



**THE STRATEGIC ENVIRONMENTAL, SOCIAL AND CULTURAL HERITAGE ASSESSMENT
OF THE REGIONAL DEVELOPMENT AND TOURISM DEVELOPMENT STRATEGIES OF
SAMTSKHE-JAVAKHETI AND MTSKETA-MTIANETI**


Third Regional Development Project

May, 2016

Abbreviations

GNTA	Georgia National Tourism Administration
EIA	Environnemental Impact Assessment
EMP	Environmental Management Plan
RDS	Regional Development Strategy
RTDS	Regional Tourism Development Strategy
MDF	Municipal Development Fund of Georgia
MoA	Ministry of Agriculture
MoENRP	Ministry of Environment and Natural Resources Protection of Georgia
MoCMP	Ministry of Culture and Monument Protection
MESD	Ministry of Economic and Sustainable Development
NACHP	National Agency for Cultural Heritage Protection
PIU	Project Implementation Unit
RDP	Regional Development Project
SECHSA	Strategic Environmental, Cultural Heritage and Social Assessment
WB	World Bank

Contents

	1
THE STRATEGIC ENVIRONMENTAL, SOCIAL AND CULTURAL HERITAGE ASSESSMENT OF THE REGIONAL DEVELOPMENT AND TOURISM DEVELOPMENT STRATEGIES OF SAMTSKHE-JAVAKHETI AND MTSKETA-MTIANETI.....	1
EXECUTIVE SUMMARY	1
1. INTRODUCTION.....	12
1.1 THIRD REGIONAL DEVELOPMENT PROJECT (RDP III).....	12
1.2 REGIONAL AND SECTORAL CONTEXT: RDS AND RTDS FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS.....	13
1.3 REGIONAL DEVELOPMENT AND TOURISM DEVELOPMENT STRATEGIES FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS OF GEORGIA	14
1.3.1. The Regional Development strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti Regions	14
1.3.2 The Regional Tourism Development strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti Regions.....	15
The RTDS for Mtskheta-Mtianeti Region	16
1.4. OBJECTIVES OF THE STRATEGIC ENVIRONMENTAL, CULTURAL HERITAGE AND SOCIAL ASSESSMENT (SECHSA)	16
2. SOCIAL ENVIRONMENT, CULTURAL HERITAGE AND TOURISM DEVELOPMENT TRENDS IN SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI.....	17
2.1 SAMTSKHE-JAVAKHETI: SOCIAL FEATURES, CULTURAL HERITAGE AND TOURISM DEVELOPMENT TRENDS	17
2.1.1 Social Profile of Samtskhe-Javakheti	18
2.1.2 Cultural Heritage of Samtskhe-Javakheti	22
2.1.3 Tourism Development Trends in Samtskhe-Javakheti.....	23
2.1.4 Natural Environment of Samtskhe-Javakheti.....	24
2.2 MTSKHETA-MTIANETI: SOCIAL FEATURES, CULTURAL HERITAGE AND TOURISM DEVELOPMENT TRENDS	29

2.2.1 Social Profile of Mtskheta-Mtianeti.....	29
2.2.2 Cultural Heritage of Mtskheta-Mtianeti.....	36
2.2.3 Tourism Development Trends in Mtskheta-Mtianeti	37
2.2.4 Natural Environment of Mtskheta-Mtianeti Region	38
3. LEGAL AND ADMINISTRATIVE SYSTEM IN GEORGIA FOR ENVIRONMENTAL AND CULTURAL HERITAGE PROTECTION	46
3.1 CULTURAL HERITAGE PROTECTION AND SPATIAL PLANNING	46
3.1.1 Administrative System.....	46
3.1.2 Legal System	47
3.2 ENVIRONMENTAL PROTECTION.....	50
3.2.1 Administrative Structure.....	50
3.2.2 Legal framework	51
3.2.2.1 Framework Legislation.....	51
3.2.2.2 Legislation Related to Environmental Permitting.....	52
3.2.2.3 Other Environmental Laws.....	53
3.2.2.4 International Commitments	53
3.3 LOCAL SELF-GOVERNMENT CODE	54
4. ASSESSMENT OF RISKS TO THE NATURAL ENVIRONMENT, SOCIAL STRATA AND PHYSICAL CULTURAL RESOURCES OF THE TARGET REGIONS	55
4.1 IMPACTS RELATED TO THE REGIONAL DEVELOPMENT STRATEGIES.....	55
4.1.1 Assessment of Risks to the Natural Environment	55
4.1.1.1 Agriculture:	55
4.1.1.2 Energy Sector.....	58
4.1.1.3 Promoting development of entrepreneurship in the region through efficient services supporting small and medium-sized enterprises:.....	59
4.1.1.4 Infrastructure: Local and Regional roads, water supply, sewerage and wastewater treatment facilities; natural gas supply.....	60
4.1.1.5 Exploration of Inert Materials	61
4.1.1.6 Environmental Protection Component of RDSs.....	61
Rational use of freshwater, mineral water and forest resources.....	62
4.1.2 Assessment of RDS Related Risks to the Social Strata	63
4.2 IMPACTS RELATED TO THE REGIONAL TOURISM DEVELOPMENT STRATEGIES ..	67
4.2.1 Tier 1 Actions.....	69
4.2.2 Tier 2 actions are aimed to address medium and long-term impacts:	70
4.2.3 Impacts on Biophysical Environment	72
4.2.4 Social Impacts Related to RTDSs	73

4.2.5	Impacts on Cultural Heritage	76
5.	STAKEHOLDER ANALYSIS.....	78
5.1	Stakeholders.....	78
5.2	Project Developing and Implementing Agencies.....	79
5.3	Regulatory Bodies	81
5.4	Beneficiaries and Affected Communities and Social Groups.....	82
5.5	Local Businesses	84
6.	ANALYSIS OF ALTERNATIVES.....	86
6.1	INTRODUCTION.....	86
6.2	REGIONAL DEVELOPMENT STRATEGY FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS AND ALTERNATIVE SCENARIOS	86
6.3	TOURISM DEVELOPMENT STRATEGY FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS AND ALTERNATIVE SCENARIOS	87
6.4	ALTERNATIVES OF RDP III PROJECT IMPLEMENTATION SCHEMES.....	90
6.5	SELECTION OF SUBPROJECTS WITHIN THE RDP III PROJECT FRAMES.....	93
7.	RDP III AND SECHSA RECCOMENDATIONS FOR ITS IMPLEMENTATION.....	95
8.	DISSEMINATION AND CONSULTATIONS.....	98
	Consultations with Scientists and Expert’s groups	98

EXECUTIVE SUMMARY

The Strategic Environmental, Social and Cultural Heritage Assessment (SECHSA) of the regional development and tourism development strategies of Samtskhe-Javakheti and Mtskheta-Mtianeti was carried for the purposes of the World Bank-financed Third Regional Development Project (RDP III). The objective of RDP III is to improve infrastructure services and institutional capacity to support the development of a tourism-based economy of the Samtskhe-Javakheti and Mtskheta-Mtianeti regions. The implementation of the RDP III is expected to improve access, quality and reliability of public infrastructure; increase the volume of private sector investment in the region; and increase points of sales (tourism-related enterprises) in renovated culture heritage sites and cities. With these interventions the RDP III will contribute to the implementation of the Regional Development Strategies (RDSs) and Regional Tourism Development Strategies (RTDSs) of Samtskhe-Javakheti and Mtskheta-Mtianeti regions. The SECHSA aimed to analyze strengths and weaknesses of these strategies and identify risks associated with their implementation in order to allow well-informed decision-making on the relevance of supporting RDSs and RTDSs, and fine tuning the design of RDP III with the Government's policy objectives in the target regions.

The SECHSA also explored expected cumulative impacts of RDSs, RTDSs and RDP III and impacts of the likely future development induced by the implementation of these strategies and of the WB -supported operation. The SECHSA report also provides recommendations towards the finalization of tourism development strategies for the target regions and to define how RDP III investments may amplify positive impacts and avoid or minimize any risks that these plans may carry.

1. Background information of Mtskheta-Mtianeti and Samtskhe-Javakheti Regions

Samtskhe-Javakheti

Samtskhe-Javakheti region stretches over 6413 km² and has a population of 160 504. The region includes six large municipalities and its administrative center is Akhaltsikhe. Main urban areas are Akhalkalaki, Akhaltsikhe, Borjomi, Vale, and Ninotsminda. 69% of the population is rural. There are around 1267 IDPs, vast majority of those are from 1992-93 conflict. Ethnicity is an important consideration in Samtskhe-Javakheti. Ethnic minorities comprise 51.6% (population census, 2014) of the population of Samtskhe-Javakheti, with vast majority – 50.5% - of ethnic Armenians. Many females do not know Georgian, which makes it difficult for them to communicate with those outside their ethnic community, to provide feedback to local institutions, participate in meetings, or to access the labor market.

Samtskhe-Javakheti is a mostly agrarian region. Most of the human resources are employed in agriculture. The share of agriculture in the region's total value added in 2014 was approximately 34%, higher than the same figure in other industries of the region and other regions of Georgia.

The region's agriculture is made up of family farms and commercial farms. 73% of family farms produce agricultural products for own use, while for others - agriculture is a source of income. The level of commercialization of agriculture in the Samtskhe-Javakheti region is higher than in any other regional of the country. More than half of agricultural land is used for pastures. The rest area used for agriculture is arable land. Productivity in both – animal farming and crop growing is pretty low. There are no major industrial facilities in the region. Mining for construction materials and timber extraction are significant branches of economic activity. Construction of a new 500/400/200 kWh electric substation and high voltage transmission lines have been completed recently that will facilitate Georgia's power exports to Turkey. Baku-Tbilisi-Ceyhan oil pipeline passes through Samtskhe-Javakheti since 2006. A gas pipeline connecting the same destinations lies in the same transport corridor.

Samtskhe-Javakheti is home to several cultural heritage sites and nature attractions. The most significant sites are: Akhaltsikhe and Borjomi historical cities, Abastumani wellness resort town with its vernacular wooden architecture houses, and observatory Vardzia cave monastery and Vanis Kvabebi, Akhaltsikhe Fortress Rabati,

Romanov palace in Likani, Sapara monastery, Zarzma monastery, Khertvisi fortress, Phoka monastery, and Atskuri temple ruins and fortress. The main nature attractions are: Bakuriani ski resort city, Borjomi-Kharagauli National Park, Javakheti National Park, six lakes and protected areas around them, and a world known bird-watching area with preserved plains and wildlife.

Mtskheta-Mtianeti

Mtskheta-Mtianeti region has an extension of 6.785 km² and a population of 94 573. The region includes four large municipalities and its administrative center is Mtskheta. The main urban areas are Mtskheta and Dusheti. Approximately 75% of the population resides in rural areas. Vast majority of population is ethnically Georgian. There are 9564 IDPs in the region most of which were displaced in the 2008 conflict.

Cattle and sheep farming and dairy production are the main branches of agriculture. Potato is a dominant crop cultivated. There are no large commercial farms in the region. Subsistence farming prevails. Mtskheta-Mtianeti is a major transport corridor, as an international automobile road passing through this region connects Armenia and Georgia with Russia and significant volumes of cargo are transported through this road. However landslides and avalanches block the road several times a year. A major North-South gas pipeline passes through this region too and is used for natural gas import from Russia to Georgia and Armenia.

Mtskheta-Mtianeti region is a major tourism destination with the UNESCO World Heritage Site of Mtskheta town and an exceptional portfolio of cultural heritage and natural products with a year round appeal for foreign and domestic visitors. The most significant sites are: Dusheti and Kazbegi historical towns with their vernacular architectural style, Svetitskhoveli church, Jvari temple, Shiomghvime monastery, archaeological sites of Bagineti-Armazi and Samtavro-Dzalisi; Zedazeni church, Bochorna church, Ananuri fortress, Gergeti Trinity church, Shatili and Mutso historic fortified cultural heritage villages, and Sno fortress. The main nature attractions are Gudauri ski resort and Tbilisi National Park.

2. Regional Development Strategies (RDS) for Samtskhe-Javakheti and Mtskheta-Mtianeti

RDSs for Samtskhe-Javakheti and Mtskheta Mtianeti were developed for the period of 2014-2021 in accordance with the guiding principles provided in the Regional Development Strategy of Georgia for 2010-2017 and the State Strategy on Regional Development of Georgia for 2015-2017. The RDS for Samtskhe-Javakheti was completed and approved in 2013. RDS 2014–2021 for Mtsketa-Mtianeti Region is approved by the Regional Development Commission and will be submitted to the Government of Georgia for adoption in near future.

RDSs for both target regions have pretty similar priorities and propose the following trends of development:

- **Agriculture:** adopt modern technologies and introduce new plant varieties for increasing productivity and efficiency; improve technological basis for cattle breeding and poultry; develop infrastructure for post-harvest handling and cold storage of produce and for food processing.
- **Energy:** development power generation capacity through construction of small and large hydro power plants (HPPs); Development of alternative sources of energy, such as wind and solar.
- **Infrastructure:** improve the network of regional and local roads; upgrade and expand water supply and sewage systems; install wastewater treatment plants and solid waste management facilities; increase coverage of electric power and gas supply; enhance communications.
- **Natural Resources:** extract and sustainably use fresh and mineral water resources, timber and non-wood forest products, and inert construction materials; also, continue exploration of coal deposits and oil fields in Samtskhe-Javakheti.
- **Small and Medium Enterprises:** provide enabling environment for the development of small and medium enterprises (SMEs) in the fields of tourism, agriculture, food processing, construction materials, alternative energy, construction and service.
- **Trans-Boundary Cooperation:** engage in international trade, tourism, trans-boundary initiatives of nature conservation and energy exchange.
- **Environment Protection:** improve management of forests and protected areas, as well as enhance capacity for the prevention and management of natural disasters; develop regional system of

monitoring quality of environment. Currently, protected areas are developed, however the management plans should be revised and approved and the newly developed Forestry Strategy should be implemented

3. Tourism Development Strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti

Final draft RTDSs for Samtskhe-Javakheti and Mtskheta-Mtianeti were developed in October 2014 through the analysis of the competitiveness of these regions as of tourism destinations using a Value Chain approach. Both Strategies cover period from 2015 to 2020. The final version of these documents are approved by WB and GNTA.. With participation of all major stakeholders, strategic vision, identification of tourist hubs, value proposition, forecasts and an action plan were formulated. Samtskhe-Javakheti and Mtskheta-Mtianeti regions - like Georgia as a whole - have significant untapped tourism development potential. The country and the region have good, affordable access from major regional and European source markets, good infrastructure, a very business-friendly regulatory environment, and a rich mix of cultural and natural attractions.

The RTDSs for both regions recommended value enhancement for the following three clusters:

Resorts:

Samtskhe-Javakheti: (a) identification of traditional winemaking and gastronomy, establishment of wine and food degustation facilities, set-up marketplaces; (b) development of new ski-lifts, snowmaking facilities and new winter adventure products – snowmobiles tours, ski-tours- in Bakuriani; (c) Development of a recreational area in Bakuriani and improved park facilities in Borjomi (spa; recreation and fun); (d) extend the outdoor activities in the territory of Borjomi-Kahargauli National Park and improve services (e) develop winter and summer events focusing on sports and USPs.

Mtskheta-Mtiantei: (a) the use of mountain guides national standards designed according to the international (UIGM) standards for professional education, training and certification; (b) Further development of a network of mountain huts, shelters and trails is important for improving the accessibility, safety, and overnight stay potential; (c) Integrated destination management covering Gudauri (winter) and Kazbegi (summer) should be explored; (d) Provide public bathrooms, public transportation, simple cafés, visitors desks incorporated with national park visitors centers, museum sales points, and information centers.

Cultural Heritage:

Samtskhe-Javakheti: (a) integrated management is needed regulated by the “heritage site management plan” (elaborated by NACHP) and mutually agreed upon by Church authorities (when the site is church property); (b) investments are needed for tourism services, including restaurants, bars, wine bars, museums, cultural performance venues, artisan shops and markets, and lastly, accommodations.; (c) training in basic hospitality skills, language training, marketing and heritage site management training by local training providers scheme in close collaboration with MoESD.; (d) encourage participation of Monasteries in a visitor program to enhance the visitor experiences and reduce the risk of future conflicts.

Mtskheta-Mtiantei: (a) investments in tourism services near cultural heritage attractions including restaurants, bars, wine bars, nightclubs, cultural performance venues, artisan shops and markets, and accommodations; (b) Specific training programs designed for heritage site guides; (c) The involvement and role of Orthodox Church should be considered while planning activities and events.

Nature and Adventure:

Samtskhe-Javakheti and Mskheta-Mtianeti: (a) improve access to the National Parks and protected areas; (b) protected areas need quality accommodations particularly near the locations of park entrances; (c) improve visitor services through a concessions policy by which the government would build facilities and lease them to private sector operators or allow private investors to build and operate facilities within the park, in exchange for annual fees and a percentage of profits from operations and (d) partnership should be encouraged between protected areas and tour guides/companies specializing in adventure sports (mountain climbing, kayaking,

rafting, etc.), involving organizations like the Adventure Travel Trade Association. (e) Special events should be organized to help promote the national parks, e.g., a cross-country skiing competition or adventure race; (f) Specialized training will be needed for nature guides, mountain rescue, and specialized adventure sports (mountain climbing, kayaking, canyoning, rafting)

Tour Circuits and Routes

Recommended value enhancements for **Samtskhe-Javakheti and Mtskheta-Mtianeti** include development of thematic circuits and trails (wine routes, heritage landscapes, historic roads), as well as development of multi-country (between Georgia, Azerbaijan, Armenia, and Turkey) tours, trails and itineraries.

4. Risks for the Natural and Social Environment and for Cultural Heritage Associated with the Implementation of RDSs and RTDSs in Mtskheta-Mtianeti and Samtskhe-Javakheti

RDSs identified some risks associated with attaining of the goals set forth in these strategies. *Excessive use of agrochemicals* that may have adverse impact on the quality of produce as well as pollute environment is the potential threat related to striving for increased productivity in rural farming. RDSs acknowledge issues related to *inadequate pasture management*. Enhancement of cattle farming may further decrease productivity of pastures and aggravate erosion due to overgrazing. Mtskheta-Mtianeti and Samtskhe-Javakheti are rich in forest resources and the established strategic goal is to increase revenues from their use, however risks of *unsustainable wood harvesting* are considerable. RDSs also cover the issues of *emissions and waste from manufacturing facilities* noting that the size/capacity of an enterprise and the environmental harm coming from it are not necessarily proportional, because larger entities are under more stringent control from the inspecting bodies and invest more in advanced technologies, while oversight of SMEs is less stringent and technologies are less sophisticated. So SMEs are not low-risk by definition and their cumulative impacts on the environment could be significant. Finally, RDSs take note of challenges related to land use which increase along with economic growth. *Land take and conversion for the needs of installing HPPs*, transmission lines, oil and gas pipelines and transport infrastructure have complex environmental and social implications. Transport infrastructure is key for regional development, however better access to some remote areas may cause *transformation of ecosystems and landscapes* preserved from anthropogenic impacts till present.

RDSs do not discuss social issues that may get in the way of regional development, except that RDS for Mtskheta-Mtianeti identifies out-migration from remote mountainous areas as an issue for the region and discusses the ways of addressing it. Risks to the physical cultural heritage are not identified. RTDSs fall short of covering environmental and social sensitivity of tourism development. While noting conservation of protection of heritage monuments as an integral part of developing cultural tourism, RTDSs make a statement about the importance of applying adequate techniques of restoration to the monuments, so that their historic value is retained.

SECSHA confirmed relevance of the risks identified in RDSs and RTDSs, provided deeper analysis of these risks, and highlighted additional sensitivities that should be considered while applying these strategies to the target regions.

A. Environment

Environment degradation from agricultural point and non-point sources of pollution

In both target regions, animal husbandry and dairy production are important branches of agriculture. Potato and other vegetables are also farmed, and grapes are grown for wine-making in Samtskhe-Javakheti. Intensification of animal farming through increasing number of cattle may lead not only to further degradation of pastures, but also have negative impact on forests and other valuable landscapes due to uncontrolled grazing outside allocated pasture lands. Organic pollution will increase as a result of operating of a growing number of poultry and cattle farms if present poor practices of organic waste management do not improve. Improper application of pesticides and fertilizers may not only pollute soil, water and groundwater, but also affect the quality of farm produce and have implications for the human health. Strive for higher productivity of the primary agricultural production may threaten Georgia's agro biodiversity if local varieties and breeds are increasingly substituted with newly bred foreign ones.

Loss of habitats, transformation of landscapes and loss of their recreational value due to construction of HPPs

The RDSs promote the development of a system of small and large HPPs. Georgia has ambitious plans for increasing hydro power generation capacity across the country. Several HPPs on the tentative to-do list of the Ministry of Energy may appear in the water sheds of Mtkvari (Kura), Tergi and Aragri rivers within the territory of Samtskhe-Javakheti and Mtskheta-Mtianeti. The potential risks associated with the development of hydro power generation facilities include loss of terrestrial and aquatic habitats and wildlife due to construction of HPPs, access roads and power transmission lines; land take and change in the land use pattern, which is particularly important if dams and reservoirs are also to be construction; loss of the aesthetic and recreational value of landscapes; and possible alteration of microclimate and local weather patterns. Additional concerns related to the construction of HPPs is that there are no formally adopted sound methodologies proposed for calculating acceptable minimal environmental flow for the rivers subjected to water abstraction. Also, integrated watershed management is not a formally adopted practice yet and assessment of cumulative impacts from multiple water users is not adequately integrated into permitting procedures for individual investments. However it is expected that a country-wide strategic environmental and social assessment of Georgia's power sector development prospects will be undertaken in 2015 (the study is financed by the WB) and will set a framework for future decisions at the regional level too.

Unsustainable extraction of natural resources

Both target regions are rich in mineral and forest resources. RDSs support extraction of stone, clay, gravel and other construction materials, as well as production of timber and firewood. According to RDSs, it is deemed encouraging that illegal extraction of mineral resources and timber has been significantly curtailed in Georgia, however regulatory framework and enforcement mechanisms in this field remains weak and sustainable ways of meeting considerable demand for firewood are yet being searched. Quarrying and borrowing are not subject to environmental impact assessment and permitting. Addressing of this legislative shortfall is on the Government's agenda, but remains in force for time being. It results in precedents of licenses permitting borrowing directly from the river beds or other sensitive areas. Licenses do not carry legally binding terms regulating on-site management during works and site reinstatement after their completion. Also, cumulative impacts of operating multiple quarries and mines in the same water shed or other geographic unit are not looked at and considered.

In the decades of economic hardship in Georgia characterized, among other aspects, with energy shortage and high level of corruption, significant deforestation and forest degradation occurred country-wide, including the two target regions. Legal and regulatory basis for forest management and use underwent series of reforms, which are not complete yet. The role of private sector in forest management and its economic use, as well as the scope of regional and local authority over forests are being defined currently through the development of the new Forest Code due by end of 2015. Meanwhile, maximizing forest revenues from the use of its wood and non-wood resources without causing deforestation and degradation of forest quality in a long run remains a big challenge.

