulations which will enable residents of high mountainous areas to have access to printed media, as well as universally trackable correspondence and parcels in affordable prices regardless of their geographic location.

The lack of access to information is a reason for poor civic engagement in government decision-making. Also, objective circumstances caused by presence of high mountains hamper different legally established forms of civic participation in local self-governance.³⁵ For example, organization of settlement assemblies is complicated because even least populated villages (363 settlements with 1 to 20 residents) located within the same administrative unit are distanced from one another and have different interests. The roads are hard to navigate due to lengthy and cold winters and attendance of meetings of municipal collegial bodies is impossible etc.

³⁵ Chapter XI, Local Self-government Code

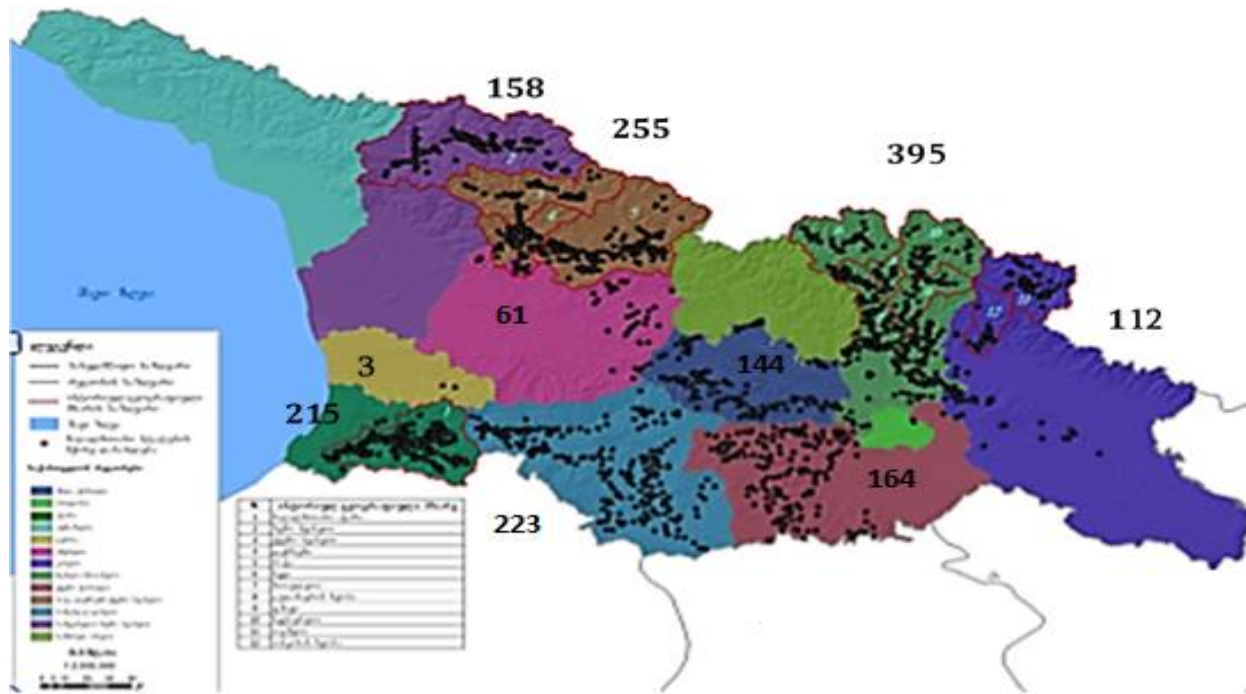
2.14. Mountainous settlements by regions

Villages, towns and cities having the status of a high mountainous settlement are located in all regions of Georgia. Most of them are located in Mtskheta-Mtianeti (395).

High mountainous settlements differ in geographic location, hypsometry, steepness of slopes, susceptibility to natural disasters, complexity of agricultural activities, depopulation and density, percentage of national minorities residing in a municipality and other characteristics. However, there are also certain similarities between the regions:

- In all mountainous regions (except for municipal centers and touristic settlements), public transportation services and road infrastructure create barriers to residents' movement and correspondingly, to access to services and economic activities;
- Central water supply, sewerage, and municipal waste management services are not fully available for the population of mountainous regions.
- In addition to limited access to financial resources necessary for entrepreneurial activities, the common challenge is the lack of qualified labor resources and business skills.
- Family run enterprises and farms have limited access to equipment necessary for agricultural activities in the mountainous settlements.
- All mountainous settlements face a common problem related to receiving adequate education in line with modern standards.
- Sports and cultural infrastructure are mainly located in municipal administrative centers. Due to the peripheral location of mountainous settlements, these services are less accessible to the local population.
- Professional education is not accessible. This hampers youth and economically active population in acquiring a profession and professional development.

Figure 6. High Mountainous Settlements of Georgia by Regions and Historical-geographic Provinces



Source: National Statistics Office of Georgia. Ministry of Regional Development and Infrastructure of Georgia

There are differences among mountainous regions because of the following regional characteristics.

Mtskheta-Mtianeti. Compared to other regions there is a bigger number of high mountainous settlements in Mtskheta-Mtianeti region. The region is distinguished by the number of historical-geographic provinces, the number of abandoned and nearly deserted settlements and depopulation tendencies. The settlements are least inhabited compared to other regions.

Schools close down due to the small number of students. School buses are available but students still have to walk long distances from remote settlements. There are boarding schools that contribute to preserving population in the mountainous settlements.

Gudauri and Stepantsminda are famous tourist destinations visited by Georgian and foreign tourists. They provide employment and income generation opportunities for residents of other settlements. The region has a significant number of visitors. Hotels and hotel-type accommodations are better developed than in other regions. The high mountainous settlements specialize in cattle breeding. The state is investing in the development of four-season tourism in this area. The average monthly income of individuals employed in the business sector is higher compared to other regions of Georgia.

The region's high mountainous settlements are characterized by such natural disasters, such as snow avalanches, landslide-gravitation processes and torrents.

Racha-Lechkhumi and Kvemo Svaneti. All of the region's settlements have the status of a high mountainous settlement. The boundaries of the historical-geographic provinces, except for Lechkhumi coincide with the municipalities' boundaries. The population is prone to reduction and aging.

There are mainly elementary schools in the villages. Older students have to attend public schools located in municipal centers to receive middle school education. Despite availability of school buses there are villages where children have to walk several kilometers to attend classes.

The level of the local population's income lags behind that of other regions. The economy is not diversified. However, the region has a potential to develop tourism, including recreational and balneological tourism. Currently the touristic sites are underdeveloped. For the last few years the region has been benefiting from tourism supported by state investments.

The region's high mountain settlements are specialized in breeding livestock husbandry. The wine production tradition and potential distinguish the region from others.

The region is characterized by natural disasters, such as snow avalanches, landslide-gravitation incidents, overflows and floods, torrents, erosion of riverbanks, rock avalanches, and rock falls.

Samegrelo-Zemo Svaneti. Only Mestia municipality with all of its settlements has the status of a high mountain settlement. Mestia is one of the least populated municipalities.

In Mestia municipality economic activities are mainly linked to tourism and energy sectors. Despite large-scale public investments in the airport construction and other areas, the municipality's tourism potential is not fully exploited

Mestia lacks land resources needed for agricultural protection. The most common natural disasters are snow avalanches, torrents and rock avalanches-rock falls.

Kakheti region. The region's high mountainous settlements differ from one another because of diverse geographic, demographic, cultural and ethnic characteristics. Except for Pankisi valley, high mountainous settlements have small populations. Very few households are left in the majority of settlements. In Pankisi valley the schools serve as places where sports, educational and cultural institutions, organizations and groups operate. The number of Tusheti residents rises in summer. In other seasons the majority of settlements are deserted. Due to the small number of residents, Tusheti practically lacks educational, cultural and sports infrastructure. The most common natural disasters are torrents.

Kvemo Kartli region. The region's high mountainous settlements have few early education institutions. In recent years the ethnic minorities' demand for Georgian-language schools and early education institutions increased. This trend was reinforced by the university education quota system (1+4) introduced for ethnic minorities since 2010. Generally, there are few educational institutions in the

region. The existing institutions are geographically inaccessible for the residents of the high mountainous settlements.

The territory is adequate to the size of the population and agricultural production needs. In the region's high mountainous settlements, the ratio of uncultivated agricultural land is relatively low compared to other regions and is close to the Kvemo and Shida Kartli indicators.

In Kvemo Kartli the most common natural disasters are landslides-gravitation processes, overflows-floods and erosion of riverbanks.

Samtskhe-Javakheti. The regions' high mountainous settlements are relatively more populated than other settlements.

The region's high mountainous settlements do not have a distinctive economic profile. The territory is adequate to the size of the population and agricultural production needs. Unemployment, low income levels and underdeveloped infrastructure are the reasons for the population migration from the region.

The share of uncultivated agricultural land is relatedly low compared to other regions and is close the Kvemo and Shida Kartli indicators.

In the region's high mountainous settlements, the most common natural disasters are rock avalanches, floods, rock falls, landslides – gravitation processes, and hails.