Emissions and Waste Pollution from SMEs

Solid waste management is acknowledged as a major issue by both RDSs and shortage of waste management infrastructure is a significant risk associated with the implementation of RDSs and RTDSs. There are no landfills that would meet contemporary standards in either of the two regions. Although the central government has embarked on a massive program of arranging sanitary landfills throughout Georgia, years will pass till decent coverage is achieved country-wide. Therefore, interim solutions are being proposed in order to address acute problems. Waste law remains in draft for many years. There is no comprehensive legal basis for handling hazardous waste and no facilities are available in-country for the deactivation and final disposal of many types of toxic waste.

Adoption of low emitting green technologies is a declared priority of the central government. It is expected that industry in general and SMEs in particular will soon be given incentives for adopting clean technologies and investing into energy efficiency. Control over the industrial emissions and discharges is being strengthened as

the Department of Environmental Supervision newly created in the Ministry of Environment and Natural Resources Protection (MoENRP) builds up its institutional capacity.

B. Cultural Heritage

Loss of Authenticity and Historical Value of Monuments through Restoration

Both target regions are rich in cultural heritage and many physical assets are in a need of restoration and conservation. Recent country experience flagged risks associated with this highly desired and welcomed type of intervention, as conceptual approach and technical solutions applied to restoration of historic monuments resulted in controversial outcomes. Cautious approach is required to the restoration works to be undertaken on the historic monuments of Samtskhe-Javakheti and Mtskheta-Mtianeti regions.

Many heritage monuments across the country, including the two target regions, are religious buildings currently operated by the Georgian Orthodox Church. Decisions to be taken about provision of supplemental infrastructure for such monuments, restoring them, and managing tourist visitation may ignite tension and even conflicts unless they are discussed and agreed upon between the cultural heritage and tourism agencies on one hand and the Church on the other hand.

Negative Impact on Visitation Experience from Exceeded Carrying Capacity of Sites

According to RTDSs, the Government will invest in the upgrade and development of infrastructure in the historical settlements as well as in the proximity to the cultural and natural heritage sites. Increasing visitation to heritage sites is the primary goal set forth in RTDSs. However as Georgia strives to establish itself as a tourist destination and concentrates on increasing inflow of visitors, little consideration is given to the carrying capacity of the advertised sites. CH Site Management Plans are not required and used. Sooner or later saturation may occur and further increase of visitors' inflow may lead to negative impacts on the visitor's experience and harm the heritage site as well.

Conflict with Local Traditions and Behavioral Patterns

RTDSs aim at rehabilitation of historical settlements, which are inhabited by local population at present. Most of the religious buildings advertised for tourist visitation are active worship sites and may be used for living by monks or nuns. Unless visitation to such sites is properly managed, it may lead to tension between external visitors on one side and local communities and clergy on the other side. Safety of monuments may also be compromised if relevant restrictions are not introduced/enforced, such as flashlight photographing of interior, leaving memorial inscriptions on walls, taking fragments of buildings as souvenirs, etc.

Loss of Authenticity of Traditional Artisan Industries through Commercialization

Increased demand for local cosine and art crafts from tourists may result in deterioration of quality and eventually – loss of authenticity of the offered services and goods.

C. Social

Out-Migration of Population

Investments aimed at development and growth in some areas of the target regions may not benefit intended number of local population and reach desired impact if out-migration from remote mountainous areas continues despite provided opportunities, which is possible due to a strong trend of urbanization country-wide. This issue is especially important for Mtskheta-Mtianeti region. The outmigration of population from the mountainous villages has its geo-political dimension, as the mentioned area is close to the border with Russia and occupied territories of South Osetia.

Uneven Distribution of Benefits

Achievement of the strategic goals in the target regions cannot guarantee that certain groups of population will not be sidelined and benefit in a fair and equal manner. Diversity within the regions will result in more investments and greater growth areas that are richer in natural and cultural assets; have higher qualified and/or more entrepreneurial works force. Furthermore, land consolidation and commercialization of agriculture –

which is being supported as a positive trend of rural development – may worsen livelihoods of those who give up small land plots but fail to land new jobs and find alternative sources of income.

Ethnic Tensions over Investment Decisions

While RDSs and RTDSs exclude any type of discrimination, ethnic tension may still arise over the government's investment decisions in Samtskhe-Javakheti. Unless special effort is made toward dissemination of information and inclusive development, then lack of integration, poor command of Georgian language, and other reasons may lead to exclusion or side-lining of non-Georgian population from the offered development opportunities. Lack of awareness and poor outreach may also result in misunderstand and disinformation about certain aspects of the implementation of regional strategies.

5. Expected Positive Impacts of implementing RDSs and RTDSs

A. Social

Implementation of RDSs and RTDSs is expected to have positive poverty and social impacts. Poverty in Georgia is associated with unemployment of the household head, and support for tourism is expected to lead to job creation. Employment generation is expected to benefit women and men in Mtskheta-Mtianeti and Samtshe-Javakheti. Construction jobs are will predominantly benefit men, since they are more likely to have interest in these jobs and skills in the construction field. Jobs in tourism are expected to benefit women and men. Some jobs in the hospitality industry are more likely to be taken by women, while some are more likely to be held by men (drivers).

Employment generated because of this project is also expected to benefit people with different levels of income. Larger businesses are expected to profit, in turn generating jobs for people of all skill levels. Small and medium-sized businesses, as well as some micro-businesses, are also expected to increase their profits and expand. Individuals at all skill levels are also expected to have greater job opportunities. RDSs provide for broader infrastructure development for Mtskheta-Mtianeti and Samtskhe-Javakheti. Better infrastructure is also expected to lead to investment in sectors other than infrastructure, to jobs in infrastructure development, and better overall services for citizens in these regions. Better water and sanitation is expected to benefit everyone. Improved roads and revitalized city centers will also be enjoyed by the whole population, regardless of gender, age, or income level.

B. Environment

Despite challenges of sustaining regional development in Samtskhe-Javakheti and Mtskheta-Mtianeti as outlined above, due implementation of RDSs and RTDSs is likely to result in positive environmental outcomes. They are expected from the improvement of waste and wastewater management, application of preventive measures against occurrence and destructive impacts of natural disasters, sustaining use of natural resources, and establishing enhanced system for monitoring key parameters of the environment quality. These mitigation measures are planned as tier 1 actions, aimed on enhancing the carrying capacity to the basic level of Soviet time, when the tourist flows were significantly higher than now.

C. Physical Cultural Resources

RTDSs name cultural tourism among three clusters that would be crucial for increasing visitation to the two target regions. RTDSs aim at the improvement of accessibility to the heritage sites, upgrading of public infrastructure around them, and reinforcing/restoring deteriorating heritage buildings. With the application of adequate methodology and techniques, this will result in much deserved positive outcomes for the physical cultural resources of the target regions.

6. Expected Cumulative Impacts

The WB -financed RDP III will provide selective support to the achievement of individual strategic goals of the Government in Mtskheta-Mtianeti and Samtskhe-Javakheti regions. Risks to the natural and social environment and to the cultural heritage that may result from the implementation of RDP III are small to

medium, and the project is classified as environmental Category B. However SECHSA looked at how risks of RDSs, RTDSs and RDP III may accumulate in a long run and what type of induced development may result from their implementation.

Investments under subcomponent 1.1 of RDP III may add to the environment pollution with solid waste and wastewater generated through the operation of new infrastructural elements to be provided by RDP III for cultural heritage sites. Pollution, landscape degradation and nuisance for local communities may result from new businesses and public infrastructure to be supported under Component 1.2 of RDP III. Based on the experience from the implementation of RDP and RDP II, provision of new infrastructural elements in the target settlements and heritage sites may require exclusion of small land plots from the State Forest Fund. Despite minor scale, this may contribute to cumulatively tangible conversion of forest land, unless environmental offsets are provided. RDP III will help to improve access to cultural heritage sites and otherwise stimulate tourist visitation to these sites. Along with the government's other investments in this field, cumulative impact of increased tourist inflow may it may become negative at some future point of time, if carrying capacity of the most popular sites are surpassed. RDP III design and implementation arrangements carry adequate mechanisms to ensure that the project implementation does not add to the existing risks of exclusion vulnerable and disadvantaged from the benefits of regional development and economic polarization of communities based on their uneven prospects. Partly these mechanisms are reflected in RPF. The TA component of the project also may provide certain input in educating and training vulnerable groups to better utilize the opportunities provided by the implementation of RDSs, RTDSs and RDP III.

7. RDP III and SECHSA Recommendations for Its Implementation

RDP III is designed to contribute to the achievement of overall strategic development goals of the Georgia's government in Samtskhe-Javakheti and Mtskheta-Mtianeti regions through selective investment into activities that support implementation of RDSs and RTDSs.

The Project Development Objective is to improve infrastructure services and institutional capacity to support increased contribution of tourism in the local economy of the Samtskhe-Javakheti and Mtskheta-Mtianeti regions. The Project activities are expected to benefit the residents, tourists and enterprises in Samtskhe-Javakheti and Mtskheta-Mtianeti regions. They are expected to receive improved access to, and quality of, public infrastructure; increased volume of private sector investment in the region; and increased small and micro enterprises in renovated cultural heritage sites and cities. The Government will benefit from increased overall tourism spending and satisfaction, job creation, improved institutional capacity of agencies, and improved capacity to operate assets.

Component 1: Infrastructure Investment (US\$53.25 million)

Component 1.1: Urban Regeneration and Circuit Development (US\$46.00 million). This component will finance: urban regeneration of old towns and villages, including restoration of building facades, public spaces, museums, roads and water, and enhancement of cultural and natural heritage sites, including access and presentation. The Project will focus on sites along the circuit connecting the selected heritage, nature and ski sites. The proposed sites/subprojects will supplement what the Government has already invested in. These can be grouped into two categories:

- Urban regeneration in three hub cities: Dusheti, Stepantsminda and Abastumani. The Project will also build on previous urban regeneration investments made by the Government, and may finance small-scale incremental investments needs, in Mtskheta, Gudauri, Bakuriani, Borjomi and Akhaltsikhe.
- Improved site management and construction of tourism facility and access road in the following cultural heritage sites: Saphara Monastery, Saro Darbazi houses, Zarzma Monastery, Vardzia caves, Vanis Qvabebi Caves, Khertvisi Fortress, Akhalkalaki Fortress, Tmogvi Fortress, Jvari monastery, Mtskheta archaeological sites, Ananuri Fortress, Gergeti Trinity Church, and Dariali monastery..

Component 1.2: Provision of Public Infrastructure to Attract Private Investments (US\$7.25 million). To encourage private sector investments in the region, this component will support a selected number of private sector entities in project areas that demonstrate interest and capacity to invest in tourism or agribusiness through investing in complementary public infrastructure that is necessary to ensure the viability of their investments (e.g. public facilities within vicinity of the investments, road/sidewalk, water/sanitation, communications, connection to main trucks, etc.). The investment proposals would be subject to screening by a selection committee and there will be appropriate conditions tied to that.

Component 2: Institutional Development (US\$6.60 million).

The component will support institutional capacity and performance of the Georgia National Tourism Administration (GNTA), National Agency for Culture Heritage Preservation of Georgia (NACHP), National Museum, Project Implementing Entity (Municipal Development Fund of Georgia, MDF), and other local and regional entities in order for them to carry out the following activities: setting up of destination management office in each region; marketing and promotion; preparation of sustainable site management plans for all Project's cultural heritage sites; training for skilled workforce development and capacity building; cultural heritage advisory service to the NACHP to improve their capacity on protection and management of the World Heritage property Historical Monuments of Mtskheta to prevent its possible removal from the List of World Heritage in Danger; business start-up/expansion advisory service to tourism SMEs; performance monitoring & evaluation activities; and preparation of feasibility studies, design and construction supervision.

Handling RDP III Implementation

One of the SECHSA findings is a lack of coordination between key agencies during the RDS and RTDS development. To avoid similar problems with the RDP III implementation, SECHSA recommends enhancement of the management system. TA included in RDP III may not only assist in a capacity building of the separate entities engaged in RDP III implementation, but also may have an input in developing a more efficient inter-sectoral management structure for RDP III. Due to the multi-sectoral nature of this Project, SECHSA advises to establish Informal Working Group, which involves all agencies concerned- namely, MDF, Georgia National Tourism Agency, Culture Heritage Agency, Culture Heritage Fund, Agency of Protected Areas, Governor's Office, Ministry of Finance and Ministry of Regional Development & Infrastructure. The Working Group should ensure coordination and efficient involvement of concerned agencies and should be responsible for strategic decision making.

The Municipal Development Fund (MDF) will be responsible for RDP III project implementation. For strategic decisions, like selection of the subprojects (SPs), the Working Group is considered as a Leading Agency. For development of infrastructure SPs and for implementation of infrastructure and conservation-rehabilitation SPS MDF, as the Implementing Agency for RDP III has the leading role. In preparation of the conservation-rehabilitation SPs, if such projects will be finally proposed for RDP III, the NACHP is the leading entity. At the stage of operation and maintenance of all provided assets, the self governments will take responsibility. MDF and the local self governments will sign SPinvestment agreements which will clearly assign local self governments the responsibility of operation and maintenance of all provided assets

Handling Involuntary Resettlement and Grievances

RDP III triggers the WB's Safeguards Policy on Involuntary Resettlement OP 4.12. A Resettlement impacts would mainly relate to temporary relocation and/or loss of income or productive assets during construction. However, there might also be some cases of permanent resettlement. Resettlement Policy Framework was prepared and disclosed to the public according to the policy and a baseline social assessment was carried out in the target regions. Resettlement activities will be fully informed by this social assessment. In particular, consultations held with project affected people will be held in venues that are accessible, in a form and language appropriate for the group, and results of the meetings will be publically disclosed. Information on project affected people will be collected in a way that makes it possible to identify specific vulnerabilities that may make it difficult for that person or their household to cope with project impacts. Gender, disability, income,

education and age will be considered when determining specific individual vulnerabilities. In Mtskheta-Mtianeti, special attention will be paid to mountain communities.

Resettlement activities shall incorporate a focus on livelihood restoration. To the extent possible, project affected people will be included in project-funded skills development activities. When this is not possible, the project will try to connect those affected with other government or donor-funded activities promoting skills, income generation, or access to finance. If no other activities exist that are appropriate for these individuals, RDP III will provide funding for individuals to start small businesses, to acquire skills, or to expand other livelihood activities, as appropriate. RDP III will pay special attention to livelihood restoration activities for women or for pensioners, given that these two groups are more likely to have difficulties adapting to different livelihood activities.

Monitoring and evaluation of resettlement and land acquisition shall be carried out systematically. Monitoring of impacts on resettled individuals and households, and on those receiving livelihoods restoration assistance shall take place immediately after the implementation of site-specific Resettlement Action Plans as well as six and twelve months after displacement has occurred. If after 12 months of displacement, negative impacts, such as reduced income are found, additional support shall be provided to those individuals.

Pooling of TA for the Support to Tourism and Agribusiness SMEs for higher efficiency

For maximizing impact of the TA included in RDP III, synergies may be built between similar activities planned under the WB -supported RDP, RDP II, and RDP III. Support to the SMEs in the tourism and agricultural sectors should be delivered in close cooperation with the Ministry of Economy and Sustainable Development, which runs a State program for SME support. Partnership should be sought with other donor-funded activities also targeting SME development. TA for SMEs should include dissemination of knowledge and information about the available low-emission technologies and green development in general, as well as provide incentives for SMEs for the acquisition of these technologies.

TA for supporting SME development should include advice for the governmental authorities, responsible for SME development, in relation with the most efficient technologies and facilities for implementing SME supporting programs. In particular, concept of Business Incubators, or other similar facilities, which complexly address all basic factors important for SME development, should be promoted. The concept of Business Incubators comprise: a) provision of start up financing; b) advisory service in financial management and marketing; c) advisory service and facilitation in implementing modern technologies; d) provision of access to modern materials, facilities and efficient technologies; e) advisory service and facilitation in entering new and prospective markets; g) The Business Incubators, as shareholders (either permanent, or temporary) will take partial responsibility for the development of sustainable enterprises.

Involving Cultural Heritage Agencies in Site Selection and Design of Activities to be Implemented in and around Cultural Heritage Sites

Component 2 of RDP III will finance training and capacity building for the staff of several cultural heritage and tourism management institutions of Georgia. Based on the experience from RDP and RDP II, it will be critically important to engage cultural heritage agencies at all stages of review, design and implementation of project-supported activities which deal with the physical cultural resources. Actually this is a requirement of OP 4.11 and Georgian law, however, the consultation process is not always implemented efficiently. Church should also be involved and consulted in cases RDP III finances works in or around places of worship. Seeking advice and guidance from international heritage institutions (ICOMOS, UNESCO) will be highly advisable when dealing with monuments of exceptional historic value. Membership of the Minister of Culture of Georgia in the supervisory board of the implementing entity of RDP III – the MDF – should guarantee political consensus on the important decisions regarding project investments into conservation and sustainable use of cultural heritage.

Clarifying Property and User Rights to the Public Infrastructure to be provided around Cultural Heritage Sites

Elements of public infrastructure which RDP III will provide as part of investment into upgrading of cultural heritage sites will be constructed on the State-owned land. User rights to such land plots may need to be transferred to the MDF during construction period, and then further on to the entity that will operate the infrastructure. Municipality, private company or Church may be given a mandate to operate the provided facilities. All arrangements pertaining land title and user rights as well as modality of operation and maintenance of the infrastructure shall be made well on time. Operating entities may require some orientation and training in particular aspects of their task.

8. Disclosure and Dissemination

SECHSA was undertaken based on a desk review of the RDSs and RTDSs of Samtskhe-Javakheti and Mtskheta-Mtianeti. Discussions with focus groups comprised of the representatives of local communities, minorities, and interest groups was held prior to completion of SECHSA report. Environmental, social, and cultural implication of the regional strategies and the proposed RDP III were already discussed with the administration and municipal representatives of Mtskheta-Mtianeti regional authority. At this early stage of consultation process, it come to the surface that demand for RDP III resources is significantly greater than what the project can invest in the target regions. Therefore transparency and accountability of the process of the receipt, review, and approval of investment proposals will be highly important throughout the Project implementation.

Executive Summary of SECHSA report was disclosed in Georgian and English languages centrally and within the two target regions and consultation meetings was held in the regional centers in February, 2015. Feedback from the MoENRP, Ministry of Regional Development and Infrastructure, Ministry of Culture and Monument Preservation, NACHP, Georgian National Tourist Agency, National Forest Agency and the Agency for Protected Areas, the Georgian Orthodox Church and key NGOs active in the country will be sought in addition to the comments from stakeholders within the target regions.

1. INTRODUCTION

The present Strategic Environmental, Social and Cultural Heritage Assessment (SECHSA) of the regional development and tourism development strategies produced for Samtskhe-Javakheti and Mtskheta-Mtianeti has been prepared in connection with the WB -financed Regional Development Project (RDP III) and in parallel with preparation of environmental and social safeguard documents for the RDP III. In this introductory section we explain relationship between the RDP III and the Regional and Tourism Development strategies, objectives of SECHSA and its structure.

1.1 THIRD REGIONAL DEVELOPMENT PROJECT (RDP III)

The Government requested the Bank to support this Third Regional Development Project (RDPIII) with US\$60 million. The Project will focus on Samtskhe-Javakheti, an economically growing region with substantial but underutilized cultural heritage endowments south of Imereti, and Mtskheta-Mtianeti, a lagging region, west of Kakheti close to the capital, with magnificent nature, ski resorts and the World Heritage city of Mtskheta (the old capital of Georgia). Investments in both regions can add substantial tourism products and offerings to the national tourism circuit map of Georgia, thus increase over-night stay, tourism spending and job creation.

The proposed development objective of RDP III is to improve infrastructure services and institutional capacity to support the development of a tourism-based economy of the Samtskhe-Javakheti and Mtskheta-Mtianeti regions. The envisaged activities are expected to bring direct benefits to the residents of these regions as well as to the tourists visiting them. More specifically, implementation of the project is expected to improve access, quality and reliability of public infrastructure; increase the volume of private sector investment in the region; and increase points of sales (tourism-related enterprises) in renovated culture heritage sites and cities. The Government will benefit from improved institutional capacity of selected agencies and local-self-governments. Overall, the population is expected to see higher incomes and better quality of life.

The Regional Development Project III includes 2 components:

Component 1: Infrastructure Investment (US\$53.25 million)

Component 1.1: Urban Regeneration and Circuit Development (US\$46.00 million). This component will finance: urban regeneration of old towns and villages, including restoration of building facades, public spaces, museums, roads and water, and enhancement of cultural and natural heritage sites, including access and presentation. Based on product development and marketing potential, infrastructure needs, and employment

levels, the project will focus on sites along the circuit connecting the selected heritage, nature and ski sites. The proposed sites/subprojects discussed with the Government for financing under the Project will supplement what the Government has already invested in. These can be grouped into two categories:

- Urban regeneration in three hub cities: Dusheti, Stepantsminda and Abastumani. The Project will also build on previous urban regeneration investments made by the Government, and may finance small-scale incremental investments needs, in Mtskheta, Gudauri, Bakuriani, Borjomi and Akhaltsikhe. Additional investment needs in Akhalkalaki, Ninosminda and Khevsureti will be subject to a great scrutiny.
- Improved site management and construction of tourism facility and access road in the following cultural heritage sites: Saphara Monastery, Saro Darbazi houses, Zarzma Monastery, Vardzia caves, Vanis Qvabebi Caves, Khertvisi Fortress, Akhalkalaki Fortress, Tmogvi Fortress, Jvari monastery, Mtskheta archaeological sites, Ananuri Fortress, Gergeti Trinity Church, and Dariali monastery.

Component 1.2: Provision of Public Infrastructure to Attract Private Investments (US\$7.25 million). To encourage private sector investments in the region, this component will support a selected number of private sector entities in project areas that demonstrate interest and capacity to invest in tourism or agribusiness through investing in complementary public infrastructure that is necessary to ensure the viability of their investments e (e.g. public facilities within vicinity of the investments, road/sidewalk, water/sanitation, communications, connection to main trucks, etc.). The investment proposals would be subject to screening by a selection committee and there will be appropriate conditions tied to that.

Component 2: Institutional Development (US\$6.60 million).

The component will support institutional capacity and performance of the Georgia National Tourism Administration (GNTA), National Agency for Culture Heritage Preservation of Georgia (NACHP), National Museum, Project Implementing Entity (Municipal Development Fund of Georgia, MDF), and other local and regional entities in order for them to carry out the following activities: setting up of destination management office in each region; marketing and promotion; preparation of sustainable site management plans for all Project's cultural heritage sites; training for skilled workforce development and capacity building; cultural heritage advisory service to the NACHP to improve their capacity on protection and management of the World Heritage property Historical Monuments of Mtskheta to prevent its possible removal from the List of World Heritage in Danger; business start-up/expansion advisory service to tourism SMEs; performance monitoring & evaluation activities; and preparation of feasibility studies, design and construction supervision.