Shida Kartli. The region's high mountainous settlements are practically deserted. Even in the populated settlements the number of residents has been on a drastic decrease. Locals leave their houses due to poor living and economic conditions, underdeveloped infrastructure and other problems. The share of uncultivated agricultural land is relatedly low compared to other regions and is close to the Kvemo and Samtskhe-Javakheti indicators.

In the region's high mountainous settlements, the most common natural disasters are landslides – gravitation processes, floods, and erosion of riverbanks.

Imereti. The region's high mountainous settlements differ from one another by population sizes. Some of these settlements belong to other region's mountainous historical-geographic provinces.

Due to the complex landscape the share of uncultivated agricultural land (52%) is lower only compared to high mountainous regions of Guria and Adjara. This landscape has tourism potential that has not been exploited so far. In Zemo Imereti region the level of development of hotels, restaurants, and similar services is low. Existing natural resources are not used and studied, so are the ways for their extraction, despite the fact that Imereti is the third region after Tbilisi and Adjara Autonomous Republic in generating the greatest industrial added value and can further grow in this direction. Despite existing opportunities, the economy of Imereti is least diversified. Correspondingly, there is a high labor migration among the youth. A complex landscape, poor state of roads and transport infrastructure, prolong travel time from Imereti high mountainous settlements to urban centers.

In the region's high mountainous settlements, the most common natural disasters are landslides – gravitation processes, floods, and erosion of riverbanks.

Guria. There are three high mountainous settlements in Chokhatauri municipality. These villages are mostly populated by ecomigrants from Adjara.

There is a sufficient number of educational institutions in the villages. Economically active residents either travel abroad for seasonal works for more than three months or find jobs in adjacent tourist zones and Adjara. The residents have to visit the municipality's administrative center or Batumi to receive various services.

In the region's high mountainous settlements, the most common natural disasters are landslides – gravitation processes and erosion of riverbanks.

Adjara. In this region, in addition to settlements belonging to the historical-geographic province, several other settlements bear the status of a high mountainous settlement.

In mountainous villages there is an insufficient number of kindergartens and mostly elementary (6 grades) and middle (9 grades) schools operate.

The following economic activities are prioritized: tourism, energy, and animal farming. The region is characterized by the scarcity of agricultural land resources, complex landscape, and a large population. Due to the complexity of the landscape, the region has a big share of uncultivated agricultural land (60%).

Unlike other regions, there is a significant number of sports and cultural infrastructural facilities in Adjara. Correspondingly the region has many coaches and successful sportsmen.

In the high mountainous settlements, the most common natural disasters are snow avalanches, landslides-gravitation processes and torrents.

Despite specificities of different high mountainous regions, there are certain similarities. The high mountainous settlements of Mtskheta-Mtianeti, Racha-Lechkhumi, Kvemo Svaneti, Samegrelo-Zemo Svaneti, Kakheti (Tusheti) regions face a common challenge: depopulation and aging. These factors can contribute to the development of joint programs for such regions or municipalities.

2.15. Conclusions

Development of high mountainous settlements requires a comprehensive, multifaceted approach based on regional characteristics, such as population density, steepness of mountain slopes, scarcity of agricultural land, land area to human resources ratios, and susceptibility to natural disasters.

The analysis revealed that human resources of specific municipalities are concentrated in urban and resort-type mountainous settlements. Opportunities existing in these settlements contribute to employment and improvements in standards of living in other mountainous places. They also improve access to public and other services for local residents, entrepreneurs, and visitors. Correspondingly, urban settlements and tourist areas serve as centers of development of high mountainous communities.

Negative demographic and migration dynamics are caused by young residents' search for education and employment opportunities and means for the improvement in living conditions in other areas. Villagers choose to move to administrative and tourist centers of the same municipalities or bigger cities of Georgia. Economically active citizens leave the places of habitation in search for seasonal jobs for more than three months.

The social benefits and allowances established in the law are thought to positively affect the socio-economic state of people living in high mountainous regions in the short and medium run; the state has to carry out projects aiming to defeat poverty and increase the population's economic activities.

The average age of population of high mountainous settlements has been on an increase and so has the share of pension age population. This indicator may further increase in the future, because ageing population may migrate to high mountainous settlements to receive increased pensions, social benefits and allowances.

The residents of high mountainous settlements live in poor living conditions: some do not have clean drinking water. Water supply and sewerage systems are not functional. The population mainly use wood for heating. The use of telecommunication services is limited.

The high mountainous settlements do not fully exploit the existing hydro energetic potential and opportunities associated with alternative energy sources. Importantly, environmental impact associated with the application of this potential has to be minimized.

In high mountainous settlements, access to certain healthcare services is restricted due to climatic and geographic reasons and remoteness from modern technological medical centers.

The state has started developing an important infrastructural network to interconnect high mountainous settlements and also ensure their connection with bigger settlements of Georgia. Despite these efforts, the poor condition of roads connecting settlements with municipal or regional and transportation hubs remains problematic which, in turn, hampers the access to different services for local communities.

The high mountainous settlements play a minor role in the country's economy. Their economies are less diversified. The major types of activities are agriculture, tourism and construction. In the high mountainous regions, the scale of business activities is much smaller compared to other parts of the country. In these settlements the major types of businesses are small, medium and micro enterprises and small farms.

In high mountainous settlements the major challenges faced by small and medium enterprises are limited access to financial resources, lack of innovation, limited use of modern technologies, and scarcity of qualified labor and entrepreneurial skills.

The Law of Georgia on the Development of High Mountainous Regions and other legislative acts established different tax benefits for businesses having the status of a high mountainous settlement enterprise/individual entrepreneur. Micro, small and medium enterprises, individual entrepreneurs and farmers have difficulties with engaging in state programs supporting businesses due to high requirements related to collateral and investment rates.

Under the European Union Association Agreement, enactment of the Deep and Comprehensive Free Trade Area requires introduction of food safety standards by 2020. The required additional investments are not feasible for farmers and small and medium enterprises. This may create additional business and trade barriers to the promotion of their products.

Incomes of residents of high mountainous regions are lower compared to the rest of Georgia. There are mostly small family enterprises producing the amount of products that barely meet family needs. Pensions make up an important part of family income. The income of family enterprises suffer from losses caused by product storage problems. Other reasons for low incomes are barriers to product sales. The number of processing enterprises and product collection centers is insufficient.

The tourism potential of high mountainous regions is not adequately exploited because of the underdeveloped tourism infrastructure, lack of information and accessibility. Tourist areas face such challenges as the lack of qualified personnel, low quality of services, scarcity of tourism products, underdeveloped production and supply chains of local traditional products.

In high mountainous settlements the quality of general education services is low (infrastructure, personnel, methodology). The access to vocational education, professional development and retraining is limited.

Considering the state of demography, it is advisable to maintain existing general education, cultural and sports facilities in optimal condition and support activities carried out at these facilities.

The economic potential of forests is not effectively exploited. Both wood resources of forests (processing by enterprises) and non-wood resources are minimally used. It is important to introduce effective approaches to forest use such as hunting enterprises, recreational use of forests and development of ecotourism – use of tourism potential.

Rich and diverse cultural heritage of mountainous settlements of Georgia provide opportunities for development and preservation of original culture. However, many heritage sites face the danger of damage and destruction and require reconstruction-fortification works.

Under the existing legislation, the state policy for high mountainous settlements is a part of the country's regional policy and is aimed at addressing problems specific to mountainous settlements.

Thus, an adequate information system is needed for planning, monitoring, and evaluating outcomes of development programs.

The national strategies and state programs include components bearing significance for the development of high mountainous settlements. Plurality of these activities calls for joint work, coordination, management and avoidance of overlaps.

Scarcity and fragmentation of agricultural land plots lead to limited access to financial resources and technologies, low productivity and competitiveness. These factors will constrain effective planning and implementation of development programs in the medium run.

The role of self-government bodies in the development and management of high mountainous settlements is limited due to the lack of resources. Also, local residents are not particularly proactive in defining and fulfilling priorities. Climatic, geographic and settlement-specific characteristics of high mountainous regions create additional obstacles to information circulation and civic engagement in government decision making.

3. SWOT Analysis of High Mountainous Regions

(Assessment of Strengths, Weaknesses, Opportunities, and Threats)

The strengths, weaknesses, opportunities and threats of high mountainous settlements have been identified based on the results of the analysis and the consultants' expertise and experience, as well as discussions involving various stakeholders. Thus, a combined SWOT analysis was carried out. The analysis involved the following criteria: system of settlements; environment, resources, risks; access and connectivity; growth and competitiveness. This assessment is used for identifying challenges and objectives faced by high mountainous settlements.