In order to stimulate rapidly increased travel to the regions and develop institutional capacity and performance of tourism related local and regional entities establishment of Regional Destination Management Organizations (DMO) should be given a priority. There is not a single institutional unit existing that could work with the government, donors, the international travel trade, and help to define a product development strategy, implement it, and market the destination. In frames of the proposed project the role and importance of DMO experience have been highly addressed.

Business development for tourism and agribusiness SMEs is a key alongside improved business access to markets and finance. The Ministry of Economy and Sustainable Development (MESD) intends to promote micro businesses in all regions of Georgia. In this regard, TA will be provided under this Component in order to support prospective SMEs with business startup/expansion advisory services so that they can easily access micro finance programs offered by MESD.

1.2 REGIONAL AND SECTORAL CONTEXT: RDS AND RTDS FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS

Regional Development Strategies (RDS) 2014 – 2021 for Samtskhe-Javakheti and Mtskheta Mtianeti Regions have been prepared in accordance with the **Regional Development Strategy of Georgia for 2010 – 2017 Years** and **State Strategy on Regional Development of Georgia for 2015-2017**. The RDS 2014-2021 for Samtskhe-Javakheti region was completed and approved in 2013. For the Mtskheta-Mtianeti region the first draft of the RDS 2014-2021 has been submitted and it is expected that the document will be finalized and approved soon. Until approval of this document the RDS 2012-2017 for Mtskheta-Mtianeti (completed in 2012) is in force. The RDS documents were developed by the Regional Governor's offices within their responsibilities, with extensive consultations with the municipal authorities, MRDI and local communities. The

Samtskhe-Javakheti and Mtskheta-Mtianeti spatial economic analysis¹ and Regional Development Strategies² have identified tourism, agriculture and trade as the main drivers of economic growth in the regions.

The regional development and tourism strategies for separate regions are initiated in the country in line with the **Socioeconomic Development Strategy of Georgia: 2020 and State Strategy on Regional Development of Georgia (SRDG)** for 2015-2017. The Regional Tourism Development Strategy (RTDS) was prepared in 2014 for each region with the help of an international consulting firm to define the long-term tourism development vision for each region and underpin this Project's design. A tourism circuit was identified in each region in participation with all stakeholders. Each region offers a variety of products with the potential to offer high-quality tourism through preserving and enhancing cultural heritage, ecosystems, wildlife, winter-ski resorts and summer-mountain adventure activities. Harnessing the tourism potential of both regions would help to provide job opportunities particularly in hotels and SMEs sectors.

The strategies utilize tourism value chain analysis and market demand assessment methodology to identify the opportunities, constraints and tourism demand in the sector in the two regions, with the aim of enhancing regional development competitiveness, increasing private sector investments, leading to improved productivity to generate additional employment and income opportunities for communities living in the two regions.

1.3 REGIONAL DEVELOPMENT AND TOURISM DEVELOPMENT STRATEGIES FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS OF GEORGIA

1.3.1. The Regional Development strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti Regions

Regional Development Strategies (RDS) 2014 – 2021 for Samtskhe-Javakheti and Mtskheta Mtianeti Regions have been prepared in accordance with the Regional Development Strategy of Georgia for 2010 – 2017 Years and State Strategy on Regional Development of Georgia for 2015-2017. The RDS 2014-2021 for Samtskhe-Javakheti region was completed and approved in 2013. RDS 2014-2021 for Mtsketa-Mtianeti Region is approved by the Regional Development Commission and will be submitted to the Government of Georgia for adoption in near future. The RDSs define vision for the regions development for 2021, strategic targets, tasks and anticipated results.

Regional Development Strategies for both target regions define priorities and propose to develop following sectors:

- **Agriculture** (modern technologies and new plant species for efficient cropping; efficient technologies for cattle breeding and poultry; product storage and food processing facilities etc.)
- **Energy sector** (development of small and large HPP; use of alternative energy resources available in the region – wind-farms, solar energy)
- **Infrastructure** (regional and local roads; water supply and sewage; wastewater treatment plants; waste management facilities; electric power and gas supply; communication systems etc.)
- **Exploration and sustainable management of natural resources** (for both target regions the natural resources available for exploration comprises: fresh and mineral water resources; timber and forestry products; inert construction materials; Besides, certain amount of coal resources are in Samtskhe-Javakheti and the survey of potential oil fields is on the way)
- **Turism** (more details related to tourism development will be discussed in chapters related to the RTDSs)

¹ The spatial-economic analysis, using the WDR 2009 analytical framework of economic geography, was prepared in the framework of project preparation to underpin its design.

² The Samtskhe-Javakheti and Mtskheta-Mtianeti Regional Development Strategies were completed in 2014 with technical and financial support from the EU and GiZ respectively.

- **Supporting small and medium-size enterprises** (in tourism, agriculture, food processing, construction materials production, alternative energy, construction and service providing sectors)
- **Development of cross-border collaboration (trade, tourism, environment protection, energy sector,**
- **Environment Protection Programs**

1.3.2 The Regional Tourism Development strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti Regions

The purpose of the Regional Tourism Development strategies (RTDS) for Samtskhe-Javakheti and Mtskheta-Mtianeti Regions is to provide an analysis of the competitiveness of the Samtskhe-Javakheti and Mtskheta-Mtianeti regions as a tourism destination using a Value Chain approach. Based on that analysis, Solimar International assisted major stakeholders to formulate a vision, value proposition, forecasts and an action agenda for the region. The value chain analysis included desk research, interviews and group meetings with public and private sector stakeholders, and site visits within the Samtskhe-Javakheti region.

The RTDS for Samtskhe-Javakheti

The Samtskhe – Javakheti region has an extension of 6413 km² and a population of 160 504. It includes 6 municipalities – Borjomi, Akhaltsikhe, Adigeni, Aspindza, Akhalkalaki and Ninotsminda. Administrative center of the region is town Akhaltsikhe. The main cultural heritage and nature attractions follow: Romanov palace in Likani, Borjomi-Kharagauli national park, Akhaltsikhe Fortress Rabati, Sapara monastery, Atskuri temple ruins and fortress, Abastumani Resort and observatory, Zarzma monastery, Chulevi monastery and Zanavi fortress, Golden fortress, Khertvisi fortress, Tsunda church and Tsunda lake, Vardzia cave monastery and Vanis Kvabebi, Kumurdo church, Phoka monastery. The main Nature attractions follow: Borjomi-Kharagauli National Park, Javakheti national park and protected areas around the lakes, world known bird-watching areas, well preserved plans and wildlife.

The Samtskhe-Javakheti Region and Georgia have significant untapped tourism development potential. The country and the region have good, affordable access from major regional and European source markets, good infrastructure, a very business-friendly regulatory environment, and a rich mix of cultural and natural attractions. The following forecasts for international arrivals, international tourism receipts, tourism employment, number of tourism related SME's, and accommodation beds for Samtskhe Javakheti are based on three scenarios calculated based on compound annual rates growth (CARG) of tourism international receipts to Georgia. Growth of international receipts has been chosen due to its direct correlation with the indicators, and because this indicator reflects the economic impact of tourism and its evolution over the years. A summary of the forecasts for the Samtskhe Javakheti Region target growth scenario follow for the 2014-2020 period:

- International arrivals will have a significant growth of 97% from 210,328 in 2014 to 415,700 in 2020.
- International receipts will grow from \$175,660,988 USD in 2014 to \$347,183,027 USD in 2020.
- International tourist overnight receipts based upon achieving a 20% room occupancy rate would result in an increase from \$52,779,954 in 2014 to \$ 136,600,421 in 2020.
- Tourism employment from 17,243 in 2014 to 34,080 in 2020, an increase of 16,837 jobs.
- Accommodation bed supply from 6,137 to 14,152 over 6 years—more than double.
- Tourism Related SMEs from 70 to 138 over 6 years—an increase of 68 new enterprises.

At present total of 30.05 million USD is recommended from RDP III for the Samtskhe-Javakheti Region investment for the period 2015-2020. US\$ 7.25 million for PPP investment is envisaged for Samtskhe-Javakheti and Mtskheta-Mtianeti regions. It is important to also focus on institutional development and capacity building. It is recommended that \$2.6 million USD be provided for destination management /marketing, tour route and itinerary development and performance monitoring. The MDF will be responsible for project implementation. It may be prudent to form a working committee or engage a qualified consultant to

assist with the process. Stakeholder involvement and collaboration is needed between GNTA and other government and private sector actors providing financial and technical support to each region's tourism development.

The RTDS for Mtskheta-Mtianeti Region

The Mtskheta - Mtianeti region has an area of 6,785 km² and a population 94 573. The region includes 4 municipalities and its administrative center is Mtskheta. The main urban areas are Mtskheta and Dusheti. In 2013, the region was visited by about 715,155 international tourists. There are 83 accommodation units, including 57% family houses, 39% hotels, and 2% guest houses. From a tourism standpoint, the region offers a variety of products with the potential to offer high-quality tourism through preserving and enhancing wildlife, ecosystems, cultural heritage, winter-ski resorts, and summer-mountain adventure activities. Harnessing the tourism potential of this region would help to provide job opportunities particularly in mountainous areas (resorts: Gudauri-Kazbegi; remote heritage villages: Shatili-Mutso) and to support rural populations, balancing migrations to the lower plains. The main cultural heritage and nature attractions along the circuit approach can be enhanced by developing the following itineraries (clusters): Svetitskhoveli, Jvari temple, Shiomghvime monastery, archaeological sites – Bagineti-Armazi-Samtavro-Dzalisi; Zedazeni church, Bodorna church, Ananuri fortress, Gergeti Trinity church, Shatili and Mutso historic fortified villages, and Sno fortress.

The Mtskheta-Mtianeti Region and Georgia have significant untapped tourism development potential. The country and the region have good, affordable access from major regional and European source markets, good infrastructure, a very business-friendly regulatory environment, and a rich mix of cultural and natural attractions. The following forecasts for international arrivals, international tourism receipts, tourism employment, number of tourism related SME's, and accommodation beds for Mtskheta Mtianeti are based on three scenarios calculated based on compound annual rates growth (CARG) of tourism international receipts to Georgia. Growth of international receipts has been chosen due to its direct correlation with the indicators, and because this indicator reflects the economic impact of tourism and its evolution over the years. A summary of the forecasts for the Mtskheta Mtianeti Region target scenario follow for the 2014-2020 period:

- International arrivals will have a significant growth of 97% from 834,386 in 2014 to 1,649,111 in 2020.
- International receipts will grow from \$474,149,974 USD in 2014 to \$937,127,958 USD in 2020.
- International tourist overnight receipts based upon achieving a 30% room occupancy rate would result in an increase from \$37,167,524 in 2014 to \$ 92,591,529 in 2020.
- Tourism employment from 46,544 in 2014 to 91,991 in 2020, an increase of 45,477 jobs.
- Accommodation bed supply from 3,213 to 6,351 over 6 years—almost double.
- Tourism Related SMEs from 119 to 235 over 6 years—an increase of 116 new enterprises

Mtskheta-Mtianeti Region infrastructure-works were estimated for the period 2015-2020 at a total of 25.15 million USD.

It is important to also focus on institutional development and capacity building. It is recommended that \$2.6 million USD be provided for destination management /marketing, tour route and itinerary development and performance monitoring.

The MDF will be responsible for project implementation. It may be prudent to form a working committee or engage a qualified consultant to assist with the process. Stakeholder involvement and collaboration is needed between GNTA and other government and private sector actors providing financial and technical support to each region's tourism development.

1.4. OBJECTIVES OF THE STRATEGIC ENVIRONMENTAL, CULTURAL HERITAGE AND SOCIAL ASSESSMENT (SECHSA)

This SECHSA aims at analyzing cumulative, direct and indirect implications of implementing the RDSs, RTDSs and the proposed RDP III on natural environment, social structure and for cultural heritage in the two target regions. The SECHSA should also provide recommendations towards finalization of tourism

development strategies for the target regions and to define how RDP III investments may amplify positive impacts and avoid or minimize any risks that these plans may carry. This part of the assignment will result in the development of reports on the conducted SECHSAs of regional development and tourism development strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti.

The SECHA addresses the following strategic questions:

- Review the two draft regional development strategies and tourism development strategies and assess the direct, indirect and cumulative impact of development in the region by 2020.
- identify key mitigation measures and inform the finalization process of the above mentioned strategy
- review the range of proposed investments on the region and suggest additional institutional and safeguards measure to ensure sustainable tourism development in the region.
- Assess past experiences in implementing RDP and RDPII, level of implementing SECHSA and key lessons learned
- suggest key improvement in addressing cultural heritage investment
- carry our consultation workshops at the regional and local levels and reflect local communities concerns and aspirations especially women, the poor and vulnerable people.

The SECHSA report provides (i) general overview of the natural and social environment in the project area and cultural heritage of the target regions (ii) potential direct, indirect and cumulative impacts of the RDS and TDS, as well as RDP III program as whole and main types of the project interventions on the environment, cultural heritage, and social strata of Samtskhe-Javakheti and Mtskheta-Mtianeti Regions. The focus is made on strategic issues and decisions rather than just the impacts of specific investments (iii) legal and regulatory framework applicable for mitigation of the potential risks associated with the project implementation, (iv) existing institutional set-up for coordinating, regulating, and enforcing policies and legislation pertaining management of environmental, cultural, and social aspects of the project implementation, (v) assessment of the sufficiency of the above systems in place and analysis of gaps and weaknesses, and (vi) recommendations on institutional arrangements for the project implementation.

Analysis of strategic impacts given in SECHSA report and its recommendations are not limited to the RDP III frames and should be viewed in a broader context of the regional development of Samtskhe-Javakheti and Mtskheta-Mtianeti and in conjunction with the overall concept of tourism development, as it is proposed in Tourism Development Strategies for these regions developed by GNTA. At the same time, SECHSA includes recommendations for the development of detailed environmental and social assessment and impact mitigation documents for the specific investments under the project, which have been set forth in project Environmental and Social Management Framework (ESMF). ESMF is a standing alone document completed earlier than SECHSA, although in consultation with the SECHSA consultant. The objective of reflecting main recommendations of ESMF in SECHSA is to expand these principles beyond the frames of RDP III and to make it a good practice code applicable for other investments within RDS and RTDS context. In addition to ESMF recommendations, SECHSA provides also screening criteria for selecting eligible private investment projects, which are not envisaged within the RDP III but are supposed to be supported by the Government under the RDS and RTDS context.

The assignment has been carried out in a participatory manner, including in-depth consultation with relevant line and administrative agencies of the Government, main types of beneficiary groups, communities expected to experience positive and possible negative impacts of the project implementation, academic circles, and NGOs.

2. SOCIAL ENVIRONMENT, CULTURAL HERITAGE AND TOURISM DEVELOPMENT TRENDS IN SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI

2.1 SAMTSKHE-JAVAKHETI: SOCIAL FEATURES, CULTURAL HERITAGE AND TOURISM DEVELOPMENT TRENDS

2.1.1 Social Profile of Samtskhe-Javakheti

TERRITORY

Samtskhe-Javakheti is a region in the South-East of Georgia. It includes three historical provinces – Samtskhe, Javakheti and Tori. The region borders with Adjara, Guria, Imereti, Shida Kartli, Kvemo Kartli, Armenia and Turkey. Its area is 6,413 m². Population density is 25 people per 1km². There are six self-governing districts in the region – Akhaltsikhe, Adigeni, Aspindza, Borjomi, Ninotsminda and Akhalkalaki municipalities. The regional centre is the city of Akhaltsikhe, which is the seat of the Governor’s administration. The region comprises 353 settlements including five towns: Akhalkalaki, Akhaltsikhe, Borjomi, Vale, Ninotsminda; and seven townlets: Bakuriani, Bakurianis Andeziti, Tsagveri, Akhaldaba, Adigeni, Abastumani, Aspindza; and 254 villages. The region has a favorable geopolitical location. It is bordered by Turkey and Armenia which creates convenient conditions for trade, economic and cultural relationships with these neighboring countries.

POPULATION

As of 2014 General Population Census, the population of Samtskhe-Javakheti totaled 160.5 thousand, which is 4.3% of Georgian population. The last decade has demonstrated a decreased trend. 34% of the region’s population (54.6 thousand people) lives in cities, and 66% (105.8 thousand people) – in the villages. Among the municipalities, the most residents are registered in the Akhalkalaki (60 975) and Akhaltsikhe (46 133) municipalities.

ETHNIC MINORITIES AND VULNERABLE GROUPS

Table 2.1 Ethnic Groups in Samtskhe-Javakheti Region (Source: Geostat 2014 year census data)

Region Municipalities	Total population	Of which							
		Georgian	Abkhaz	Ossetian	Armenian	Russian	Azeri	Greek	Ukrani an
Samtskhe- Javakheti	160 504	77 498	42	393	81089	712	89	420	142

Internally Displaced Persons: Currently there are 1 267 internally displaced people in the region. Their absolute majority is in the Borjomi municipality. No report describing their social, economic and other problems or assessing their needs is available at the moment.

Pensioners: In 2015, 35 235 thousand people received pension and social aid package. This number makes 22% of the region’s population and is not a high compared to the rest of Georgia.

Vulnerable receiving allowances In 2015, subsistence allowance was received by 2 843 families, which is 12,5% of those registered in the database. This parameter is the lowest in Georgia. The allowances amount 60 GEL per month for the head of household and for other members of family

In addition to the state programs, Samtskhe-Javakheti municipalities carry out various programs aimed at one-time assistance to the population below the poverty line, co-financing medical operations, reliefs for refugees and the people with disabilities, free dinner expenses, assistance to homeless children and other expenses

stipulated under social or healthcare programs of the municipalities. The healthcare and social insurance programs designed by the municipalities' budgets are mostly homogeneous and do not differ from one another significantly.

SOCIO-ECONOMIC FEATURES

The Labor Market. In 2014, the rate of unemployment in Samtskhe-Javakheti, together with Guria and Mtskheta-Mtianeti, stands at 5.1%, which is much lower than the country's rate (12,4%). The reason is that a large number of the region's population is employed in agriculture. However, the workforce in the region already employed or seeking work in any sector of economy, often need professional development. The average annual number of temporary workers in the region in 2012 was 9750, most of them hired in construction, processing industry, trade and repair of car and various household appliances.

Attraction of investments and development of SMEs in the region is one of the most important factors for its economic development. In 2011, investments of more than GEL 495 mln were made into the region; including over GEL 397 mln of private investments. In recent years, large foreign investments went to processing industry and energy. Limited access to the service of financial institutions, low level of business education, poor skills of the labor force, inefficient marketing strategies, as well as outdated technologies and little opportunities for entrepreneurship is having a negative impact on the business development in the region, affecting the employment rate.

Industry. Considering the mineral and other natural resources available in the region, industry in Samtskhe-Javakheti could be developed in the following main directions: mining, mineral waters, and manufacturing of furniture and wood items. With relatively cheap labor force, low-priced electricity and the region's strategic location, it is possible to develop agricultural processing industry here. Naturally, professional development of human resources and use the potential existing in the processing industry are absolutely necessary.

Energy Sector. Samtskhe-Javakheti has a big potential of becoming a large producer of electricity and a transit node in the region of South Caucasus. Attraction of investments for efficient use of energy resources is one of the most important opportunities of the development of the region and the country in general. Neighboring Turkey, whose demand on electricity is growing rapidly, is one of the most attractive markets for Georgia. Construction of Akhaltsikhe 500/400/200 kWh substation and high voltage transmission lines has just been complete within the frameworks of the Black Sea Transmission Network BSTN project. As a result of this project, Georgia will be the first country in the Caucasus to have the high voltage direct current (HVDC) system, transforming 500 kilowatt alternating current will be transformed into 400 kilowatt high voltage direct current and supplied to Turkey. The substation makes it possible for the country's electricity system to operate in parallel to neighboring countries' electricity systems. Once the transmission line on the Turkish territory is built, it will be possible for Georgia to export own electricity and re-export electricity generated in other neighboring countries to Turkey and via Turkey to East and Central European countries.

Currently the region generates over 115000 MW per hour electricity which is only 1.13% of the country's energy generation. However, after 5 new hydro power stations are built in the coming years, electricity generation is estimated to grow eightfold. Besides, the Ministry of Energy has identified potential locations for building 6 additional hydro power plants. Certainly, to implement these projects, it is necessary to attract investors.

Use of alternative sources of renewable energy and implementation of energy efficient technologies are also among the priorities of the region's energy sector.

Currently, oil and gas extraction works are underway in Samtskhe-Javakheti but the stocks haven't been discovered yet. Strait Oil and Gas Ltd. has the distribution agreement with the Ministry of Energy of Georgia on discovery and further extraction of oil and gas. The region also has coal reserves in Vale-Akhaltsikhe basin.

The coal-field started operation in 1931 and extracted approximately 150 thousand tons of charcoal annually for thermal power plants in the East part of Georgia. Vale Akhaltsikhe coal-field contains the resources of 71.3 million tons but it is currently abandoned.

Cross-border Cooperation. The region's location facilitates development of cross-border cooperation. Currently, there are mostly trade relationships.

Agriculture. Samtskhe-Javakheti is a strictly agrarian region where the share of agriculture in total value added is largest (32%). Most of the human resources are employed in agriculture. The share of agriculture in the region's total value added in 2006-2011 was approximately 33%, higher than the same figure in other industries of the region and other regions of Georgia.

The region's agriculture is made up of family farms and commercial farms. Over 90% of production is accounted for by family farms. 73% of family farms produce agricultural products for own use, and for the remaining 27%, agriculture is a source of income. The level of commercialization of agriculture in the Samtskhe-Javakheti region is higher than that of the whole country. More than half of agricultural land is pasture. Second largest type of agricultural land is arable land. Only third of the existing potential is being used. Agriculture has an extensive nature and local products cannot compete with the imported products.

Plant Growing. The plant growing in the region mainly consists of potato, cereals and vegetable growing. Share of **potato** production is concentrated in Samtskhe-Javakheti, where 52% of the country's potato plantations are located (2011). Almost all the families in the region have their own vegetable garden primarily for own use. Only small part of vegetable is taken to the market for sale. Vegetables are grown for commercial purposes by farmers who own lands of up to 1 ha. **Cereals** – the region's contribution to production of barley is significant – constituting on average 35% of planted area and 42% of production.

Livestock. Growth in number of livestock is observed in Ninotsminda, Akhaltsikhe and Adigeni, especially in Ninotsminda municipality. The number of sheep and goats was less volatile in Adigeni, Aspindza and Akhaltsikhe municipalities, and more volatile in the rest of municipalities. The Akhaltsikhe municipality has a much bigger number of pigs than other municipalities. Poultry and bee keeping is mostly concentrated in Akhalkalaki. The Samtskhe-Javakheti region has a significant share in livestock production, accounting for 8-17% of the country's total. Local farmers have little information or knowledge of different livestock breeds. Artificial insemination is not widely used and controlled. It causes degeneration of breeds and has a negative impact on livestock productivity, health, resistance and growth and development. The fodder used in winter is mostly hay, silo is not used and combined fodder is used rarely, which results in low productivity and weight loss of livestock. Veterinary service is poorly developed in the region. Vets are absent in many communities and farmers often have to address to municipal centers or neighboring communities.