Category	Strengths	Weaknesses	Opportunities	Threats
Cultural heritage, natural resources, and environmental protection	<ul style="list-style-type: none"> • Rich biodiversity • Rich forest resources • Relatively large and expanding protected areas • Effective management of protected areas • Wealth of renewable energy sources (hydro, wind, solar, biomass) • Wealth of cultural heritage monuments • Drinking water resources • Existence of a plan to mitigate risks related to torrents and landslides 	<ul style="list-style-type: none"> • Dysfunctional/nonexistent sewerage and water supply systems in high mountainous settlements • Deteriorated biodiversity (flora and fauna) due to fragmentation of natural areas • Speedy deterioration of material-cultural monuments due to damages and environmental impact • Limited experience in using wind and solar renewable energies • Frequent occurrence of torrents, landslides and floods • High fragmentation of land • Limited access to municipal waste management services for the population of high mountainous regions • Lack of a plan of preventive measures to cope with disastrous geological processes, lack of plans of adaptation and mitigation measures for vulnerable territories 	<ul style="list-style-type: none"> • Development and effective management of protected areas • Preservation/rehabilitation of cultural heritage monuments and revitalization of places where these monuments are located • Promotion of cultural heritage sites of high mountainous settlements to increase their attractiveness for tourism development purposes • Improved management of rivers • Cooperation with relevant high mountainous settlements of neighboring countries to mitigate the impact of natural disasters 	<ul style="list-style-type: none"> • Ineffective use of environment and natural resources • Complications in accessing, preserving and using local cultural heritage sites due to ineffective management of tourist flows • Negative environmental impact of economic activities • Negative effect of excessive use of water resources • Increasing number of natural disasters caused by climate change and human interventions in environmental development • Negative impact of climate change on economic activities and quality of life

		emerging as a result of climate change, lack of a natural disasters management system		
Access and connectivity	<ul style="list-style-type: none"> • Availability of road infrastructure and transportation system connecting developed urban centers • Availability of airport/airdromes providing access to high mountainous settlements with tourism potential distanced from urban centers of Georgia 	<ul style="list-style-type: none"> • Inadequate condition/lack of a road infrastructure connecting different regions' high mountainous settlements with municipal/urban centers • Additional difficulties caused by climatic-geographical specificities hampering circulation of information among the residents and civic engagement in decision making • Poor road and transportation connections between high mountainous settlements and resorts, and municipal and urban centers • Poor access to communication systems (including internet) in certain high mountainous settlements • Lack of intermodal transportation hubs and 	<ul style="list-style-type: none"> • Development of transportation networks in different tourism, resort areas in high mountainous settlements, increasing their interconnectivity and access to various urban centers • Development of a multimodal transportation system and improved shipment logistics • Improvements in information-communication infrastructure in high mountainous settlements • Development of cable transport connecting high mountainous settlements • Optimization and improvements in quality of existing medical service by means of medical service referrals and transportation schemes • Development of various E-governance instruments, 	<ul style="list-style-type: none"> • Challenges associated with increased transportation flows to high mountainous urban settlements and resorts (traffic jams, environmental pollution etc.) • Deterioration-termination of transportation services provided in high mountainous settlements • Transportation network damages caused by natural disasters

		<p>underdeveloped logistical centers</p> <ul style="list-style-type: none"> • Relatively high expenses associated with the delivery of services in underpopulated settlements • High expenses associated with the improvement of connectivity in high mountainous settlements due to landscape problems. 	including development of E-participation of citizens	
Human resources, competitiveness, and growth	<ul style="list-style-type: none"> • Significant tourism potential of high mountainous settlements • Increasing number of international visitors • Developed infrastructure, including tourism infrastructure in famous high mountainous resorts • The country's attractive investment 	<ul style="list-style-type: none"> • High rates of socio-economic inequality in high mountainous settlements • Significant negative dynamics of population migration from village-type high mountainous settlements • High rate of reduction of economically active population in high mountainous settlements • Low level of development of village-type high mountainous settlements compared to high mountainous urban settlements and resorts 	<ul style="list-style-type: none"> • Positive impact of developed high mountainous urban settlements and resorts on the development of adjacent mountainous settlements • Application of modern technologies and organizational forms to provide services in high mountainous settlements • Encouragement of reversal of migration of economically active local residents by supporting economic and business activities 	<ul style="list-style-type: none"> • Deepening disparities between high mountainous settlements and lowland • Unchanged number of visitors despite growing numbers of tourist products and sites • Decreasing visitor flows due to international economic/financial crisis • Social tensions caused by changes in traditional

	<p>environment and tax privileges for businesses operating in high mountainous settlements</p> <ul style="list-style-type: none"> • State programs supporting farms, cooperatives, and entrepreneurship • Clean environment necessary for the development of specific sectors of the economy • Existence of traditional products and industries • Social support package(s) for residents of high mountainous settlements envisioned in the legislation • Rich historical and cultural heritage • Diverse environment and protected areas • State programs providing salary 	<ul style="list-style-type: none"> • Negative impact of complex climate conditions and landscape-related difficulties on economic activities • Abandoned high mountainous settlements in certain regions and drastic seasonal reduction of population of high mountainous settlements • Low competitiveness of local products and the lack of markets • Underdeveloped and undiversified sectors of economy • Limited access to financial resources • Few registered land plots and difficulties associated with land registration • Lack of entrepreneurial and farming skills among the local population • Lack of qualified professionals • Low level of hospitality and other services, scarcity of personnel speaking foreign languages • Poor knowledge of modern technologies and 	<ul style="list-style-type: none"> • Supporting entrepreneurial and business skill development in local population • Reduction in territorial disparities and development of village-type high mountainous settlements by promoting modern technologies, infrastructure and creative industries • Production of ecologically clean products based on local resources • Increasing sales of local agricultural products by establishing linkages between producers and consumers and creating supply chains • Increasing number of cultural products in high mountainous settlements • Maximal application of tourism potential, extension of tourism seasons through diversification of tourist products and development of tourism infrastructure • Existence of potential for the development of alpinism, ecotourism, and rural tourism 	<p>behavior and lifestyle</p> <ul style="list-style-type: none"> • Lack of the local population's interest in entrepreneurship • Lack of the local population's incentives to receive revenues caused by the fear to lose social benefits • Continuing population migration from high mountainous settlements and negative demographic trends, especially in settlements located near the border • Deepening depopulation of high mountainous settlements
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	<p>supplements for medical personnel</p>	<p>limited opportunities for their use</p> <ul style="list-style-type: none"> • Deeply rooted poverty • Scarcity of medical personnel and resources • Complex climate and terrain hampering infrastructural works • Lack of positive experiences and opportunities for organizing cooperatives and low awareness of internal business relations inside cooperatives. 	<ul style="list-style-type: none"> • Adjusting the education system to local environment and labor market demands • Production of traditional high value product varieties: bio/organic; geographic origin names; authentic trademarks etc. • Development of cooperation systems/cooperatives • Increased youth engagement • Increasing access to equipment necessary for agricultural production in high mountainous areas • Development of traditional industries specific to mountainous settlements (e.g. sheep farming in Tusheti) • Improving access to education and other services for local residents through the development of basic infrastructure • Reversed migration of certain categories of population as a result of expanded provision of social packages. 	
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4. Vision

The strategic vision reflects on an assessment of socio-economic conditions and resources of high mountainous settlements, as well as key problems faced by these communities. The strategic vision provides a picture depicting a desirable future to be attained through addressing existing problems and objectives for sustainable development.

By 2023 living standards and demographic dynamics in Georgia's high mountainous settlements are improved as a result of improved access to basic infrastructure, social and public services, greater tourist attraction, and support provided to economic activities based on agriculture and production.

In order to achieve the above objective, in addition to the state programmes targeting all high mountainous settlements, the Strategy also envisages the utilization of local potential and identification of special areas for development so that these targeted programmes are implemented in light of existing linkages with local hubs/attraction centers.

5. Strategic Goals and Objectives

The strategic goals and objectives for the vision above have been informed by findings of the analysis of situation in high mountainous settlements

The following three strategic goals and respective objectives have been developed Based on this approach:

Based on this approach, the following three strategic goals with respective objectives have been developed:

Strategic Goal 1. Sustainable development of high mountainous settlements

Objective 1: Support to the development of tourism

Development of tourism infrastructure will pave the way to the utilization of tourism potential of high mountainous settlements. Development of hospitality services and offering high quality services to visitors in the entire territory of the country including attractive high mountainous settlements, is of utmost importance for Georgia. High mountainous areas are characterized with great potential for the development of agro- and ecotourism. Therefore, the Strategy envisages further improvement of state programmes informed by this potential.

Rehabilitation of cultural heritage monuments and construction of infrastructure will greatly contribute to the development of Georgia's rich cultural heritage in high mountainous regions and preservation of the country's uniqueness.

Outcome indicators:

- Number of overnight stays in the hospitality system of the high mountainous regions
- Number of restored cultural monuments and tourism facilities
- Number of visitors in the Protected Areas

Objective 2: Support for agricultural sector

Since agriculture remains the main source of income and economic activities for communities residing in the country's high mountainous areas, it is important to support agricultural sector through well-developed targeted state programmes and with measures including but not limited to support for agricultural cooperatives and construction of processing facilities.

Outcome indicators:

- Area of land used for agricultural purposes
- Number of newly established agricultural enterprises
- Access to support services and programmes by farmers
- Number of supported cooperatives

Objective 3. Support for entrepreneurship

Entrepreneurship in most of the country's high mountainous regions remains underdeveloped due to limited access to financial resources, lack of skilled labour and underdeveloped entrepreneurship skills. Therefore, it is envisaged to undertake investment measures aimed to empower small, medium and micro businesses and foster entrepreneurship skills through implementing adequate state programmes.