Fish Farming. Fish farming and the area of artificial ponds and reservoirs are on the rise. Salmon is bred in special artificial ponds, while chub, common whitefish (lavaret) and other species – in natural water reservoirs. Trout is mostly farmed in small family farms. Each family has 5-8 specially arranged concrete ponds, and annual production is about 2-5 tons.

Poor condition of the irrigation system, lack of mechanization, high quality seeds, warehouse facilities are the main factors hindering development of agriculture in the region.

LIVING STANDARDS AND SOCIAL SECURITY OF THE POPULATION

Income and Expenses. In 2011, the annual monthly income of households in the region was GEL 857, which is GEL 320 up from 2008, making this region a leader in Georgia. However, Samtkhe-Javakheti has one of the lowest shares (13%) of income from hired work. The income from selling homegrown agricultural products in the region is 22% and is relatively high as compared to the rest of the regions. The largest source of income is

remittances and pensions. The total expenses of the region's population grow steadily and in 2011 it reached GEL 36.7 mln, which is GEL 11 mln up from 2008. Average monthly income of families grows as well, totaling GEL 830,8 in 2011, which is GEL 251,5 up from 2008. Most expense in the family budget are for food products, constituting 26,1% of the total monthly expenses. The average monthly expenses for families in Samtskhe-Javakheti are higher than in other regions of Georgia.

Health care. As a result of the reforms and restructuring in the healthcare sector in recent years, the state-owned medical establishments have been merged and become larger, or handed over to private ownership. Currently there are 6 hospitals (1 hospital in each municipality) in the region and one specialized in-patient facility in Abastumani. The number of hospital beds in the region per 100,000 people is 223.4, which is 26% behind the overall figure of Georgia. Even though the region is rehabilitating medical establishments and equipping hospitals with modern equipment, it is still behind the medical establishments of Tbilisi and a few other regions. The lack of up-to-date medical equipment and low number of skilled medical personnel negatively affect the quality of health services that the region's population receives. Therefore patients often have to go to Tbilisi hospitals and clinics to get professional medical research, diagnostics and treatment, causing them additional expenses. Within the framework of the medical insurance program launched in the country for the population below the poverty line, over 17,700 people (6261 families) were ensured by September 2012 in Samtskhe-Javakheti, and more than 5,916 teachers had the special teachers' insurance. The government-funded insurance program mainly finances urgent surgical operations, planned operations, cancer treatment, medical-preventive examination and check-ups and other healthcare services. On 1 September, 2012, the government additionally ensured 35,000 pensioners (age) and people with severe disabilities, as well as up to 17,000 children (up to 6 years of age) and students.

Education. There are all types of educational institutions operating in the region, including 205 general education schools (2 of which are private schools), 34 nursery schools, 4 vocational schools and one institution of higher education – Non-commercial Legal Entity *Akhaltshikhis Sastsavlo Universiteti* (Akhaltshikhe Learning University). In the last few years, there has been a decline in the number of pupils as a result of various social and economic factors and internal/external migration.

INFRASTRUCTURE AND ACCESS TO SOCIAL SERVICES

Infrastructure in the region has significantly improved in the past 5-6 years. Some of the funds allocated for infrastructure development are used for rehabilitation of road network, fresh water and irrigation systems, bridges, sewerage, schools and pre-school establishments, squares and gardens, and setting up outdoor lighting. Since 2013, new infrastructure projects have been launched to restore streets in cities and roads in villages, as well as water supply and sewerage systems. The length of motorways in the region is 1340 km. Of this, 195 km of international highways are used for transit, connecting the country with Armenia and Turkey. The length of the roads for internal (national) transportation is 270 km, and the length of the roads for local transportations is 945 km. The highway network used for international transportation is paved with asphalt concrete surface. Only 77,8% of the roads of national importance has asphalt surface, the remaining is covered with gravel. Within the framework of Millennium Challenge program, 245 km of roads, bridges and roadside facilities were rehabilitated in Samtskhe-Javakheti.

Khashuri-Akhaltshikhe-Vale branch (length 60km) of Georgian railway runs across Samtskhe-Javakheti and is used for shipping cargo and transporting passengers. Marabda-Akhaltshikhe branch of the railway is currently being repaired (178 km). The Baku-Tbilisi-Kars Railway project was launched in 2007 under the international treaty signed by Georgia, Azerbaijan and Turkey. Its purpose was to rebuild and repair the Marabda-Akhaltshikhe railway in the Georgian territory and build a new railway from Akhalkalaki to the Turkish border.

The total length of the gas distribution network in Samtskhe-Javakheti is 373 km. Even though gasification works are started in the region, some families do not have gas delivered to their homes. That is why majority of the population (75,4%) uses liquid gas for household purposes. According to the 2011 data, utility companies

supplied gas to only 16.2% of households. The Baku-Tbilisi-Ceyhan oil pipeline, the Trans-Caspian Gas Pipeline pass through the region.

The irrigation system in the region supplies water to around 15% of arable land, which significantly hampers agricultural development and is a big challenge for the local population because its majority is employed in agriculture.

Most of the population has access to fresh water. Municipality centers and some rural areas are supplied with fresh water via the central water distribution system. Approximately 70-80% of the fresh water system in the region is damaged and rather significant portion of water is lost because of the poor condition of water distribution system. The volume of used water is reported only in some part of the region's territory. Samtskhe-Javakheti region does not have the facilities for cleaning sewage water, causing contamination of surface waters (rivers) in the region. What is more, forests and lakes are also polluted with diffuse waters.

Waste management is one of the main environmental problems in Samtskhe-Javakheti. None of the five official landfill sites has environmental permit. Household waste is collected regularly in municipal centers and towns (Bakuriani and Abastumani) by utility services. In the villages no such services are available and people throw wastes sporadically in the neighboring areas, creating uncontrolled small dumping sites. Waste is not arranged-separated in the region. Nor is there any practice of composting organic waste. To solve the problems related to waste disposal and environmental pollution, it is planned to build new sanitary landfill sites in Ninotsminda and Borjomi municipalities; but in the rest of the municipalities sustainable waste management is still a big challenge, standing in the way of the region's development.

2.1.2 Cultural Heritage of Samtskhe-Javakheti

Samtskhe-Javakheti represents the largest region of the South Georgia. Nowadays the following historical and geographical provinces are included in Samtskhe-Javakheti region: Tori (Borjomi Municipality), Samtskhe (Adigeni, Akhaltsikhe and partially Aspindza Municipalities), Javakheti (Aspindza, Akhaltsikhe, Akhalkalaki and Ninotsminda Municipalities). The historical reality, diverse geographical conditions and local traditions of each province defined /determined specific regional peculiarities for its architectural development. Below is provided a list of cultural sites and monuments by municipalities.

Borjomi Municipality

1. Rveli Castle (Samis Tsikhe), X-XIV centuries;
2. Petre Fortress, the early and developed Middle Ages.
3. Chitakhevi Green Monastery, VIII-IX centuries.
4. The village of Chobiskhevi, former settlement "Gogichaant Ghele" (stream), VIII-X centuries,
5. Kvabiskhevi three-nave basilica, Church of Assumption (St. Mary), IX century.
6. Sakvirike Monastery, VIII-IX centuries. South-west of the village Dviri.
7. Tadzrisi Monastery, X-XI centuries. Is located on the outskirts of the village Tadzrisi,
8. Sakiri Castle Hall, X-XIII centuries. Is located to the south-east of the village Sakiri,
9. Sakdrivake Monastery, IX-X centuries; to the west of the village Sakiri, 3-4 kilometers away.
10. Daba St. George Hall Church, XIV century.
11. Timotes Ubani Monastery Complex, XII-XIII centuries.
12. Uznariani Castle, the early and developed Middle Ages.
13. Tori Nadarbazevi, VIII-X centuries..
14. Tabatskuri Red Church, X century.
15. Likani Romanov Palace, XIX century. Is situated in the resort Likani.

Adigeni Municipality

16. Zarzma Monastery, XIII-XIV centuries..
17. Golden Castle, Medieval period..
18. Ijareti Bell tower, the I half of the XIII century,.
19. Abastumani Castle (the same Odzrkhi, Otskhi, Tamari's Castle) IX-X centuries.
20. Vale Church of the Blessed Virgin Mary, three-nave Basilica, X-XVI centuries.
21. Jakismani Monastery, IX-XI, XIII-XIV centuries..

22. Abastumani houses

Akhaltzikhe Municipality

23. The town of Akhaltsikhe, Castle - Rabati, the developed and late Middle Ages.
24. Sapari Monastery Ensemble, X-XIV centuries.
25. Bieti Domed Temple, XII-XIV centuries.
26. Tiseli Domed Church of the Blessed Virgin, XIV-XV centuries.
27. Tiseli Hall Church of the Blessed Virgin, XIII century.
28. Uraveli Monastery Complex, X-XIV centuries.
29. Atskuri Domed Church of the Assumption, XI, XIV-XV centuries.
30. Atskuri Fortress, the early, developed and late Middle Ages.

Ninotsminda Municipality

31. Chiqiani Menhir, pre-Christian period.
32. Paravani Lake Hall Church, X century. Paravani Caravanserai, XIV century.
33. Foka St. Nino Hall Church, XI century.
34. Shaori Cyclopean Fortress, pre-Christian period.
35. Abuli Cyclopean Fortress, pre-Christian period.
36. Saghamo Lake Large Church, X century.

Akhalkalaki Municipality

37. Samsra Rock-cut Monastery, X-XI centuries.
38. Azavreti Hall Church, IX-X centuries.
39. Kumurdo Domed Temple, X century.

Aspindza Municipality

40. Khviliashi St. George Church, VIII-IX centuries..
41. Khertvisi Fortress, early, developed, late Middle Ages.
42. Tsunda Hall Church of John the Baptist, XII-XIII centuries.
43. Saro Hall Church of the Archangel, VII-VIII centuries.
44. Vardzia Rock-Cut Monastery Ensemble, XII-XIII centuries.
45. Vani Caves (Vanis Kvabebi) John the Baptist Rock-Cut Monastery Complex, VIII-XI centuries.
46. Tmogvi Fortress, IX-X centuries.
47. Former Settlement Gaghma Chachkari, XI-XII centuries.
48. Tamala Hall Church (Shadow Archangel), X century.

2.1.3 Tourism Development Trends in Samtskhe-Javakheti

In the last 5 years, the number of hotels and other lodging facilities in the region has grown by 40%, and the number of visitors to the region has also increased (approximately 40-45%). Currently there are 138 hotels registered in the region, of which 78 are guesthouses. In 2010 the total turnover of the hotels in the region was GEL 7.3 mln. Foreign tourists arrive mostly from Armenia, Russia, Germany, Israel and the USA . In 2011 Samtskhe-Javakheti was visited by 278500 tourists, 84150 of which were foreigners. Cultural, recreational and adventure tourism is being developed in the region. Samtskhe-Javakheti is rich in historical and cultural monuments, notably Vardzia Cave Monastery, Tmogvi, Khertvisi, Rabati castles, Zarzma and Sapari Monasteries; there are also a few popular resort zones, among them Borjomi-Kharagauli National Park and the Javakheti Protected Areas. However, further development of tourism requires hotels of high standards and additional construction of small hotels. It is also necessary to offer visitors a modern package of tourism services and improve the level of service, open high quality catering facilities, use the tourism potential of the region's lakes, full exploitation of the eco-tourism opportunities – National Park of Borjomi-Kharagauli and Javakheti Protected Areas, develop new travel guide books and raise public awareness about the advantages of developing tourism. Below we provide some tourism indicators (sources: GNTA; CBA)

Number of Visitors in 2014 (source: GNTA)	210,328
Number of tourists (> 1 night) (source: GNTA)	84,131
Number of Beds in Samtskhe-Javakheti	6,137
Tourist arrivals growth rate forecast in 2015-2020	5%
Tourist arrivals growth rate forecast after 2017	2%
Current Average stay, days (source: GNTA)	1.80
After Project Average stay, days from 2017 (source: GNTA)	2.00
After Project Average stay, days from 2020 (source: GNTA)	2.50
Average daily spending per tourist, GEL (source: survey) ³	192.66
Local share in tourist spending	85%
Hotel occupancy rate	30%
Secondary Sales Multiplier factor	1.50

2.1.4 Natural Environment of Samtskhe-Javakheti

Geographically Samtskhe is represented by Akhaltsikhe depression with average elevation 800-1500 m a.s.l., mountain systems are Meskheti, Arsiani, Erusheti, Kasri, Gumbati and Vani ranges and southwestern-western slopes of Trialeti range (Klopotovskii, 1950, Nemanishvili, 1960, Maruashvili et al. 1971). The highest peak is Kiumbet (2964 m a.s.l.). Main rivers are Mtkvari, Potskhovi, Kvabliani, Uraeli, Otskhe and Tsinubnistskali. Several lakes are in Samtskhe - Lake Satakhve or Karageli (1940 m a.s.l.) near v. Zarzma, Lake Tsunda (1340 m a.s.l.) near v. Tsunda in Aspindza district, as well, artificial three Jaji Lakes (2240 m a.s.l.) and Triala Lake near v. Lelovani in Adigeni district.

Climate

The characteristics of individual meteorological elements merge with the relief peculiarities, where vertical zoning is clearly seen, and of the existing conditions in the study area, three major climatic zones can be distinguished:

- Moderately dry (steppe) subtropical mountainous climate with short winter with little snow and long summer, mostly spread from 900 m to 1800 m altitude;
- Moderately dry subtropical high-mountainous climate with cold winter and short summer, mostly spread from 2000 m to 2700 m altitude;
- Moderately humid high-mountainous climate, with no real summer, mostly spread over 2700 m altitude.

Geomorphological conditions

The study area is distinguished with widely spread surface waters (rivers, lakes, rarely bogged areas). The study area is located within the limits of three large geomorphological elements:

- Mountainous basin of Akhaltsikhe;
- The southern piedmonts of the crest zone of Ajara-Imereti (Meskheti) and Trialeti ridges, and
- Javakheti mountainous area.

An important role in the transformation of the relief and formation of its separate forms, as well as origination and activation of exogenous processes in the southern mountainous region of Georgia, in addition to the geological factors, is played by the climate, surface waters, soils and vegetation. The vertical zoning is clearly expressed.

Hazardous geological processes

As per the tectonic zoning plan of Georgia (E. Gamkrelidze, 2000), the study area is located in the central, southern, Javakheti and Gioktepe sub-zones of the Lesser Caucasioni folded system. The study area is characterized by high seismicity evidenced by numerous earthquakes, which are sometimes very strong and

³ Survey average was GEL 288.99, but due to the fact that Gudauri is at high end, we assumed that average expenditures for the Samtskhe-Javakheti will be 2/3 of the Gudauri expenditures

result in natural calamities. The instrumental measurements show that most of the earthquake focuses are located on relatively lower slopes in the southern part of Ajara-Trialeti mountain system. Most of the earthquake focuses in the study area are concentrated along the meridian line of the volcanoes of Abul-Samsari and Kechuti ridges. Below we give the characteristics of the horizontal acceleration of the earthquake waves in different settled areas of the study area: Apindza - 0,17m/sec², Sakudebeli - 0,17m/sec², Orgora - 0,17m/sec², Dzveli - 0,18m/sec², chobareti - 0,18m/sec², Muskhi - 0,19m/sec², Andriatsminda - 0,20m/sec², Ninotsminda – 0,31 m/sec², Aklalkalaki - 0,21m/sec². As per the macr-seismic zoning plan of Georgia, the study area is located in an 8-9-point earthquake zone (Decree No. 1-1/2284 of the Minister of Economic Development of Georgia of October 7, 2009, Tbilisi “On approving building standards and rules - “Earthquake-resisting construction” (PN 01.01-09).

The exogenous processes, such as landslide, mudflows, erosion, rockfalls, rock avalanches, floods, snow avalanches, weathering and bogging, are widely spread in the Southern mountainous region of Georgia. Their types, intensity and origination and activation result from the seismo-tectonic, geological-geomorphologic, meteorological, hydrogeological and anthropogenic factors. The geodynamic stress of the study area is much intensified by the fact that the mountainous zone of Georgia is located in an 8-9-point earthquake zone, what in combination with other factors, in most cases greatly contributes to the origination and activation of exogenous processes. Of anthropogenic factors, irregular and intense forest cutting, slope overload with heavy buildings and premises, poor water-supply systems in the settled areas, irregular and excess irrigation, ignoring elementary engineering-geological requirements during the construction of engineering facilities and lack of awareness of the population of the hazardous exogenous processes have a particularly negative impact on the geological situation and complicate it a lot. There are 155 old and new landslide bodies registered in the region, which got activated on a periodic basis (60 landslide bodies are registered in Borjomi, 50 in Akhaltsikhe and 20 in Adigeni) and 119 mudflow-forming watercourses. Out of 270 settled areas of the region, 91 ones are at risk of hazard. Up to 50 areas of riverbank washout of different scales are known; floods and floodings mostly take place in the gorge of the river Mtkvari. Bogging takes place in the areas adjacent to the lakes of Javakheti mountainous area. Weathering, solifluction processes (“cryogenic landslides”), floods and floodings, areal erosion, rockfalls, rock avalanches and snow avalanches are also spread in Javakheti. Over 100 settled areas of the study area are subject to the risk of exogenous processes at different degrees.

Soils

The soil cover of the area is quite diversified. Based on the soil zoning map of Georgia by T. Urushadze (1999), there are 4 major dominant groups:

- Mountain-and-meadow turf soils and Chernozems;
- Chernozems;
- Brown soils;
- Sierozems.

With its vegetation cover, the study area is clearly distinct from other regions of Georgia being the result of the relief peculiarities and climatic conditions of the region. Both, coniferous (pine and spruce as dominant species) and hardwood (beech, hornbeam, nut, etc.) species grow here. The grass cover is also widely spread, particularly over Javakheti mountainous area and Persati Plateau. The volcanic cones and their adjacent areas are poor in vegetation and their surfaces are mostly covered with block talus and gravely destritus deprived of vegetation.

Surface Water

The principal rivers of Samtskhe-Javakheti are: Mtkvari, Paravani, Potskhovi, Agrichai, Kvabliani, Murjakhetistskali, Borjomula and Gujaretistskali. It should be noted that the beds of the rivers in Samtskhe-Javakheti region are mostly cut into the bedrocks of a volcanic origination making any significant meandering of the rivers or developing lateral erosion impossible. Along some sections where the riverbeds are build with alluvial or delluvial sediments, the activation of the bed processes is expected during the catastrophic flood interval mostly expressed as deep, but not lateral erosion.

There are many lakes in the region, with Paravani, Sagamo, Khanchali and Tabatskuri lakes worth mentioning. The lake is used by fisheries and have recreational and ecological value. However, in several cases development of fishery results in adverse impacts on biodiversity and endemic species of fish.

The river Mtkvari is intensely used for irrigation, power engineering and industrial water-supply purposes. In the region, there are Rustavi and Chitakhevi HPPs being a part of the power engineering network of Georgia constructed across the river Mtkvari. Tashiskari irrigation system heads near village Akhaldaba. The Paravani river is used for irrigation and power engineering purposes. There are some local irrigation channels across the river and Paravani HPP connected to the power engineering network of Georgia put into operation in recent years. The river Kvabliani is used for irrigation and power engineering purposes. There is Kakhareti HPP connected to the power engineering network of Georgia operating across the river. The river Potskovi is used for irrigation. There are several irrigation pumping stations operating across it. The river Murjakheti is used for irrigation. Murjakheti channel supplying the irrigation water to 1245 ha of agricultural plots of field in Akhalkalaki municipality operates across the river. The river gujaretistskali is used by the local population to irrigate their own land parcels.

Landscapes, Habitats and Biodiversity

The region is particularly rich in flora and fauna and landscape/habitats diversity. Multitude of endemic species and forms is noteworthy.. There are 15 landscapes on the territory of Mtskheta-Mtianeti Region (classification by N. Beruchashvili, 1979 D. Nikolaishvili, 2009), including the ones with different conservative values being much important for the existence of habitats of rare and threatened fauna and flora species. According to traditional classification (N. Beruchashvili, 1979 D. Nikolaishvili, 2009) the landscapes are grouped by altitude and climatic zones as: Low Mountain Landscapes; Middle Mountain landscapes and High Mountain Landscapes. Low Mountaineos landscape comprise predominantly forest habitats and partly steppe landscapes with “shibliak”. Middle Mountainous landscapes comprise forest habitats, meadows and steppe landscapes. High Mountainous landscapes integrate subalpine forests witch birch or pine and oak (*Quercus pontica*), meadow-steppes, alpine meadows and subnival landscapes. From zoogeographic standpoint and most general description it is convenient to group the landscapes not by climatic/altitude criteria but by types of habitats. This approach for classification is used in the present SECHSA. Below we provide only a very brief summary with ecological characteristics of three larger landscape complexes, which unite more or less homogenous types out of the mentioned 15 landscapes and habitats. The mentioned three landscape/habitat complexes are: a) Complex of forested area; b) Complex of mountain steppes and c) Complex of high-mountain landscapes.

I. Landscape/Habitat Complex: of forested area

This complex comprises **low- and middle- mountain forest landscapes** [hornbeam-oak (*Quercus iberica*), oak-pine and pine (*Pinus caucasica*) forests and post-forest meadows and shrubs; beech-dark coniferous and dark coniferous, mainly with evergreen underwood] **and Upper-mountain forest landscapes witch** [birch or pine and oak (*Quercus pontica*) forest; High mountain sub-alpine landscapes with combination of meadow, shrubs, elfin woods (beech and birch) and thickets and open woodlands]

II. Complex of mountain steppes

This complex comprises middle- and high mountain steppes landscapes [Middle-mountain shibliak and sparse forest, phrygana, meadow-steppe; Mountainous Depression with Steppes, mountainous semi-desert vegetation; High Mountain subalpine landscapes with combination of meadow, tall-herb communities, elfin woods and thickets]

III. Complex of high-mountain landscapes

This complex comprises alpine meadows and subnival landscapes [High mountain alpine landscapes with grasslands and rhododendron thickets; high-mountain volcanic Alpine meadows; High mountain volcanic subnival landscapes]

Fauna Within the Area of Concern

Forested area.