Outcome indicators:

- Increased employment through hiring
- Number of newly registered enterprises per 1000 persons
- Number of enterprises/individual entrepreneurs in high mountainous settlements; improved indicators of turnover and production
- Improved entrepreneurship skills among local communities.

Objective 4. Construction of road infrastructure

Poorly developed road infrastructure in some of high mountainous settlements is one of the common barriers hampering movement, access to services and economic activities in these areas. In addition, transport network is particularly susceptible to the impact caused by natural disasters. Therefore, rehabilitation/construction of road infrastructure, as well as preventive measures for mitigating impact of natural disasters will be important part of the Strategy. In addition, the document envisages measures aimed to eliminate effects of natural catastrophes.

Outcome indicators:

- Reduced commute time
- Length of rehabilitated and constructed roads

Objective 5. Environmental Protection and Natural Resource Management

Ineffective use of environment and natural resources in high mountainous settlements remains as one of the biggest challenges. Natural as well artificial interventions have dire negative impact on environment. Respective stakeholders will undertake measures to ensure effective use of forest resources and greater public awareness for effective protection of environment and natural resource management in high mountainous settlements. Some of these measures include restoration of burned areas, environmental protection measures in the Protected Areas etc.

Outcome indicators:

- Number of households using alternative energy sources
- Number of municipalities with full coverage with municipal waste management services
- Area of resorted post-fire forests

Outcome of the strategic goal:

Communities in high mountainous settlements enjoy effective goods and service delivery and environment conducive to entrepreneurship, as well as greater employment opportunities and income.

Strategic Goal 2. Social support for communities residing in high mountainous settlementsObjective 6: Access to quality health services

High mountainous communities suffer from limited access to some of health services because of a distance to healthcare facilities or their lack thereof. In response to these challenges, the Strategy envisages rehabilitation/construction of emergency and out-patient health and improvement of emergency medical assistance services. Medical personnel working in high mountainous settlements will continue to enjoy monthly allowances in addition to their salaries which is expected to contribute to improved access to health care services in the highlands.

Outcome indicators:

- Number of constructed health care facilities
- Total annual amount of allowances allocated to health personnel

Objective 7: Access to quality education

The lack/absence of educational infrastructure or distance to education facilities restrict the access to quality education in high mountainous settlements. In order to improve such access, it is expedient to take measures for rehabilitation/construction of educational infrastructure, ensuring an increase in the number of vocational schools and training, transportation to schools, flexibility of education system reflecting on the local context and consistency with labour market demands.

Outcome indicators:

- Number of individuals with higher and vocational education per 1000 persons
- Improved geographical-territorial access to general education facilities
- Number of schools/boarding schools constructed/rehabilitated
- Increased number of vocational education facilities in high mountainous settlements

Objective 8: Support for improved demographic standing

Most of high mountainous settlements are affected by population aging and growing demographic burden. Due to high importance attached to these issues, it is planned to incentivise birth rate and reduce negative demographic dynamics such as continued financial incentives per new-born in high mountainous settlements, improvement of pre-school educational infrastructure and development of other targeted programmes.

Outcome indicators:

- Demographic burden
- Reduced migration
- Greater birth coefficient
- Increased rate of enrolment in pre-school institutions

Objective 9: Access to utility and communication services

In order to ensure effective access to utility and communication services remaining families will be provided with solar pellets as a source of electricity. In addition, measures will be taken to ensure the provision with natural gas, water – both potable and irrigation, as well as the Internet.

Outcome indicators:

- Increased number of potable water consumers
- Number of utility and communication projects
- Number of electricity and natural gas consumers
- Number of communication consumers
- Percentage of the population with an access to waste management service
- Number of municipalities using alternative energy source

Objective 10: Support for youth

Outbound migration of youth and labour force from the high mountainous settlements remains a challenge. Lack of employment opportunities and poor access to education are the two most common drivers of the youth migration. Therefore, special programmes will be developed to incentivize economic activities. In addition, young people will receive funding to pursue higher education, and opportunities to engage in informal education activities.

Outcome indicators:

- Number of youths receiving funding for higher education
- Increased number of users of services for transferring knowledge and innovation
- Increased share of young people in the management of newly registered enterprises

Objective 11: Development of culture and sports infrastructure

The analysis has found that maintenance of existing and cultural and sport facilities in their most optimal condition and support to greater involvement in sports and cultural activities will contribute to development of high mountainous settlements. Prior to identifying specific measures for increasing the number of culture and sports facilities and respective activities, 'profiles' of sports and culture facilities will be carried out in the entire territory of the country.

Outcome indicators:

- Number of constructed/organized cultural and sports facilities
- Indicators of activities conducted in cultural and sports facilities

Outcome of the strategic goal:

Living and development conditions are improved for communities residing in high mountainous settlements.

Strategic Goal 3. Access to services in High Mountainous Settlements**Objective 12:** Implementation of innovative systems for management and service delivery

The importance of applying modern technologies for good governance has long been recognized. Introduction of electronic services and best management practices (intermunicipal cooperation), and development of electronic civil participation instruments, will contribute to considerable saving of administrative costs, lead to greater civic engagement in the implementation of local self-governance and create an environment which will benefit both service providers and users.

Outcome indicators:

- Increased number of municipalities with implemented management systems
- Increased level of the application of innovative management and service delivery systems
- Improved indicators of civic participation in local self-governance

Objective 13: Increased access to public services

The distance to administrative centers for many of high mountainous settlements often restricts access to public services for local communities. In order to address this issue, residents of high mountainous settlements should receive services in close vicinity to their homes. In addition, there should be enough facilities to ensure that local communities feel safe and secure. When it comes to public services, due attention should be paid to the importance of protecting local communities from geologic and meteorological threats.

Outcome indicators:

- Level of accessibility of public services
- Level of satisfaction of high mountainous communities with respect to accessibility of public services
- Number of users of programmes for prevention of natural disasters and mitigation of their impact
- Transparency index of legislative and executive branches of local self-governments

Outcome of the strategic goal:

Communities of high mountainous settlements have greater access to public services and opportunities for engaging in self-government processes.

7. Implementation and Management Mechanism

The collegial body, National Council for Mountain Development coordinates the work of relevant ministries involved in the elaboration of a policy for the development of mountainous settlements.

The state budget is the main source of funding of the strategy and action plan for the development of mountainous settlements of Georgia. The strategy documents and action plans developed by relevant ministries of Georgia and agencies subordinated to the Government of Georgia have to correspond to the priorities established in this strategy. The projects aimed at developing high mountainous regions will be funded by the Fund for the Development of High Mountainous Settlements. In addition, the agencies subordinated to different state bodies and implementing various project will also be able to contribute to funding so that all funding sources defined by the legislation are used.

International partners and donor organizations will take part in the effective implementation of the strategy and action plan.

In addition to state bodies, municipal bodies, private companies, civil and international organizations will participate in the implementation of the strategy. Coordination will be ensured through a three-level system:

- Decision-making: Government of Georgia is responsible for making decisions on important and overarching issues;
- Consultative level: National Council for Mountain Development is responsible for fulfilling decisions made by the Government. The Council shall also elaborate on possible responses to issues, and conduct monitoring and evaluation. The Council carries out monitoring through the Ministry of Regional Development and Infrastructure responsible for developing and submitting the strategy implementation reports for review;
- Executive level: the ministries, municipal bodies, different state agencies and other organizations will be responsible for the implementing the strategy and action plan. The Ministry of Regional Development and Infrastructure will be responsible for coordinating implementation of the strategy and action plan.

An estimated budget for the implementation of a two-year action plan of the strategy totals approximately 700 mln GEL.

8. Reporting, Monitoring, and Evaluation

The reports describing implementation of the strategy will be developed on an annual basis. Implementation of the activities and projects defined in the action plan will require regular monitoring. Achievements related to strategic objectives and the strategic vision will be evaluated. The strategy will be revised periodically. Annual monitoring reports will reflect the process and outcomes of the action plan implementation during one reporting year. The evaluation reports will be prepared twice: interim – in two years from the approval of the strategy and final – in 2023. Strategic objectives will be revised if they are accomplished or the achievement of the vision requires new objectives. The strategic vision will be revised if an alternative vision is developed after consulting all stakeholders. Consultations regarding an alternative vision can be carried out in the fourth year from the approval of the strategy.

The Ministry of Regional Development and Infrastructure of Georgia will develop monitoring and evaluation reports based on the reports prepared by relevant agencies. The Mountain Development Council will review reports and develop recommendations to improve state of affairs. The public will be informed about how the strategy and action plan are implemented through the meetings with the representatives of the Council and Ministry, a special website, in different media and social networks.

Monitoring and evaluation will be based on the data provided by the National Statistics Office of Georgia. The Georgian legislation places development of high mountainous settlements in the domain of the regional policy. Thus, the Statistics Office will collect data for indicators related to the development of the high mountainous settlements. Information on the development of high mountainous settlements can be requested from state bodies and municipalities. The data will be provided in a standardized format and will be accessible for all interested persons. Thus, the strategy can be assessed vis-à-vis implementation of other national strategies.