Complex of forest species is widespread on the southern slopes and crest of the Meskheti Mountain Range, on the western spurs of the Trialeti Mountain Range and north-east end of Arsiani Mountain range and on eastern spurs of the Erusheti ridge within the Akhaltsike municipality. This area is a part of the Ecoregion PA0408 “Caucasus mixed forest”. Within the Project area this region covers western part of the Adigeni municipality, northern part of the Akhaltsikhe and Aspindza municipalities, and almost entire Borjomi municipality. The good preserved forests and subalpine meadows are of significance for mammals. More than 60 species of mammals are recorded for this part of the Region and additional four species are presumed according to their ecological preferences and existing habitats within the considered area. Ten mammals are listed in the Georgian National Red Data list: six as Vulnerable, two as Endangered, and two as Critical Endangered. At least 190 bird species are recorded within forested area (from low-mountain up to high-mountain forest). Among them 99 species are breeding there and just seven are wintering or winter visitors. 18 bird species are listed in the Georgian National Red Data list, five are breeding and no one of threatened species is wintering. 13 bird species are listed as Vulnerable, three as Endangered, and one as Critical Endangered. At least 14-16 reptilian species (six snakes, eight lizards and one tortoise) occur within forested area (from low-mountain up to high-mountain forest and subalpine meadows). One species Mediterranean Tortoise (*Testudo graeca*) is listed in the Georgian National Red Data list as Vulnerable. Eight amphibian species occur within forested area (from low-mountain up to high-mountain forest). One species - Caucasian Salamander (*Mertensiella caucasica*) is listed in the Georgian National Red Data list as Vulnerable.

The Open Grasslands in the region are of two different types: steppes on flatlands in depression and on plateau, and subalpine landscapes on mountains. More than 34 species of mammals are recorded for this part of the Region and additional seven species are presumed according to their ecological preferences and existing habitats within the considered area. Five mammals, occurring in the open landscapes are listed in the Georgian National Red Data list: four as Vulnerable and one as Endangered. About 266 bird species occur in agriculture lands and natural habitats in Akhaltsike depression and Javakheti Upland in different seasons. Among them 144 species are breeding there, 200 species are migrating through the territory, about 40 species can be considered as occasional visitors and only four species are wintering there. 23 of them are listed in the Georgian National Red Data list, nine are breeding, 13 species are just migrating and about ten species are visiting this territory regularly in summer (7) or occasionally (3), no species of the birds protected by law are wintering there. Up to 11 reptiles (four snakes, six lizards and one tortoise) occur in agriculture lands and natural habitats. One species Mediterranean Tortoise (*Testudo graeca*) is listed in the Georgian National Red Data list as Vulnerable. Four amphibian species occur there. No species of them are listed in the Georgian National Red Data list.

The High-mountain ecosystems are widespread on altitudes above 2000-2100 m above main sea level on mountains that encircle the steppes and meadow-steppes on volcanic plateau. Generally, transition between steppes and subalpine meadows is gradual. The species complexes as well are similar and also are changing gradually. The southern slopes of the Trialeti Mountain Range are covered by subalpine meadows, shrubs and sparse growth of trees. There is a transitional zone between ecoregion PA0408 “Caucasus mixed forest” and ecoregion PA0805 “Eastern Anatolian montane steppe”. The animal complex here is enriched with species mainly occurring in forest. 14 species of mammals are recorded for this part of the Region and additional five species are presumed according to their ecological preferences and existing habitats within the considered area. Four mammals are listed in the Georgian National Red Data list: three as Vulnerable and one as Endangered. About 248 bird species are recorded within the high mountain part of the Region. Among them 80 species are breeding there, 185 species are migrating through the territory, about 35 species can be considered as occasional visitors and no species are wintering there. 25 bird species occurring there are listed in the Georgian National Red Data list, six are breeding, 12 species are just migrating and about 13 species are visiting this territory regularly in summer (6) or occasionally (7), no species of the birds protected by law are wintering there. Seven reptiles (two snakes and six lizards) occur there. No one of them is listed in the Georgian National Red Data list. Two amphibian species occur there. One more species can be suspected according to its habitat preferences. No species of them are listed in the Georgian National Red Data List. All ecosystems in high mountain zone

are very sensitive to anthropogenic impact. The most vulnerable and fragile ecosystems are alpine meadows. In the same time, these landscapes are important for a wellbeing of mountain fauna.

Protected Areas of Samtskhe-Javakheti Region

Javakheti Protected Areas were established in 2011. It includes Javakheti National Park, Kartsakhi Wetland Reserve, Sulda Wetland Reserve, Khanchali Lake Reserve, Bughdasheni Lake Reserve and Madatapa Lake Reserve. Javakheti protected areas are located Akhalkalaki and Ninotsminda municipalities. There are many lakes on Javakheti Plateau, including the largest lake of Georgia, Paravani. The most important natural subalpine forests, which consist of the white birch, Caucasian rowan, cotoneaster, dog rose and raspberry bushes, are found in Kartsakhi lake area, near Georgia's borders with Turkey.

Borjomi-Kharagauli National Park is situated in central Georgia and creates the eastern part of the Lesser Caucasus. The total area of the park is 85,083 ha. It includes six administrative districts: Borjomi, Kharagauli, Akhaltsikhe, Adigeni, Khashuri and Baghdadi. Park Administration manages four different categories of protected area — Borjomi Nature Reserve, Borjomi-Kharagauli National Park, Nedzvi Managed Reserve and Goderdzi Petrified Forest Natural Monument. National Park offers its visitors hiking, horseback riding, biking, snow boots cultural and educational tours.

Nedzvi Managed Reserve is located in Borjomi district. The total area is 8 992 ha. Nedzvi reserve was established to protect unique groves of Caucasian fir and lynx. The functional zones of Nedzvi Managed Reserve: 1. Strict Protection Zone (The total area 1 814 ha); 2. Traditional Use Zone (The total area 7 178 ha)

Ktsia-Tabatskuri Managed Reserve

Located in southern Georgia, Ktsia-Tabatskuri Managed Reserve was established in 1995 in order to protect the unique high mountain wetland ecosystem of volcanic Javakheti plateau. On the territory of reserve, in Nariani valley and coastal area of Tabatskuri lake is represented a great variety of wetland flora. Ktsia-Tabatskuri Managed Reserve is characterized by the abundance of wild birds and local fish species: carassius, European cisco, mirror carp, etc. Javakheti upland is one of the main way of a bird migration. During the period of migration, Tabatskuri lake and its surroundings are filled with predators, water or marsh birds. Among the mammals there are a lot of rabbits, foxes and badgers, a wolf and small predators such as weasel, marten and marbled polecat.

Tetrobi Managed Reserve

Tetrobi Managed Reserve is located in the northwestern part of the Javakheti Volcanic Plateau on Tetrobi-Chobareti limestone ridge. Caucasian pine forest is formed by plants of dry habitats, such as feather grass, festuca valesiaca, sunrose, Anatolian polygala, etc. Especially notable are the endemics of Javakheti: Ketskhoveri's scorzonera with stunning beauty (with golden flowers, and downy silver leaves and stems) and Javakhetian scorzonera; Among bushes should be noted willow-leaved pear, juniper, goat willow, etc.

Goderdzi Petrified Forest Natural Monument

Goderdzi Petrified Forest Natural Monument represents a unique flora and fauna uncovered location of Pliocene period, which is represented on 3 sites, at an altitude of 1600-2100 m above sea level, Khulo and Adigeni municipalities. The total area is 365 ha. Here you can see the exposed Neogene volcanogenic series of uncovered parts of the forest, which contains a lot of plant remnants of the early Pliocene age on the one hand, and salicaceae, birch, hornbeam, Fagaceae family - on the other hand. Plant remnants are represented as prints of fossilized and semi-fossilized leaves and stems within the gray volcanic tuff.

Natural Resources

The region is famous for its healing and recreation zones. Its climate provides an important potential for renewable alternative energy resources in the region. The region has a rather high solar radiation. So it is possible to use the Sun's energy potential based on relevant technical and economic estimates. Besides, the yearly data of the direction, speed and duration of the winds common in the region, allow for the possibility of

using the wind resources for energy production purposes. Currently the works are underway to prove the feasibility of building wind power plants here. The region is rich in mineral resources, mostly: mineral, thermal and salt-free water, finishing materials, calc-tuff, basalt, diatomaceous earth, perlite, clay, sand and gravel, scoria, charcoal, gold and andesite. Currently, there are 136 licenses issued for mining and extraction of natural resources. The existing stocks of resources have an important economic potential. The Samtskhe-Javakheti region abounds in water resources – rivers and lakes. Compared to other regions of Georgia, less thermal waters are found here. The water resources are used for drinking (8%), hydro energy (80%) and industrial, irrigation purposes and for fish ponds.

Samtskhe Javakheti is rich in natural forests. It should be noted that forest inventory has not been held in Samtskhe-Javakheti for the last 10-15 years, which means that the official information about the condition and qualitative/quantitative parameters of the forests does not reflect the reality. All easily accessible groves are degraded and sparse. The cut and idly lying wood adds to the problem by posing the threat of spreading diseases and pests. Unchecked cutting, unregulated use of pastures, forest fires and diseases have had significant negative impact on the forest ecosystem. The most dangerous pest in Samtskhe-Javakheti is considered to be engraver beetle. The region’s population is highly dependent on the forest and actively uses wood. Because alternative fuel is expensive, people use firewood. One of the reasons of forest degradation and future risk factors are natural and anthropogenic forest fires and intensive spread of parasite pests.

Pollution Profile and Potential Sources of Pollution

Compared to other regions of the country, Samtskhe-Javakheti has only a few operative plants and emission of hazardous materials to the atmosphere is relatively low. The region’s share in the country’s emissions has increased and reached 0.27% in 2012, while in 2011 it was only 0.17%. Diffuse waters, transport vehicles and standing waters are main source of air pollution in the region.

The background pollution of the rivers is assessed mainly by the results of the water chemical analysis accomplished by the weather station of Georgia in recent years. Unfortunately, the observations over the water quality in the region were accomplished only across the river Mtkvari. No observation over the water quality in other rivers has been accomplished.

The data of the content of the chemical ingredients in the river water fixed in the low-water period, the most sensitive period, are given in the table below.

Table 2.2, Indicators of the quality of the water in river Mtkvari in the sections of the hydrological station in the winter low-water period

Hydrological station	pH	Ion content, mg/l								P mg/l	Si mg/l	Fe mg/l
		Ca ²⁺	Mg ²⁺	Na+K	HCO ₃	SO ₄ ²⁻	CL	NO ₃	NO ₂			
Khertvisi	7.61	25.0	9.2	15.8	132.4	12.6	6.1	2.50	0.017	0.034	5.6	0.06
Minadze	7.61	18.6	8.1	18.8	114.7	13.8	4.7	3.00	—	0.015	7.0	0.06
Likani	8.01	26.4	10.3	19.0	145.2	17.3	6.1	1.0	0.010	0.000	5.7	0.05

It should be noted that potential pollution of the river Mtkvari will have an international importance, as it is a trans-boundary river and its polluted will flow across the territory of Azerbaijan. There is no water reservoir across the river Mtkvari on the territory of Georgia, which could reserve the polluted water and clean it to a certain extent.

2.2 MTSKHETA-MTIANETI: SOCIAL FEATURES, CULTURAL HERITAGE AND TOURISM DEVELOPMENT TRENDS

2.2.1 Social Profile of Mtskheta-Mtianeti

TERRITORY

Mtskheta-Mtianeti region is situated in the North part of the Eastern Georgia. The total area of the territory makes up 5, 8 thousand sq. km (8,3% of the entire territory of Georgia) with the population (2014) of 94 573

(the data of the National Statistics Office of Georgia) people (2.6% of the Georgian population); the density of the population –16, 3 people per 1 sq. km. The region includes: Dusheti, Tianeti, Mtskheta and Kazbegi Municipalities, the administrative center is the city of Mtskheta. The distance between the administrative center and the capital of Georgia – Tbilisi makes up 24 kilometers. From the west Mtskheta-Mtianeti borders on Shida Kartli, from the east - Kakheti regions, from the south - Tbilisi and Kvemo Kartli region, and from the north Russian Federation (North Ossetia, Ingushetia, Chechnya). There are two cities (Mtskheta and Dusheti), five dabas – settlements (Jinvali, Pasanauri, Tianeti, Sioni, Stepantsminda) and 483 villages in the region. The region is marked out due to its serious strategic location (common border with the capital, border with Russian Federation) and accordingly developed infrastructure (the Georgian Military Road, Larsi border crossing point), and has been playing considerably important role in the historical context as well as nowadays.

POPULATION

The population of the Mtskheta-Mtianeti region makes up 94 573 as of General Population Census Results, 2014.. According to the population census data of 2002, the Mtskheta-Mtianeti population amounted to 125 400 persons. Most of them – 57 600 people (56% of the region population) – are registered in the Mtskheta Municipality, the least, 4900 people – in Kazbegi Municipality (6%).

Since 2002 up to present, general statistical picture has been characterized by the population decline tendency (-30 827) due to different reasons. The analogous rates are even higher in percentage terms in the mountainous and highland areas where migration process has become irreversible for the recent few decades. In 2010 Mtskheta Municipality increased by 10 400 people provoked by occupation of the Akhagori Municipality territory by Russian Federation in 2008 and ethnic persecution of the local residents that led to setting up compact settlements of the Internally Displaced Persons (IDPs) on the region territory (Tserovani, Prezeti, Tsina mdzgvriantkari and etc.).

The region is notable for a large number of small, underpopulated villages. Only one village in the entire region registers 5 000 residents, in Mtskheta Municipality. Less than 10 residents live in 50 villages throughout the region, while up to 60 villages are practically abandoned and left without any inhabitants.

ETHNIC MINORITIES AND VULNERABLE GROUPS

The Mtskheta-Mtianeti region is mostly populated by ethnic Georgians. A number of villages in Mtskheta Municipality are densely populated by ethnic minorities (Ossetians, Russians, Assyrians, and Armenians).

Table 2.3. Ethnic minorities by Municipalities (Source: RDS for Mtskheta-Mtianeti Region)

	Mtskheta	Dusheti	Tianeti	Kazbegi
Ossetians,	834	1577	196	60
Azeris,	587	12	18	1
Armenians	204	11		5
Assyrians	1517	6	16	
Russians	????	65	30	
Greeks		2	2	

Internally Displaced Persons. After the 2008 war, the number of Internally Displaced Persons (IDPs) has dramatically increased throughout Mtskheta-Mtianeti region (up to 10 000) that represents 9% of the total population of the region. Their social-economic conditions of IDPs living in Mtskheta municipality are satisfactory. However, employment index is not high. By order of the Government of Georgia (GoG) a youth club is being built for the IDPs in Tserovani settlement under Rural Support Project and a kindergarten in tsilkani village under infrastructure projects. The construction is financed with the allocations provided by the GoG to Mtskheta municipality.

In Dusheti municipality 349 IDPs live in Bazaleti sanatorium. 45 IDP households are socially vulnerable. Besides the financial support and allowances paid by GoG, the utility costs of these households are covered by

the municipality. The IDPs are employed in local organizations as far as possible, namely 3 teachers in a public school, 2 IDPs – in agriculture and 3 IDPs – in the municipality board.

15 IDPs are registered in **Tianeti municipality**. Their social-economic conditions are average. Only a few IDPs are employed in various sectors. The local authorities provides assistance to the IDPs based on their demands and the financial resources of the local budget. There is almost no migration in Tianeti municipality.

There are no IDPs in **Kazbegi municipality**.

Ecomigrants. As regards the environmental migration, several households live in landslide-prone zone in the villages of Dusheti municipality (Mleta, Vedzatkhevi, Sharakhevi), which need to be resettled as soon as possible.

Penisoners. In Mtskheta-Mtianeti Region 22 401 persons receive pensions.

Vulnerable receiving allowances

6 060 households receive allowances as poor (below poverty threshold). The allowances amount 60 GEL per month for the head of household and for other members of family

Gender data. 52,4% men and 47,6% are employed in public and private sectors in **Mtskheta community** municipality. Therefore there is gender equality in this regard in the municipality.

The number of men and women employed in the municipality board and Sakrebulo of **Dusheti Municipality** is as follows: 43 men and 45 women in the municipality board and 4 women and 29 men in Sakrebulo. Most of the women have low positions. In general, involvement of women in political and economic activities of the municipality is evidenced by the fact that gender issues are associated more with social problems and not the economic ones.

In **Tianeti municipality** 215 women and 44 men are employed in the private sector and 320 women and 160 men – in public sector. One of the key factors promoting gender equality is professional training of the population, establishing vocational education institutes and training centers.

In **Kazbegi municipality** 505 women and 245 men are employed. The data shows that most of the employees are women. The lack of qualified specialists and low wages account for this situation, which is pointed out by the local population.

SOCIO-ECONOMIC FEATURES

The Labor Market. The employment problem is still relevant for entire Georgia as well as Mtskheta-Mtianeti region. Based on the data, provided by the National Statistics Office website - www.geostat.ge, unemployment rate throughout Georgia amounts to 12,4%, while in Mtskheta-Mtianeti region it makes up 6.1%, increasing by 2100 person in comparison with 2010. Average number of employees in 2010-2013, grew from 4587 to 6687 people; while their average compensation per month over the same reported period increased from 518,4 to 775 GEL. Low level of unemployment compared with the data throughout Georgia is preconditioned by the fact that in Mtskheta-Mtianeti region, the population is mainly self-employed on their own farms. The data from by the National Statistics Office, provide the indicators for Mtskheta-Mtianeti, Guria and Samtskhe-Javakheti regions together. Since the population gender and age structure is almost identical within the mentioned above regions, the percentage figures may be generalized for Mtskheta-Mtianeti region.

Table 2.4 Population by Economic Activities in 2006-2013 (in thousands)

	2006	2007	2008	2009	2010	2011	2012	2013
Georgia								
Unemployment rate, %	13,6	13,3	16,5	16,9	16,3	15,1	15,0	14,6
Level of activity, %	62,2	63,3	62,6	63,6	64,2	65,2	66,9	66,2
Employment rate, %	53,8	54,9	52,3	52,9	53,8	55,4	56,8	56,6

Mtskheta-Mtianeti								
Unemployment rate, %	6,4	6,5	8,0	8,3	8,9	7,1	7.5	6.7
Level of activity, %	73,4	75,0	72,8	73,0	71,5	70,6	72.9	72.5
Employment rate, %	68,7	70,1	67,0	67,0	65,1	65,6	67.4	67.7

Traditionally, the share of self-employed people among the employed population prevails. Absolute majority of the rural population is engaged in labor activity on their own farms. Low rate of employment is related to lack of jobs. Shortage of qualified personnel also contributes to unemployment. Until today the region lacks of vocational and higher education institutions.

Regional Economy and Infrastructure, Enterprise Development

The largest share of the total added value by region, falls on: industry, state governance, agriculture, fishery, hunting and forestry.

Based on the data, provided by the National Statistics Office website - www.geostat.ge, production manufacturing within Mtskheta-Mtianeti region in 2013, exceeded the production output in 2010 by 251,3 million GEL. Production output, which determines the amount of actually produced goods by an economic entity and volume of the products sold, made up 454.5 million GEL. In Mtskheta-Mtianeti region, share from the manufactured production in accordance with economic activity falls mainly to industry, then construction, agriculture, trade, communications and etc. Out of industrial enterprises, the Brewery “Natakhtari”, the Brewery “Zedazeni”, “Aqua Geo”, “Shato Mukhrani”, the Ksani Glass Factory,”Barambo”, Paper Manufacturing Plant and others can be distinguished. Turnover of the enterprises in Mtskheta-Mtianeti region reached the highest rate in 2013, making up - 327.3 million GEL, from 2010, the growth trend of the enterprises’ turnover can be observed, that is the period when enterprises such as “Barambo” and “Natakhtari” actively enter the market.

Agriculture

Land reserves and landuse

The natural conditions of Mtskheta-Mtianeti Region influence the structure of land reserves. The land reserves are in constant transformation as some of the agricultural lands are used for construction, mining, roads construction, etc. At the same time some previously uncultivated lands become cultivated. This is an extremely complex process (especially taking into account the present situation) which needs significant control. Agricultural lands should be moved to another category taking into account the public (village, community) interests as well as the economic development of the region. 2/3 of all the land in the region are characterized by the following:

- a. disproportional structure of agricultural area – the lack of arable lands and a large absolute and comparative quantity of natural pastures;
- b. the lack of agricultural land under perennial crops and a trend of their reduction;
- c. a large quantity of lands unsuitable for agriculture.

The structure of land reserves is disproportionate in another way as well. The cattle forage reserve consists mainly of summer pastures. The lack of winter pastures is a main obstacle for livestock breeding. Another critical factor in agricultural production is soil fertility or crop yields which depend on several aspects, including seed quality, level of amelioration and adherence to the agricultural schedule. After collapse of collective farms and deterioration of rural infrastructure over the last decades traditional agricultural production continued on family plots which are mainly subsistence farms.

Following agricultural sectors have good prospective for development in Mtskheta-Mtianeti region (by municipalities):

	Mtskheta	Dusheti,	Tianeti	Kazbegi
Grain Crops	+	+	+	
Vegetable growing	+	+	+	+
Fruit growing	+	+	+	+
Potato growing		+	+	+
Vineyards	Mukhrani Valley			
Fruit growing				
Livestock farming (large)				
Livestock farming (small)			+	+
Pig farming				
Poultry farming	+			
Bee keeping	+	+	+	+
Fish farming	+	+	+	+
Forest products	+	+		

Below we present the problems that hinder efficient development of agriculture in region:

- **Grain production:** the lack of the required machinery, agricultural practices, high-quality seeds, irrigation and other necessary inputs, average yields are very low.
- Potato production: the lack of a legal framework and a potato seed farm.
- **Fruit growing:** high prices of saplings, lack of the appropriate machinery, lack of knowledge of good agricultural practices, local fruit purchase centers and small fruit processing plants.
- **Livestock farming (large)** - lack of breeding farms, inadequate forages reserve, the local residents' lack of financial means. Introduction and breeding of highly profitable cattle varieties, including those adapted to the Alpine conditions, setting up small-scale dairy and meat processing plants and production of new, high value products are required.
- **Livestock farming (small):** the lack of winter pastures. The infrastructure of sheep routes needs to be reconstructed and properly operated.
- **Poultry farming:** Commercial poultry farms located in Mtskheta municipality play an important part in supplying the capital population with eggs and chickens. There is a high demand for the so called "village eggs and chickens". Due to the small size of poultry farms this demand is only minimally met.
- **Bee keeping:** The proper labeling, packing and marketing needs to be developed. The pure environment, abundance of Alpine and forest plants, characteristics of Georgian bees account for especially high quality of Georgian honey. The natural conditions allow several-fold increase in honey production.
- **Lack of Greenhouses:** Greenhouses are important taking into account the lack of agricultural land in the region.
- **Lack of commercialization:** Besides the low yields the region suffers from low commercialization level of its agricultural products. Individual producers can not afford to pack, promote and market their products properly. They require state support in this matter (just as in case of wine making). Tianeti soaked cottage cheese (dambal khacho) is a good example of promoting a regional product in order to make it more competitive and profitable. It was declared an intangible cultural heritage. The demand for this product and its price increased sharply. This encouraged local producers and some farmers focused solely on its production.

In order to develop food production in the region high-yield crops, cattle and poultry varieties need to be introduced. Perennial grasses, root plants and other plants adapted to the natural conditions of the region should be selected. The law on agricultural cooperatives, support of the government and various donors may help some farmers to organize cooperatives and carry out their activities successfully.

Living Standards and Social Security of the Population

In 2013 the average annual number of employed people in Mtskheta-Mtianeti region was 6687 (6.14% of the total population in the region) . In 2010 the number was more than 2100. 3970 people were employed in large, 619 in medium-sized and 2097 in small enterprises. In 2013 the average monthly salary of employed people was GEL 775 (GEL 722.8 – in case of local employers (physical and legal persons), GEL 1251,3 – in case of foreign employers (physical and legal persons). These amounts are higher than those in 2010 with GEL 226.2 in the first case and GEL 346 in the second case. In 2013 in large enterprises the average monthly salary was GEL 1045, in medium-sized enterprises – GEL 479.9, in small enterprises – GEL 294.7 . These amounts are close to the average salaries nationwide and in case of large enterprises – even higher.

The poverty level in the region is quite high . in 2014 the number of socially vulnerable registered households living below the poverty level was 9933. There are 18585 retired and socially vulnerable people in the region, which amounts to 9.12% of the population and is much lower than the average number nationwide (19.05%).

Despite the hard social conditions there are no social houses for socially vulnerable population in the region (children without parental custody, senior citizens and physically challenged people). It should be mentioned that the infrastructure in the region is not adapted to the needs of physically challenged people, which prevents them from integration in the society.

Health care

There are 4 hospitals, 27 clinics and 2 first aid centers and 14 ambulance crews equipped with the necessary material-technical means in the Region. However due to the complex relief and specific nature of settlements there is a pressing need for improving a medical helicopter services. As the majority of the region's population are elderly, there is high demand for medical services. As the population's incomes are low the affordability of medical services is a serious issue. The hospitals are in municipal centers and in winter when the weather is bad, the people in remote villages have problems in receiving medical services. The health care entities of the region suffer from the deficit of highly qualified staff. Therefore the residents of the region often go to various hospitals in other parts of the country. The number of region residents with private insurance is very small. The affordability of insurance and medicines is a serious problem. The nationwide state insurance provides the population with a basic insurance policy. However, this policy does not address all the health-care related issues.

Education

Mtskheta-Mtianeti region has 86 public and 2 private schools (Mtskheta, Stepantsminda) with a total of 11 525 pupils. The number of pupils in 2014/2015 academic year decreased with 377 compared to 2012/2013 academic year. The reasons are demographic situation and increasing migration, especially from mountainous areas and highlands. There are 2141 teachers in the region. In the highlands some communities have only primary schools. Older pupils go to the nearest secondary schools in municipal centers. Some pupils living in the villages close to the municipal centers prefer to go to schools there as these schools have better material-technical resources and there are extra-school educations, such as musical schools, art studios, gyms, etc. in the community/municipal centers. The pupils studying in community centers are provided with transportation (school buses). However, in some villages children walk several kilometers to school. Therefore the mountainous areas need boarding schools (e.g. Barisakhlo boarding school, which experiences a lot of problems now, practically helps to prevent depopulation of villages in this historic community).

In the last years almost all public schools were repaired/rehabilitated. Two new schools were built in Mtskheta district. Most of schools are equipped with computers and have access to the Internet. However, the municipalities and the Ministry of Education should pay special attention to the needs of these schools.

There are 59 municipal nurseries with 2743 children and 771 teachers and technical staff members in Mtskheta-Mtianeti region. The material-technical resources of most of the kindergartens are unsatisfactory.

There are no private or public higher and vocational educational institutions in the region. In view of the present demographic situation there is no need for higher educational institution. However there is a pressing need for vocational education institutions/their branches (it is planned to rehabilitate and restore

Tsinamdzgvaltari community college which has a long and rich history) of agricultural specialties in Dusheti and Tianeti districts. It is also necessary to establish training centers where various short-term trainings can be provided for improvement of qualifications.

INFRASTRUCTURE AND ACCESS TO SOCIAL SERVICES

Roads and Traffic

The motor roads in (including local roads in settlements) total to 476.6km, out of which 172.3km is international roads, 460.3km - secondary roads and more than 800 km - local roads. Most of secondary roads in municipal centers and local roads connecting settlements have no concrete or asphalt pavement. Landslides and flash floods regularly damage the pavement. Most of secondary roads are dirt (unpaved) roads. Therefore they are out of service in heavy snow periods in winter. Most of rural roads are out of order. The roads to Khevsureti, Gudamakari and Mtiuleti villages are in the worst condition. They are hardly usable even in summer and blocked in winter. Therefore these villages are cut off from the municipality center in winter.

Motor transport is the only way of travel and transportation in the Region. The regional vehicle park consists of private and municipal buses and mini buses. The main traffic flow is Tbilisi- regional municipalities, administrative centers of regional municipalities – local villages. The traffic flow is seasonal and decreases in winter. Traffic flows from villages to municipality centers are most intensive on market days. It should be noted that a number of villages in Mtskheta and Dusheti municipalities are cut off from the municipality centers (minibuses go straight to Tbilisi). The condition of bus and minibus stations in the municipality are unsatisfactory. Several road rehabilitation projects have been implemented by the GoG in Mtskheta-Mtianeti region over the last few years. At present the construction of two road sections of strategic importance, namely Tianeti-Zhinvali and Roshka-Arkhoti sections, is underway. After their completion the social and economic conditions of the population in Tianeti municipality and Pirikita Khevsureti will improve significantly.

The railroad section in Mtskheta municipality is 26km long.

Utility Services

Water supply and Drainage

Due to the deterioration of the potable supply systems in Mtsketa-Mtianeti Region, the losses are high. Most of the settlements have no sewage systems. The existing sewage systems are mostly in urgent need of rehabilitation and modernization. About 60-70% of sewage discharge leaks from the system contaminating the soil.

Natural Gas and Power Supply

Power Supply. Almost all of Mtsketa-Mtianeti Region is provided with electric power. Due to the complex relief conditions 2 highland villages in Mtskheta municipality and several villages in Dusheti municipality still do not have power supply.

Gasification. At present only Kazbegi municipality has natural gas supply. Gasification of Mtskheta, Dusheti and Tianeti municipalities is underway. It should be pointed out that the population, schools and kindergartens in highland villages have serious problems in covering the natural gas supply costs.

Waste Management

No proper waste removal scheme is in place in Mtskheta-Mtianeti Region, except administrative centers. A problem of landfills has not been solved as well.

All four municipalities of the region have landfills. However they are in poor condition. No proper sanitary and disinfection measure are carried out. There are not enough garbage trucks and bins.

It should be noted that large industrial enterprises have comparatively little impact on the environment. These companies can afford modern treatment facilities, waste processing and secondary use. Small and medium-sized enterprises and population have much stronger negative impact on the environment. They lack the financial resources to carry out proper waste management and disinfection.

The amount waste produced by hospitals in the Region is not recorded. The issue of specific waste disinfection and management (Mukhrani poultry plant, etc) is also ignored. There is no data on agricultural waste and pesticides management, abandoned storehouses and their condition.

Communications

The region is covered by cellular networks. There is internet access in almost all municipalities (only Tianeti has some technical problems). Internet access is ensured through cellular networks (modems) and satellite dishes. All four municipalities have the branches of the Post of Georgia.

Fire and Rescue Services

There is an emergency service in the regional administrative center. Overall, the material-technical resources and staff qualifications of the center are satisfactory. At present the reorganization and re-equipping of Kazbegi municipal service is underway.

2.2.2 Cultural Heritage of Mtskheta-Mtianeti

Mtskheta - Mtianeti region includes the following historical provinces of Georgia: Pshav-Khevsuteri (Dusheti Municipality), Ertso-Mtiuleti (Tianeti Municipality), Khevi (Stepantsminda Municipality), the ancient capital of Georgia Mtskheta and its surroundings. Numerous monuments of material culture are registered in the mentioned above region.

Since 1874 at different times, as a result of archaeological excavations in Mtskheta and its surroundings, numerous archaeological monuments of different epochs (former settlements, burial sites, workshops, manufactories and etc.) have been found starting from the III millennium BC until the Middle Ages inclusive. Ruins of different defensive and municipal buildings, palaces, temples, bath-houses, mausoleum-type crypts and burial sites of Antique Era should be particularly noted. Many significant churches and monasteries of early and developed medieval centuries are located in Mtskheta and throughout the municipality territory in general. Since 1973 historic Mtskheta was announced as the city-museum, and from 1996 as an important monument, it was placed on UNESCO's List of World Heritage Site.

In general, up to 1300 archaeological and architectural monuments are registered in the region. Below particularly distinctive architectural monuments are listed, which will be interesting for the visitors.

Mtskheta Municipality

1. Tomb. Located south of the Mtskheta railway station,. Dated back to the II century A.D..
2. Antioqia Church (Antioch Church), dated back to the VII-VIII centuries.
3. Armazi Holy Mother Church
4. Armaziskhevi Archaeological Site complex.
5. Armazistsikhe (The Fortress of Armazi). XIII-XV centuries..
6. Armaztsikhe – Bagineti Archeological Site Complex. Dated back to IV century BC – VII century AD,
7. Bebristsikhe (Fortress) Dated back to the XII-XVI centuries.
8. Samtavro Complex. Dated back to the XI century.
9. Svetiskheveli Cathedral.
10. Mtskheta Jvari Domed Monastery;
11. Akhalsopeli Bziani Complex;
12. Zedazeni Monastery Complex Dated back to the VI century.
13. The Palace of Mukhrani It was built in the XIX century.
14. I. Chavchavadze House Museum.
15. Shiomgvime Monastery Complex
16. Ksani Castle. XVI century,
17. Dzalisi Roman Period Bath House and Temple. I-IV centuries.
18. Tsilkani Holy Mother of God Temple, dated back to the VII century,

Dusheti Municipality

19. The Chilashvili Castle Hall. XVII-XIX centuries,
20. Avenisi St. George Church. Dated back to the IX-X centuries.
21. Ananuri Complex. XIV- XVII centuries.
22. Bodorna Church of the Virgin. Built in the XVIII century.
23. Mere Castle Complex. The developed and late medieval period.
24. The Divine Gudani Jvari (Cross). Dated back to XIX century..
25. Davati Church of the Virgin and Tower. Dated back to the VIII-IX centuries.
26. Kistani Village Fortress (Tower Houses).
27. Mutso – Village Fortress.
28. Sepe St. Marine Church. XVI-XVIII centuries..
29. Pudznari Domed Church of the Virgin. Dated back to the XIII century.
30. Koroghlo Hall Church of the Virgin. Dated back to the X-XI centuries.
31. Shatili. Late middle ages..
32. Vazha-Pshavela House museum. XIX century.

Tianeti Municipality

33. Bochorma Castle Hall Complex. The X-XV centuries.
34. Nadokari Archil Monastery Complex. VIII century.
35. Zheboti Ascension Church and Bell Tower of the late Middle Ages.
36. Zhaleti Basilica, IX-X centuries.

Kazbegi Municipality

37. Akhaltsikhe three-nave basilica, IX-X centuries.
38. Bumasiqi Residential Complex, XVII-XVIII centuries.
39. Garbani St. George Hall Church, IX-X centuries.
40. Gergeti Betlemi Complex, X-XI centuries.
41. Gergeti Trinity Church. XIV-XVI centuries.
42. Dariali Fortress (Gveleti).
43. Zakigori Fortress Village, XIII-XIV centuries.
44. Khevi Sioni Church Complex, IX-X centuries.
45. Sno Castle (Gudushauri Castle), XVI-XVII centuries.
46. Pansheti Cave Complex - „Sinful Huts„, the developed Middle Ages.

2.2.3 Tourism Development Trends in Mtskheta-Mtianeti

In terms of local natural resources and their use, the beauty of the local landscapes, their esthetic and recreational value is the main asset of Mtskheta-Mtianeti Region. These intangible assets may become economically important if they are used properly, i.e. for development of tourism and resorts. The mountains and foothills of Mtskheta-Mtianeti have a good potential in this regard.

Mountain regions and highlands have good prospects for tourism and resort development due to their the fresh air and mineral and therapeutic water springs. The proper and complex use of these resources will facilitate revival of the existing balneotherapeutic and balneal resorts and establishing of new ones.

The architectural monuments, historical-cultural heritage and natural monuments of the region are important for tourism development. The rational use of these assets will allow Mtskheta-Mtianeti region to become a center of tourism, alpinism and balneal resorts.

Mtskheta-Mtianeti region has a high potential of tourism development. All four municipalities and Mtskheta Town have long history, ancient traditions and customs, especially Mtskhet which is declared a world heritage site by the UNESCO. The mountains of the region are favourable for the development of cultural, archaeological, adventure, extreme, business, agricultural tourism, pilgrimage, alpinism and skiing, etc.

At present there is only one tourist information center in Mtskheta Town, where a tourist can get information on the tours and services in all four municipalities. However, there is not enough printed material and the quality is poor. We believe that a tourist information center should be opened in all municipalities.

The fast pace of tourism development is especially notable in Mtskheta and Kazbegi municipalities. These two sites have always attracted tourists and therefore a number of state and local projects have been implemented in these areas. Infrastructure rehabilitation and reconstruction is underway in Mtskheta Town and Kazbegi settlement. Its aim is tourism development, provision of employment and increase in local incomes. The infrastructure development increased a flow of tourists, the interest of local population in establishing guest houses and tourist service centers. Below we provide some tourism indicators (sources: GNTA; CBA)

Number of Visitors in 2014 (source: GNTA)	433,985
Number of tourists (> 1 night) (source: GNTA)	173,594
Number of Beds in Mtskheta-Mtianeti	2,754
Tourist arrivals growth rate forecast in 2015-2020	5%
Tourist arrivals growth rate forecast after 2020	2%
Current Average stay, days (source: GNTA)	1.80
After Project Average stay, days from 2017 (source: GNTA)	2.00
After Project Average stay, days from 2020 (source: GNTA)	2.50
Average daily spending per tourist, GEL (source: GNTA, survey)	192.66 ⁴
Local share in tourist spending	85%
Hotel occupancy rate	30%
Secondary Sales Multiplier factor	1.50

2.2.4 Natural Environment of Mtskheta-Mtianeti Region

Mtskheta-Mtianeti region is situated in the eastern part of the north Georgia. The total area of the territory makes up 5, 8 thousand sq. km. From the west Mtskheta-Mtianeti borders on Shida Kartli, from the east - Kakheti regions, from the south - Tbilisi and Kvemo Kartli region, and from the north Russian Federation (North Ossetia, Ingushetia, Chechnya). Two-third of the territory of the Mtskheta-Mtianeti region is occupied by mountainous relief, with most of its part located on the southern slope of the main ridge of Caucasioni and part of it (Kazbegi region, Pirikita Khevsureti) reaching and spreading over the northern slope of the main ridge. The absolute heights vary from 500 m. within Mtskheta municipality up to 5033 m (mount Mkinvartsveri) in Kazbegi Municipality. Accordingly, Mtskheta-Mtianeti region is extremely heterogeneous by topography and relief, climate, landscape and hydrographic features. Therefore, even this brief description is given separately by municipalities.

Climate

Mtskheta: Mtskheta is included in moderately humid subtropical climatic zone. The average air temperature is +10,8 - +12°C, the temperature in January amounts to -1,1°C, in July +22,1°C. With moderately cold winters (absolute maximum of the temperature -29°C) and long hot summers (absolute maximum of the temperature +39°C), precipitation – 590 mm per year. Moderately humid climate is observed along the Skhalta, Saguramo and Kartli Ridges as well.

Dusheti: Basically 3 types of climate have been formed around the Dusheti Municipality territory:

1. Moderately humid climate with moderately cold winters and long warm summers;
2. Humid climate with cold winters and short cool summers
3. High-mountain humid climate with permanent snow and glaciers.

⁴ Survey average was GEL 288.99, but due to the fact that Gudauri is at high end, we assumed that average expenditures for the Mtskheta-Mtianeti will be 2/3 of the Gudauri expenditures

The area is characterized by climatic altitude zonality. At 900 meters above sea level, average annual temperature makes up 9,7°, that is in January -1,4°, and July 20,4°, with precipitation of 740 mm per year. Highland moderately humid climate, without real summer has been formed in the mountains with rather severe winters and precipitation of 1200-1600 mm annually. Above 3300-3400 meters, climate is notable for perpetual snow and glaciers (on mountain peaks and ridgelines).

Mtianeti: In lower areas of the Municipality, the climate is moderately humid with moderately cold winters and warm summers. At 1000-1100 meters above sea level, the climate is moderately humid with cold winters and long, cool summers. The average temperature in January equals -4,1°, 4,7°. In summer times 18,3°, 18,5° accordingly. Precipitation - from 790 mm to 880 mm per year. In highland areas, the climate is moderately humid of high-mountain-type, lacking of genuine summer. Clearly expressed continental climate characterizes the Iori basin and this distinguishes the area from the other river basins throughout Georgia.

Kazbegi: Climatic altitude zonality is apparent in Kazbegi Municipality: ranging from moderate humid to high-mountain humid climate and permanent snow with moderate humid climate at 1740 m above sea level – cold winters and long, cool summers where average annual air temperature is 4,9°, in January -5,2°, and in July 14,4°, the absolute minimum amounts to -34°. Precipitation approximately 800 mm per annum. At 1970 m above sea level, average annual temperature is equal to 3,5°, precipitation 1160 mm per year. Maximum rainfall occurs in May (147 mm), minimum - in January (50 mm). At above 2000 m, the climate devoid of genuine summer. At the height of 3650 m, average annual temperature makes up -6,1°, in January -15°. Absolute minimum amounts to - 42°. Duration of snow cover - 277 days.

Topography and Geomorphology

Mtskheta: Large part of the vast area to north-west of Mtskheta is occupied by Mukhrani- Saguramo plain. Tsleva-Tkhoti and Skhalta ridges are located in the southern part, Kartli and Saguramo slopes descend to the east. The relief is lowland.

Dusheti: The territory of the Dusheti Municipality is stretched along northern line/sector/ section/stripe of Shida Kartli plain and southern and northern slopes of the the Caucasus Watershed Ridge. To the south, mainly, along the Aragvi Basin as well as the Lapanaantkari and Narekvavi Ravines, and to the north down the Asa, Shatili and Migmahevi Gorges.

Mtianeti: The Tianeti is moderately high-mountain area. Large areas of its territory is occupied by uplands, plateaus and foothills, and small part by lowlands. Among negative forms of the Tianeti Municipality Tianeti and Ertso depressions should be marked out.

Kazbegi: The Kazbegi Municipality territory is of high-mountain nature. The relief is mainly rather rocky and difficult to access. Erosion, volcanic and old glacial relief forms are developed throughout the region. Karst is sporadically found as well.

Soil

Mtskheta: Meadow alluvial, calcareous and meadow brown soils dominate on Mukhrani-Saguramo plain. Meadow brown soil is observed along the Mtkvari riverside plains and at the foothills of Trialeti Range northern slopes. Brown forest soil is widely spread on Krtli, Skhalta, Saguramo and Trialeti Ridges.

Dusheti: Most of the area consists of gray and brown forest soils. Brown forest soil is found on lowlands. Chernozem-like soil is rare on the Bazaleti Plateau. On the elevated hilly areas, medium and small thickness forest gray soils have been formed. Here humus and calcareous soils are found. Forest zone soils are replaced by caespitose and caespitose- turf soils in higher places.

Mtianeti: Within the territory of the Municipality various types of soils can be found. The high places (ridge slopes) are enriched with forest podsol and gray soils, which are replaced by caespitose and caespitose- turf mountain meadow soils in higher areas. In the lowlands of Municipality, forest brown soils are widely spread.

Down throughout Ertso and Tianeti depressions and caverns alluvial soils are found. At the bottom of Sioni lowland alluvial soil can be seen.

Kazbegi: Most part of the territory is covered with mountain and meadow caespitose and primitive soils. The forest light gray soils are found in the gorges of river Tergi and its several tributaries. Alluvial soil is observed along the bottoms of the river gorges. In the highland areas soil is devoid of forest cover. Mountain and meadow caespitose soil is spread up to 1100 – 2600 m above sea level.

Surface Water

The principal rivers of **Mtskheta-Mtianeti region** are: Mtkvari, Aragvi, Shavi Aragvi, Narekvavi, Iori, Ksani, Tergi, Sno.

Mtskheta: There are the rivers - Mtkvari, Aragvi, Narekvavi, Ksani and Tezami.

Dusheti: Hydrographic network is dense and widely represented by rivers, lakes, glaciers and underground waters. There are mountain as well as foothill and lowland rivers. Numerous lakes are scattered around the territory, most of which are of small-size. The main river system and network is created by four streams of the Aragvi River (Mtiuleti-Gudamakari and Pshav-Khevsureti), among them the most important is the Mtiuleti Aragvi. The rivers of the Main Range North Slope should be also mentioned among the Dusheti Municipality water resources: these are the Arghuni and Asa. From all the lakes located in Dusheti Municipality, the most significant are Bazaleti and Abudelaury Lakes. Jinvali Water Reservoir has been built on the Aragvi; its mirror surface makes up 11,5 sq. km, and the volume - 520 million m³. There are also mineral springs, including „Vazhas Tskaro“ (Vazha Stream) and „Pasanauri“

Mtianeti: The river Iori and its tributaries: the rivers Kusno, Sagami, Khashrula, Khatkhaura. The total length of the river resources amounts to approximately 420 kilometers; there is also an artificial water reservoir in the Sioni settlement

Kazbegi: Hydrographical network is rather broad. The Municipality is rich in rivers, lakes, glaciers and mineral springs. The local rivers are short (with the exception of the Tergi River), but they are swift and are distinguished by the transparency of water. Some rivers form high and very beautiful waterfalls. The lakes are of glacial or volcanic origin and they are small size and are frequently characterized by remarkable depth. The glaciers tend to change direction and back away, shrink away, recede, melt and become smaller in size, crack and etc. Some of them have transformed from gorge glaciers into cirque glaciers. The tributaries of the rivers Aragvi and Tergi are characterized by mudflow occurrences resulting in the changes of the riverbeds morphometry (at some places, mostly near the confluences, the mudflow mass is accumulated, the riverbed is widened and its levels rise, while the solid matter accumulated in the mouths is washed away and the levels of the waterbeds rise accordingly), but no significant lateral erosion is fixed.

Hazardous geological processes

The region is extremely vulnerable towards natural disasters; natural calamities, such as earthquakes, floods, landslides, mudslides, avalanches, droughts are frequently observed in the area.

Mtskheta-Mtianeti region with its geo-tectonic location covers both, the folded system of the Central Caucasus and Tiriponi-Mukhrani plain. The area of the region within the limits of the Central Caucasus covers Shovi-Pasanauri, Kazbegi-Lagodekhi and Mestia-Tianeti tectonic zones, which are built with terrigenous-metamorphous formations. The most part of territories of the Mtskheta and Dusheti municipalities fall within the macroseismic intensity zone of 8 grades, while the territories of Mtianteti and Kazbegi municipalities fall into 9 degree seismic intensity zone.

Intense engineering-economic operations (cutting down the forest massifs, strong violation of turf in the mountain-meadow zone, laying local roads without relevant geological studies, settlement in the risky areas, cultivating ground over the highly inclined slopes, etc.) and sensitive natural conditions (geology, relief, tectonics) in the region have caused the origination and activation of such hazardous geological processes, as landslides, mudflows, rockfalls, floods, washout of river and water reservoir banks, snow avalanches, etc. The hazardous geological processes have been causing significant material loss in recent years and unfortunately, some cases end with human victims.

The climatic conditions in the region and deviation of the indicators of their meteorological elements from many-year regime is one of the principal determinants, as the factor causing geological processes and determinant of their origination and activation in time and space, moreover, when we deal with the relief with high energy and geologically “sensitive” rocks, as the territory of Mtskheta-Mtianeti region is, where erosive-mudflow processes, landslides, solifluction effects and snow avalanches cause great material loss to the population, engineering objects and often have catastrophic outcomes.

General Description of Hydrogeological Conditions and Major Groundwater Resources

The water-bearing basin of Mukhrani underground waters occupies an important area within the limits of the study area. Below is the general description of the said basin for different water-bearing horizons and complexes (aquifers).

Modern bed and floodplain water-bearing horizon of alluvial deposits. The stratum of the Early-Quaternary deposits on Mukhrani valley containing pressure water-bearing horizons is covered with floodplain alluvion. Non-pressure ground waters are associated with the floodplain terraces built with stone circles, gravel, sands, sandy-loams and clay loams of both, the river Ksani and the river Aragvi, with the depth of circulation of 1,0-4,0 m below ground level. In addition, the minimum circulation depth (approximately 1,0 m) is typical to the zone adjacent to the beds of the rivers. The major feeding factor for the ground waters of alluvial deposits is river filtrates added by the water overflow factor off pressure horizons in fragments. The groundwaters are important for Tbilisi water-supply, as Bulachauri, Choporti, Misaktsieli, Natakhtari and Saguramo water intakes operate.

Undifferentiated Early-Quaternary water-bearing complex of alluvial-proluvial deposits. This is the structure of Early-Quaternary alluvial deposits, which, as per hydrogeological zoning of the territory of Georgia by Prof. I. Buachidze, is determined as so called third-range artesian basin of Mukhrani, the eastern end of Kartli artesian basin.

As per the data of the wells made on the territory of the effective water intake of Mukhrani, the total strength of the water-bearing horizons opened at different intervals is within the range of 50-100 m.

Landscapes, Habitats and Biodiversity

The region is particularly rich in flora and fauna and landscape/habitats diversity. Multitude of endemic species and forms is noteworthy. There are 21 landscapes on the territory of Mtskheta-Mtianeti Region (classification by N. Beruchashvili, 1979 D. Nikolaishvili, 2009), including the ones with different conservative values being much important for the existence of habitats of rare and threatened fauna and flora species. Below brief summary is provided with ecological characteristics of three larger landscape zones, which unite more or less homogenous types out of the mentioned 21 landscapes and habitats. The mentioned three landscape/habitat zone are: **a) Lowland Landscapes and Habitats; b) Low- and Middle-Mountain Landscapes and Habitats and c) High Mountain Landscapes and Habitats;**

I. Landscape Zone (Lowland Landscapes and Habitats)

This zone of Lowland Landscapes is within the absolute altitude range 400 – 900m and comprises two large categories of landscapes:

- **Category B. Sub-Mediterranean - Semi-Humid Foothill Hornbeam-Oak Forest and Steppes;** Open arid grasslands with bushes in Mtkvari (Kura) river depression presented mainly by agriculture lands surrounded with shibliak and derivatives of phrygana and beardgrass steppes (*Bothriochloa* sp.). [According to classification (N. Beruchashvili, 1979): **B3.** South-East Caucasian sub-Mediterranean (transitional to moderate-thermophilic semi-humid) foothill landscapes with hornbeam-oak forest and woodlands and *Bothriochloa* steppes. Following landscapes of this type are represented within the Mtskheta-Mtianeti region (**Landscape 18, Landscape 19; Landscape 23**)
- **Category J. Hydromorphic and Sub-Hydromorphic - Floodplain Wetlands and Forests;** Floodplain Wetlands and Poplar-Oak Forest (Tugai Forest); [According to classification (N. Beruchashvili, 1979): Hydromorphic and Sub-Hydromorphic - Floodplain Wetlands and Forests; J2. Delta and floodplain landscapes with wetlands, swamp forest and grasslands and salt marshes; **Landscape 51:** Floodplain poplar-oak forest (tugai forest) and meadows;]

II. Landscape Zone (Low- and Middle-Mountain Landscapes and Habitats)

Category O - Low- and Middle-Mountain Forests and Secondary Dry Scrublands;

There are the oriental hornbeam-oak, oak forests and secondary dry scrublands (shibliak) in lower part of this section, the middle-mountain beech forest and hornbeam-oak forest and secondary grasslands in the middle part of it, and a small site of upper-mountain birch and eastern oak forests in the upper reaches of this section. [This zone of Lowland Landscapes is within the absolute altitude range 900m 1900m and comprises two large categories of forest landscapes:

- According to classification (N. Beruchashvili, 1979): **O6. South East Caucasian (transitional to semi-humid) low-mountain landscapes with hornbeam-oak, oak forests and secondary dry scrublands** [Landscape 81; Landscape 82]
- According to classification (N. Beruchashvili, 1979): **O7. South East Caucasian middle-mountain landscapes with beech forests alternating with hornbeam-oak, partly with pine forests and secondary grasslands** (Landscape 89)]

III. Landscape Zone (High Mountain Landscapes and Habitats)

High-mountain landscape with combination of subalpine meadows, crook-stem forest and bushes. The natural habitat is quite degraded. Area is used for cattle and sheep grazing and for hay-making. This zone of high mountain Landscapes is within the absolute altitude range 1900m – 5000m and comprises three large categories of mountainous landscapes landscapes:

Category W - Mountain Cold-Moderate Upper-Mountain Forests;

[W2. Caucasian upper-mountain landscapes with birch and pine forests; Landscape 130: Upper-mountain erosive-denudation landscapes with birch and oak (*Quercus macranthera*) park forests; Climate. And Landscape 133:

Upper-mountain erosive-denudation, partially paleoglacial landscapes with pine (*pinis caucasica*) and birch forests;]

Category X - High-Mountain Meadows

[X1. Caucasian sub-alpine landscapes with combination of meadows, tall-herb communities, elfin woods and thickets **Landscape 137; X3.** Caucasian alpine landscapes with grasslands and *Rhododendron* thickets **Landscape 147; X4.** High-mountain landscapes with plant micro-communities, mosses and lichens - ; High mountain volcanic subnival landscapes -**Landscape 151**]

Category Y - Glaciers (Nival Landscapes)

[According to classification (N. Beruchashvili, 1979): Glacio-nival Landscapes (**Landscape 152**)]

Fauna Within the Area of Concern

From zoogeographic standpoint and for the animal conservation purposes we can aggregate all landscapes into three complexes: **Open Arid Grasslands; Forested Areas; and High Mountain Landscapes;**

Open arid grasslands with bushes in Kura River Depression presented mainly by agriculture lands which are surrounded by shibliak and derivatives of phrygana and beardgrass steppes (*Bothriochloa Sp.*), Natural habitats on this area are heavily degraded. [Corresponds to **I Landscape Zone (Lowland Landscapes) Category B. Landscape 18, Landscape 19; Landscape 23**

About 67 bird species occur in agriculture lands and natural habitats in Kura river depression in different seasons. Among them 50 species are breeding there and eight are wintering. Four of them are listed in the Georgian National Red Data list, two are breeding, one species is wintering and one species is just migrating. Forest and meadow passerine birds are the dominant group of breeding birds within open landscapes. 12 reptiles (eight snakes, four lizards and one tortoise) occur in agriculture lands and natural habitats in Kura river depression. One species is listed in the Georgian National Red Data List. Four amphibian species occur in agriculture lands and natural habitats in Kura river depression. One species is listed in the Georgian National Red Data List.

Forested area. There are the oriental hornbeam-oak, oak forests and secondary dry scrublands (shibliak) in lower part of this section, the middle-mountain beech forest and hornbeam-oak forest and secondary grasslands in the middle part of it, and a small site of upper-mountain birch and eastern oak forests in the upper reaches of this section. [Comprises **I. Landscape Zone Category J. (Landscape 51) and II. Landscape Zone Category O (landscapes 81; 82; 89)**]

The good preserved forests, having significance for mammals as home range and feeding area. A least 95 bird species occurs within forested area (from low-mountain up to high-mountain forest). Among them 85 species are breeding there and just six are wintering, four of them are listed in the Georgian National Red Data list, three are breeding and one species is wintering. Forest and meadow passerine birds are the dominant group of breeding birds within forested land. A least 13-14 reptilian species (six snakes, seven lizards and, probably, one tortoise) occur within forested area (from low-mountain up to high-mountain forest). No one species is listed in the Georgian National Red Data list. Eight amphibian species occur within forested area (from low-mountain up to high-mountain forest). No one species is listed in the Georgian National Red Data list.

High-mountain landscape with combination of subalpine meadows, crook-stem forest and bushes. The natural habitat is quite degraded. Area is used for cattle and sheep grazing and for hay-making. [Corresponds to **Category X - High-Mountain Meadows; Landscape 137; 147**]

The sites important from the biodiversity preservation standpoint are:

- a) The upper parts of the mountains within the both National parks Kazbegi and Pshav-Khevsureti occupied by East Caucasian tur, chamois and Bezoar goat.
- b) The mountain slopes in upper reaches of the Greater Caucasus Mountain Chain – habitat of the redlisted rodent - Long-clawed mole-vole (*Prometheomys schaposchnikovi*).
- c) The upper parts of the rocks and subalpine meadows in Kazbegi and Dusheti municipalities – the feeding ground and nesting area of birds of prey. 30 bird species are related with the high-mountain landscapes - subalpine meadows, crook-stem forest and bushes. Among them 28 species are breeding there. Eight of them are listed in the Georgian National Red Data list. All are breeding there. Seven reptile species (two snakes and five lizards) are related with the high-mountain landscapes - subalpine meadows, crook-stem forest and bushes. One species is listed in the Georgian National Red Data list.- Dinnik's Viper (*Vipera dinniki*).

Protected Areas

Tbilisi National Park

It is located on the southern slope of the Caucasus - Saguramo-Ialno Ranges and slopes of their branches, which stretch along a latitudinal strip from the Kura to the Iori, 600-1,700 m above sea level. The total area is 23218.28 ha and consists the districts of Saguramo, Martkophi, Ghulelebi and Gardabani.

Pshav-Khevsureti Protected Areas

Pshav-Khevsureti Protected Areas include two historical and geographical provinces of Dusheti municipal area, in particular, the main part of Khevsureti and Pshavi. The boundaries of the areas occupied a total area of 117 447 ha, 27 661 ha of which is forest area. The forest is 21% of the total project area. The area provides original form and natural ecological balance of central part of the eastern Caucasus mountain forest, subalpine forests and meadows, alpine meadows, nival and subnival landscapes. The establishment of protected areas allows to organize the eastern Caucasus, Kazbegi and Tusheti in continuous space, ensuring the sustainability of ecosystems of the northeastern boundary. Pshav-Khevsureti projected area boasts of flora and fauna species diversity. 1200 species of flora are represented, including 5 types of ferns, 23 types of gymnosperms and 1172 types of angiosperms. There are different types of landscapes, ecosystems and communities. Birch represents 55% of forest area, beech - 15 %, oak - 10 %, pine - 10 %, hornbeam - 6 %, the rest - 4% (aspen, alder, maple, lime tree, willow groves, rhododendron and hazel shrubs).

The current data represents Fauna: 103 species of birds, 27 - mammals, 7- reptiles, 5 - amphibians, 1- fish, 27- butterflies (There is limited data about insects).

Kazbegi National Park

Kazbegi National Park is located on the northern slopes of the Caucasus, in historical Khevi. The total area of the park is 9. 030 ha. Only 35% of the park is covered with the forest. The rest is occupied by alpine pastures, moraines, snow-covered peaks and inaccessible rocks. These rocks and mountains are native surroundings for rare and unique species of animals and birds. Kazbegi National Park is a high mountain region and its lowest point is at an altitude of 1400 m above sea level. In spite of the lack of the tourism infrastructure, Kazbegi National Park is one of the most visited places among the protected areas.

In Mtskheta Mtianeti region there are also preserved natural monuments: Sakhizari Cliff Natural Monument; Abano Mineral Lake Natural Monument, Truso Travertines Natural Monument, Keterisi Mineral Vacluse, Jvari Overpass Travertine Natural Monument, Bodorna Rock Columns Natural Monument

Natural Resources

The water resources of the region play considerable role in its social and economic development. They are represented in lakes, reservoirs, rivers, glaciers and underground waters. In order to regulate the river flow (7244,3 million m³) regime, Jinvali, Sioni, Narekvavi and Zahesi Reservoirs built for the purpose to provide irrigation, drinking and industrial water supply, play rather important role throughout the region.

Potable fresh water. Among water resources **fresh, underground waters** play a significant role. They are annually renewable and are distinguished by purity and permanence of water discharge. These waters are able to fully satisfy the demand for drinking and industrial water supply and enable to get even excess resources. The Mtskheta Municipality is characterized with the lowest rate of resources for locally formed water resources (112 mm), while the Kazbegi Municipality is notable for the highest rate (730 mm). Nevertheless, the Mtskheta Municipality is distinguished by producing drinking water, its producer - GWP represents the main water supplier for Tbilisi. Geo“, „Sno“, „Natakhtari“, „Zedazeni“, „Shato Mukhrani“ and other large enterprises all are the licensees of the Mukhrani Valley wells. The amount of potable drinking bottled water throughout the entire region enables to considerably increase its production for internal as well as external markets.

Mineral waters are available in all four municipalities (approximately 115 springs). Waters are notable for the diversity of their chemical composition. Most of their geographical location allows to build resorts, boarding houses, rest houses and bottled water fresh as well as mineral) manufacturing enterprises on their basis.

The rivers passing through the region (Mtkvari, Aragvi, Iori, Tergi) represent the important water and power resources. **The river Mtkvari** is intensely used for irrigation, power engineering and industrial water-supply purposes. In the region, there is Zemo Avchala HPP being a part of the power network of Georgia constructed across the river Mtkvari. In 1985, near village Zhinvali, a 412-metre-long and 95-metre-high Zhinvali water reservoir with the power engineering and complex function was constructed with a fill dam on **the river Aragvi**. The water reservoir regulates **the river Aragvi** runoff along the lower section. Besides Zhinvali HPP,

the water regulated with the water reservoir is supplied to Mukhrani and Saguramo irrigation systems and Tbilisi Sea for water-supply of the city of Tbilisi. Thus, the water of the river Aragvi is used for power engineering, irrigation and water-supply purposes of Tbilisi. The **river Iori** is used for irrigation and power engineering purposes. In 1962, across the river Iori, Sioni water reservoir with the irrigation and complex function was put to operation, which regulated the river runoff. The regulated river runoff is used to supply water to the upper main channel of Zemo Samgori irrigation system, Tbilisi water reservoir (Tbilisi Sea) depending on it and lower main channel of Zemo Samgori irrigation system. There is Sioni HPP on Sioni water reservoir with the installed capacity of 9000 KW. There are three HPPs across the upper main channel of Zemo Samgori irrigation system: Satskhenisi (with the power of 14000 KW), Martkopi (3800 KW) and Tetrichevi (13600 KW). The **river Tergi** is used for power engineering purposes. Larsi HPP with the installed capacity of 35 MW operates across the river, and Dariali HPP is being constructed. The river **Narekvavi** runoff regulated with Narekvavi water reservoir is used to supply the irrigation systems of the region with water. The river **Ksani** is used for irrigation and power engineering purposes. Tezi-Okami and Telovani Ru main channels have been operating across the river since 1955. Tezi-Okami main channel supplies water to Igoeti and Okami HPPs constructed in recent years. The river Sno is used to run the village mills.

Forest Fund. 39% of the territory within Mtskheta-Mtianeti region is forested; it means that forest cover makes up 264,4 thousand hectares. The major part of woods is stretched along the steep slopes performing vital soil protecting, water storing and regulating, sanitation and hygienic, recreational, wind protecting and other functions. What is most important, forest represents the fresh air reservoir and creates resort and environmentally clean microclimate that makes the entire region distinctive and attractive. Dusheti and Tianeti Municipalities are particularly notable for their forest resources. The forest areas located in Kazbegi Municipality are situated within the Kazbegi National Park, while part of the Mtskheta forest zones – within the Tbilisi National Park.

Rational use of forest resources requires assessment of their role and appropriate economic, social and ecological value, including the country's contribution in the sustainable development. In 2011 the timber cuts amounted to 61 884 m³, while in 2012, the figures made up 45 517 m³. Decline was caused not due to reduction in consumption, but changes in the location of forest cut (decrease in forest areas as a result of wood cutting, led to cutting in higher mountain zones) that caused certain increase in firewood prices.

Inert Construction Materials. Mtskheta-Mtianeti region is rich in construction materials. Kazbegi Municipality is notable for abundant stone mines: the different coloured granite, green and brown diabase, tuff stones and etc. All municipalities have considerable supplies stone, sand and gravel that are partially utilized on the rivers Aragvi, Ksani and Iori Rivers.

Pollution Profile and Potential Sources of Pollution

The problem of environmental pollutants, in particular issue of waste management is acute in the region. Utilities sector (sewage in the settlements) represents the main pollutant of surface waters. As of today, none of the water treatment facilities or structures can provide wastewater treatment in compliance with the project quality. There is no biological purification of the water as well. Agriculture also represents the source of pollution throughout Mtskheta and Dusheti Municipalities (pumping mineral fertilizers and pesticides into the rivers, leakage into ground waters). Noncompliant landfills represent a vital problem as well. None of the settlements has landfill, built in accordance with the established norms, while there are no rubbish dump places in the villages, and dumping garbage has spontaneous character, mostly into ravines and rivers; waste collection vehicles and as well as bunkers are inadequate and insufficient. The less share of pollution falls on the large enterprises, functioning in the regions. Large production volume and investments enable them to equip their enterprise with modern cleaning and purification technologies, provide waste recycling and re-utilization. However, we should note that so called special / specific waste (for example, industrial waste of poultry processing plants) represents a very grave problem; its management and decontamination and, at the same time, implementation of environmental safety measures is a rather complicated process. More danger comes from small and medium sized business entrepreneurs and population who do not have financial resources to ensure the proper waste management and decontamination.

Atmospheric air in the region is polluted mainly from motor vehicles, agricultural sectors and to a lesser extent, from industrial facilities and projects. Important highways with intense and increasing traffic in the eastern and western as well as northern and southern directions, cross the entire territory. As the highways generally run through settlements, adverse effect on the population health along certain sections and, consequently, the risk of morbidity is significantly high.

Surface water. The background pollution of the rivers is assessed mainly by the results of the water chemical analysis accomplished by the weather station of Georgia in recent years. Unfortunately, the observations over the water quality in the region were accomplished only across the rivers Mtkvari and Aragvi. No observation over the water quality in other rivers has been accomplished. The data of the content of the chemical ingredients in the water of the above-said rivers fixed in the low-water period, the most sensitive period, are given in the table below.

Table 2.5. Indicators of water quality in the winter low-water period

Hydrological station	pH	Ion content, mg/l								P mg/l	Si mg/l	Fe mg/l
		Ca ²⁺	Mg ²⁺	Na+K	HCO ₃	SO ₄ ²⁻	CL	NO ₃	NO ₂			
Mtkvari-Zegvi	7.59	44.5	9.5	31.2	174.5	55.7	7.6	1.50	0.004	-	4.0	0.02
Aragvi-Zhinvali	7.59	46.3	10.6	26.2	190.3	39.4	9.4	2.00	0.020	0.002	3.0	0.02

In village Mukhatgverdi of Mtskheta municipality, Mtskheta-Mtianeti region, Applied Research Center of the Institute of Physics of Ivane Javakhishvili Tbilisi State University (The territory of so-called Mtskheta reactor) is located the temporary storage of radioactive waste.

3. LEGAL AND ADMINISTRATIVE SYSTEM IN GEORGIA FOR ENVIRONMENTAL AND CULTURAL HERITAGE PROTECTION

3.1 CULTURAL HERITAGE PROTECTION AND SPATIAL PLANNING

3.1.1 Administrative System

Protection of cultural heritage, protection of environment and the spatial planning issues are implemented by the Government of Georgia (GoG), the Ministry of Culture and Monuments Protection (MoCMP), Ministry of Environment and Natural Resources Protection, the Ministry of Justice, the Ministry of Economy and Sustainable Development, the local government bodies as well as other bodies of public and private law, and on the territory of the autonomous republics – respective ministries and departments. In the field of cultural heritage protection the national and local government bodies implement their authority according to the national legislation and according to the provisions of the constitutional Agreement Between the State of Georgia and Autocephalous Orthodox Church of Georgia” (art. 7, 8 and 9).

In the field of spatial planning the main decision making body is local government, which elaborates and approves the different spatial planning documents and issues construction permits. In the field of cultural and natural heritage the administrative system is rather centralized. The management is implemented by the central government bodies and the participation of local government is limited only to the assistance, when such is required by the central administration.

The Cabinet of Ministers

The competence of the Cabinet of Ministers of Georgia is limited to the designation of **cultural heritage protected zones in the country** on the basis of a proposal put forward by the Minister of Culture and Monuments Protection.

The Ministry of Culture and Monuments Protection (the MoCMP)

The Ministry oversees the cultural heritage protection in the country, sets up and implements the state policy for cultural heritage, leads and coordinates the identification, inventory, maintenance and monitoring as well as promotion of cultural heritage, enacts rules and procedures for these activities, supervises the conservation and rehabilitation of movable and immovable monuments and archaeological sites, sets up the protection zones and regulations and presents to the Cabinet of Ministers for adoption. Within the Ministry the two structural units have regard to the cultural heritage protection and spatial planning: a) **The Department for Cultural Heritage Strategy, Coordination and Permissions.** And b) **The Cultural Heritage Protection Council**

The National Agency for Cultural Heritage Preservation (NACHP)

The NACHP is an entity of public law subordinated to the Ministry. The Agency is responsible for management and monitoring of national monuments and World Heritage Sites in the country and for granting permits for conservation and rehabilitation project for these monuments. The Agency is also responsible for protection the inventory and promotion of movable and immovable cultural heritage objects, scientific research, consulting and expertise in the field of cultural heritage.

The Ministry of Justice

The functions of the Ministry of Justice regarding the cultural and natural heritage are limited to the activities of its subordinate entities of public law – the National Archive and the National Agency of Public Register. The **National Archive** maintains the documents of cultural heritage value which may as well be registered as cultural heritage listed properties by the MoCMP and ensures their inventory, identification and rehabilitation. The **National Agency of Public Register** is authorized to register the title to ownership for all immovable assets and among them cultural heritage monuments as well.

The Ministry of Economy and Sustainable Development

Among other issues, the Ministry deals with the alienation of state possessions including historic monuments and protected areas; urbanization and construction issues and development of tourism. The Department for Urbanization and Construction, the Privatization Department and the National Tourism Agency of Georgia are structural and subordinated units of the Ministry in charge of the above issues. The Ministry of Economy and Sustainable Development compulsorily consults with the MoCMP when alienating, leasing or transferring the right of use of state owned monuments and heritage sites, developing the strategies for cultural tourism or undertaking other strategic actions which may have an impact on cultural heritage.

The local Self-Government

The respective state institutions of the autonomous republics and the self-government bodies implement their authority in accordance to the Georgian legislation and the functions delegated to them by the national authorities. They ensure the identification, inventory and maintenance of cultural heritage within their administrative borders and provide information to the MoCMP.

3.1.2 Legal System

The issues of spatial planning, environmental protection and cultural heritage are regulated by different legislative and subordinate legal acts. The protection of cultural heritage is implemented on the basis of national legal system and international conventions and charters ratified by Georgia. The Constitution, which is the supreme law of the country, declares cultural heritage protection and preservation a duty of every citizen of Georgia and the subject to relevant state legislation (art. 34).

The major laws aimed on protection of cultural heritage and regulating spatial planning and development projects are the laws of Georgia on:

- Cultural Heritage, 2007
- on Spatial Organization and Principles of Town planning, 2005
- on Museums, 2001

- on Environmental Impact Permits, 2008
- on the Control of Technical Threats, 2011

Other important laws and regulations related to cultural and natural heritage and spatial planning are given in the table 3.1.

Table 3.1. Georgian national laws related to/having a major impact on cultural heritage protection

Field of Regulation	Title of the Law
Movable Heritage	<ul style="list-style-type: none"> ▪ The Law on the Import and Export of Cultural Goods, 2001 (last amendment 2007) ▪ The Law on Museums, 2001 (last amendment 2007) ▪ The Law on Culture, 1997 (last amendment 2007)
Relationship of the State and the Church	<ul style="list-style-type: none"> ▪ The Concordat – Constitutional Agreement between the State and the Autocephalous Orthodox Church of Georgia, 2002
Penalties for violation of cultural heritage legislation	<ul style="list-style-type: none"> ▪ The Administrative Infringement Code, 1994 (amendment related to cultural heritage, 2007 introducing stricter fines for violation of monuments protection regimes and regulations in protected zones) ▪ The Criminal Code, 1999 (amendment related to cultural heritage, 2007, introducing new chapter on the crime against cultural heritage with respective provisions)
Financial policy for cultural heritage	<ul style="list-style-type: none"> ▪ The Tax Code, 2004 (amendment related to cultural heritage, 2008, VAT exemption for the World Heritage, national and religious monuments) ▪ The Law on Local Tariffs, 1998 (amendment related to cultural heritage, 2007, introducing temporary local rehabilitation tax for specially designated areas max 1.5 GEL per sq/m of the building and respective provisions) ▪ The Law on State Excise Duty, 1998 (amendment related to cultural heritage, 2007) ▪ The Budgetary Code of Georgia, 2009

The Georgian Parliament has ratified and signed most important international and European treaties in the field of cultural heritage protection. The list of which is given in the table 3.2.

Table 3.2: the international treaties on cultural heritage protection ratified or approved by Georgia

Ratification/signature	Title of the Convention
A. Cultural Heritage	
1993 ratification	Convention for the Protection of the World Cultural and Natural Heritage (the World Heritage Convention), Paris, 1972
1993 ratification	1 st Protocol of the Convention for the Protection of Cultural Property in the Event of Armed Conflict, the Hague, 1954
1993 ratification	Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, Paris, 1970
2000 ratification	European Cultural Convention, Paris, 1954
2000 ratification	Convention for Protection of Architectural Heritage of Europe, Granada, 1985
2000 ratification	Convention for Protection of Archaeological Heritage of Europe, La Valetta, 1992
2004 ratification	European Charter on Local Self Government, Strasbourg, 1985

2008 approval	Convention on the Protection and Promotion of the Diversity of Cultural Expressions, Paris, 2005
2008 ratification	Convention for Safeguarding of the Intangible Cultural Heritage, Paris, 2003
2010 signature	European Landscape Convention, Florence, 2000

The Law on Cultural Heritage was enacted in 2007, which was conceived as an attempt to improve and modernize the overall administration of heritage field. The Law defines the responsibilities of central and local government in the field of cultural heritage management, the provisions for protection of discovered heritage objects, the relationships between the state and the owner of monument, the issues of inventory, classification and listing of cultural heritage objects, etc. The major innovations of the new amendments are that it allows privatization of cultural heritage monuments, exempts the rehabilitation works of national monuments from the VAT, enforces stricter fines and provisions for the infringement of the heritage legislation, regulates the procedures for the rehabilitation project application, elaborated the system of protection zones for monuments, establishes criteria for their application and the relevant protection regimes.

As the present legislation was enforced only few years ago and has been in the process of constant amendment, the lack of practical experience does not give sufficient evidence to discuss its shortcomings. Nevertheless the need for the further improvement is still obvious. The Law on Cultural Heritage regulates a wide range of legal issues that require adoption of other laws and subordinate legal acts. The transitional provisions of the Law consider the duty of adoption of such legal acts. However, many of these issues, such as accreditation and professional activity in the field of cultural heritage, the definition of monuments of exceptional public interest and the rules for acceptance of general public by the owners of such properties remain without regulation today.

The Constitutional Agreement between the State of Georgia and the Apostolic Autocephalous Orthodox Church (2002) regulates the relationship between the state and the Church. Its provisions (art. 7, 8 and 9) have a major impact on the management of cultural heritage in the country. By this agreement all the religious buildings and related structures on the territory of the country, in use or without function, standing or in ruins, together with their parcels and also all the immovable ecclesiastic treasures protected in museums and archives are handed down in the ownership of the Church of Georgia (art.7 and 8). The MoCMP must agree with the Church of Georgia in the process of adopting protection zones, rules and methodologies, planning and approving rehabilitation projects or scientific research of movable and immovable religious monuments. Together with the state, the Church is responsible for maintenance and care of the monuments in its ownership (art.7 and 9). The property of the Church is exempt from the state taxes (art. 5). According to the Concordat the church is the owner of the majority of immovable listed properties in the country, most of which, at the same time, are living heritage sites, with the religious function being restored and enhanced after the fall of Soviet regime. Because of this special circumstance, the specific rules for maintenance and exploitation of these properties need to be elaborated.

Spatial Planning Legislation

The main document regulating the spatial organization is the Law on the Principles of the Spatial Organization and Town Planning (2005). It sets the major aims and principles in spatial organization of the country and the process of planning. The provisions set by the law are based on the principles of sustainable development which involve equal spatial development of the country, protection and rational use of the resources, **decentralization** and polycentrism of the spatial-economic development, equal distribution of the infrastructure on the whole territory of the country etc. One of the significant aspects of the document is that in public-private relations it gives the apparent privilege to the public interests.

Forms of Immovable Heritage Protection: The Georgian legislation defines two mechanisms for protection of cultural heritage objects (a) Initial (temporary) and (b) permanent protection through granting the status of the Cultural Heritage Property or the Listed Property status. Initial (temporary) protection is applied when the heritage object is being discovered. The permanent protection is granted by the decree of the Minister of Culture, Monuments Protection and Sport, on the basis of the advice of the Cultural Heritage Council. Among other provisions the protection regime implies the establishment of the individual protection zone,

corresponding areas and regulations which aim to preserve the setting of the monument which contributes to its historic, cultural and other values. It is important that while being inscribed in the list of Cultural Heritage Properties an object enjoys the same protection regulations as the Listed Property.

Hierarchy and Classification of Cultural Heritage Listed Properties: According to the Law on Cultural Heritage listed property can be granted the grade of national significance by the President of Georgia if it has the special historic and cultural value. A listed property of national significance can be nominated by the President for inscription in the List of World Heritage Sites. Thus there can be distinguished three steps in the hierarchy of listed properties (1) listed property (2) listed property of national significance (National monument) (3) listed property of international significance (World Heritage Site).

Regulation for Cultural Heritage Protection Zones: The Law on Cultural Heritage prescribes general as well as more detailed protection regimes for each type of zones. These regimes may be further refined in scope of the Historic-Cultural Reference Plan, which is the essential and mandatory basis for town planning documentation within protection zones. The demolition of buildings in all types of cultural heritage protection zones is prohibited except the cases when there is an imminent threat of destruction due to irreversible deterioration of physical condition of a building, or when it is deemed necessary to remove the buildings distorting the historical environment. In the Historical Landscape Protection Zones only temporary constructions may be permitted when it is necessary for the purpose of protection or scientific research of protected structures within or when it is considered to be of the supreme public interest. No construction activities are to be permitted within Archaeological Protection Zones. These general provisions are further articulated in articles 36-44 of the Cultural Heritage Law and explain the details of permitted outdoor advertisement, control of alteration of appearance of buildings, street network, landscape and streetscape as well as functions, traffic, clauses related to industrial wastes and hydro-geological conditions.

3.2 ENVIRONMENTAL PROTECTION

3.2.1 Administrative Structure

Ministry of Environment and Natural Resources Protection (MoENRP) is a leading ministry responsible developing the environmental policy of the government and has overall responsibility for managing natural resources and radiation safety. The MoENRP consists of several functional departments and services, which are responsible for different aspects of environmental protection, and other supporting departments, like administrative department, Legal Department, Service of Public Relations etc.

Functional departments and their responsibilities:

Department of Environmental Impact Permits	<ul style="list-style-type: none"> - Carrying out Ecological Expertise and issuing Environmental permits - Post EIA monitoring of compliance with the conditions of Environmental Permit
Department of Environmental Policy and International Relations	<ul style="list-style-type: none"> - Development of the State Policy and State Environmental Programs
Ambient Air Protection Service	<ul style="list-style-type: none"> - Ambient air and water protection strategy; - Consent on the Reports of “Inventory of Stationary Sources of Emissions” and “Norms of Maximally Admissible Emissions”.
Water Resources Management Service	<ul style="list-style-type: none"> - Water resources protection policy, monitoring; - Consent on the Report on “Norms of Maximally Admissible Discharges”;

	<ul style="list-style-type: none"> - Consent on the technical regulations for Water Intake from the Surface Water Objects.
Waste and Chemicals Management Service	<ul style="list-style-type: none"> - Waste Management - Hazardous Substance Management -
Climate Change Service	<ul style="list-style-type: none"> - Climate change adaptation and mitigation policy and strategies - Greenhouse Gas inventories
Biodiversity Protection Service	<ul style="list-style-type: none"> - Biodiversity protection policy and strategies; - Red list species; - National Biodiversity Monitoring System; - Hunting and fishery policy and management.
Legal Department	<ul style="list-style-type: none"> - Development of Environmental Legislation
Department of Environmental Supervision	<p>Execution of controle over the environmental protection and use of natural resources. In particular, responsibilities of the Department cover matters like:</p> <ul style="list-style-type: none"> - Inspection of compliance with the natural resource use regulations <p>Inspection of compliance with the conditions of Environmental Impact Permit</p> <ul style="list-style-type: none"> -
Agency of Protected Areas	<ul style="list-style-type: none"> - Protected areas development policy and programs
National Environmental Agency	<ul style="list-style-type: none"> - Hydrometeorology - Pollution Monitoring - Geohazard monitoring - Monitoring of geo-ecological conditions of river basins, water reservoirs, Black Sea territorial waters, continental - Issuance of licenses on exploration of natural resources (except gas and oil). This includes also licenses for quarries and borrow pits supplying the road projects with the inert construction materials -

3.2.2 Legal framework

3.2.2.1 Framework Legislation

The basic legal document is “**The Constitution of Georgia**”, which was adopted in 1995. While the Constitution of Georgia does not directly address environmental matters, it does lay down the legal framework that guarantees environmental protection and public access to information with regard to environmental conditions. Article 37, Part 3 states that “any person has the right to live in a healthy environment, use the natural and cultural environment. Any person is obliged to take care of the natural and cultural environment.” Article 37, Part 5 states that “an individual has the right to obtain full, unbiased and timely information regarding his working and living environment.” Article 41, Part 1 states that “a citizen of Georgia is entitled to access information on such citizen as well as official documents available in State Institutions provided it does not contain confidential information of state, professional or commercial importance, in accordance with the applicable legal rules.

Legislative execution of constitutional requirements in the sphere of environmental protection is implemented through framework Georgian “Law on Environmental Protection” (1996, as amended) and the set of specific laws developed on its basis. The framework law regulates the legal relationship between the bodies of the state authority and the physical persons or legal entities (without distinction-legal form) in the scope of environmental protection and in the use of nature on all Georgia’s territory including its territorial waters, airspace, continental shelf and special economic zone. The law deals with education and scientific research in the scope of environment, environmental management aspects, economic levers, licensing, standards, EIA and related issues. Considers different aspects on protection of ecosystems, protected areas, issues of global and regional management, protection of ozone layer, biodiversity, protection of Black Sea and international cooperation aspects. In particular, the law addresses broad spectrum of issues, like environmental management, environmental education and awareness building, licenses and permits, fines and enforcement, environmental impact assessment, which should be further regulated by specific laws. According to the requirements set forth in the framework law, numerous laws and normative–legal documents were adopted to regulate specific environmental issues in Georgia. Further below the environmental regulations most relevant to the project – and first of all, to the permitting process - are described.

3.2.2.2 Legislation Related to Environmental Permitting

At present, the environmental permitting procedure in Georgia is set out in three laws:

The project proponent, in implementing projects, will comply with (i) **The Law on Licenses and Permits (2005)**; (ii) **The Law on Environmental Impact Permits (EIP)**, and (iii) **The Law on Ecological Examination (EE) 2007**. In more details the EIA process and required content of the EIA document is described in the **Regulation on EIA issued by the MoENRP dated May 15, 2013**.

The Law on Licenses and Permits was adopted by Parliament of Georgia, on June 24, 2005. The Law regulates legally organized activities posing certain threats to human life and health, and addresses specific state or public interests, including usage of state resources. It also regulates activities requiring licenses or permits, determines types of licenses and permits, and defines the procedures for issuing, revising and canceling of licenses and permits (Article 1, Paragraph 1).

The Laws on Environmental Impact Permit and on Ecological Examination have been published on 14.12.2007 and entered in force on 01.01.2008. These new laws integrate all the amendments introduced in legislation of Georgia during recent years.

The Law of Georgia on Environmental Impact Permit.

The Law of Georgia on Environmental Impact Permit determines the complete list of the activities and projects subject to the ecological examination (clause 4 p.1) and the legal basis for public participation in the process of environmental assessment, ecological examination and decision making on issuance of an environmental impact permit. In case if the activity included into the list given in clause 4 p.1 at the same time requires Construction Permit, the administrative body responsible for issuance of the Construction Permit ensures involvement of MoE, as a separate administrative body, in the administrative procedures initiated for the purpose of issuing Construction Permit, as it is envisaged by the Law on Licenses and Permits. In such cases the MoE is issuing the Conclusion on the Ecological Examination of the project based on the documentation provided to MoE by the administrative body issuing the Permit. The Conclusion on the Ecological Examination is adopted by the administrative (executive) legal act of the MoE and compliance with the conditions of the Conclusion is obligatory for the project proponent. The conditions of the Conclusion on Ecological Examination is a part of conditions of the Construction Permit. In case if the activity included into the list given in clause 4 p.1 does not require Construction Permit, based on the Conclusion on the Ecological Examination the MoE will issue the Environmental Impact Permit, supported by the administrative (executive) legal act issued by the minister. The ecological examination is carried out in accordance with the law of Georgia on Ecological Examination and the conditions set forth by the Conclusion present the Conditions of the Permit.

According to article 6 , developer is obliged to carry out public discussion of the EIA before its submission to an administrative body responsible for issuing a permit (in case of activity requiring construction permit before initiating stage 2 procedure for construction permit issuance).

Planned improvements in Environmental Permitting Legislation

In line with the general tendency of harmonization of the Georgian legislation with the EU regulations, it is planned to improve the environmental permitting legislation and procedures in Georgia. The MoENRP has initiated a program aimed on development of EIA procedures compliant with the EU directives, including such procedures as “Screening”, “Scoping” etc. Possibility of introducing such instruments as Strategic EIA will be also discussed under this process. At present, Draft Code on Environmental Assessment is elaborated and published on the MoENRP web-site. This draft code is planned to be submitted to the Parliament of Georgia for adoption by the spring session, 2016.

3.2.2.3 Other Environmental Laws

Below is the list of laws relevant to environmental protection:

1994	Soil Protection
1996	System of Protected Areas
1996	Minerals
1996	Environmental Protection
1997	Wildlife
1997	Tourism and Resorts
1997	Water Protection
1997	Transit and Import of Hazardous Waste within and into the Territory of Georgia
1998	Resorts and Sanitary Protection of the Resort Zones
1998	Dangerous Chemical Substances
1998	Pesticides and Agrochemicals
1999	Atmospheric Air Protection
1999	Forest Code
2003	Red List and Red Data Book of Georgia
2005	Licensing and Permitting
2007	Environmental Impact Permit
2007	Ecological Expertise
2007	Cultural Heritage

3.2.2.4 International Commitments

International cooperation is a dominant feature and driving force for environmental reforms in Georgia. Some of the International Treaties and Conventions Ratified or Signed by Georgia are provided in the list below.

Short List of the Ratified or Signed Conventions

N	Title	Year of ratification
1	Ramsar Convention on Wetlands	1996
2	United Nations Framework Convention on Climate Change (UNFCCC)	1994
3	Kyoto Protocol	1999
4	Basel Convention on the Control of Transboundary Movement of Hazardous Waste and Their Disposal	1999

5	Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)	1999
6	United Nations Convention to Combat Desertification (UNCCD)	1999
7	Convention on Biological Diversity	1994
8	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	1996
9	The Vienna Convention for the Protection of the Ozone Layer	1995
10	Montreal Protocol on Substances that Deplete the Ozone Layer	1995
11	Convention on Long-range Transboundary Air Pollutants	1999
12	Stockholm Convention on Persistent Organic Pollutants	2006
13	Convention on the Conservation of European Wildlife and Natural habitats	2008
14	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	2006

3.3 LOCAL SELF-GOVERNMENT CODE

On 5 February 2014 the Parliament of Georgia approved the new Local Self-Government Code, which brings about certain changes in the current local self-government system. Below we focus on those provisions of the new Code, which have direct implications for the RDP III.

Supreme Self-Government Official

Whereas under the old legislation a Sakrebulo Chair was the supreme self-government official, after the reform a directly elected Gamgebeli/Mayor became the supreme self-government official.

State Trustee - Governor

A consultation body of municipalities – “Regional Consultation Council” – will be set up with the state trustee – Governor, with the following powers:

- Examination of projects and programs to be implemented by the state in the relevant territory at the submission of the state trustee – Governor and their budget estimates;
- Examination of the socio-economic development strategy of territory subordinated to the state trustee’s – Governor’s powers;
- Development of relevant recommendations for the state trustee – Governor.

Ex officio members of the Consultation Council will be the Gamgebelis/Mayors, Sakrebulo Chair and the Deputy Sakrebulo Chair of relevant municipalities. The Consultation Council will convene at least once in a quarter and will render recommendatory decisions.

Self-Government in Villages

Pursuant to the Code a Gamgebeli will be authorized to appoint in the municipality’s administrative unit a Gamgebeli’s representative – a “Village Trustee”, whose powers will be determined by the Regulations of the municipality Gamgeoba.

Fiscal Decentralization

Pursuant to the old Organic Law, the local self-government’s own revenues include a property tax, local fees and an equalization transfer. Whereas according to the reform, the financial resources of local self-government will increase by a “shared tax”: a portion of the income tax paid by a person registered and employed in the territory of a self-governing unit will remain with the same self-governing unit. In addition, along with special and targeted transfers, the municipality’s budget will receive capital transfers.

Property of a Self-Governing Unit

Property, which is necessary for exercise of self-government, is located on the territory of a specific municipality and is in the ownership of the Ministry of Economy, is arrested or is on the balance of the former farming economies, will be transferred in the ownership of a relevant municipality until 2017. As for the agricultural land, under the Code, until 1 January 2017 the Ministry of Justice of Georgia, the Ministry of Regional Development and Infrastructure of Georgia, the Ministry of Economy and Sustainable Development of Georgia and the Ministry of Finances of Georgia will develop a relevant timeline and procedure for transferring the agricultural land resources to municipalities and will submit it to the Government of Georgia for approval.

Individual Powers of a Municipality

Paragraph 2 of Article 16 of the Code defines individual powers of a municipality, including the following novelties:

- Sub-Paragraph 'ზ' - "Provision of water supply (including technical) and water drainage; development of a local-scale melioration system", which under the effective legislation is under the powers of the central authorities, and namely the LEPL "United Water Supply Company" of the Ministry of Regional Development and Infrastructure of Georgia";
- Sub-Paragraph 'ქ' - Adoption of rules for keeping domestic animals and decision-making on the stray animals;
- Sub-Paragraph 'თ' - Development of relevant infrastructure for persons with disabilities, children and the elderly at the facilities of local importance, including the relevant adaptation and equipping of public places and municipal transport;

4. ASSESSMENT OF RISKS TO THE NATURAL ENVIRONMENT, SOCIAL STRATA AND PHYSICAL CULTURAL RESOURCES OF THE TARGET REGIONS

4.1 IMPACTS RELATED TO THE REGIONAL DEVELOPMENT STRATEGIES

Regional Development Strategies for both target regions propose to develop following sectors:

- **Agriculture** (modern technologies and new plant species for efficient cropping; Efficient technologies for cattle breeding and poultry; product storage and food processing facilities etc.)
- **Energy sector** (development of small and large HPP; use of alternative energy resources available in the region – wind-farms, solar energy)
- **Infrastructure** (regional and local roads; water supply and sewage; wastewater treatment plants; waste management facilities; electric power and gas supply; communication systems etc.)
- **Exploration and sustainable management of natural resources** (for both target regions the natural resources available for exploration comprises: fresh and mineral water resources; timber and forestry products; inert construction materials; Besides, certain amount of coal resources are in Samtskhe-Javakheti and the survey of potential oil fields is on the way)
- **Tourism** (more details related to tourism development will be discussed in chapters related to the RTDSs)
- **Supporting small and medium-size enterprises** (in tourism, agriculture, food processing, construction materials production, alternative energy, construction and service providing sectors)
- **Development of cross-border collaboration (trade, tourism, environment protection, energy sector,**
- **Environment Protection Programs**

4.1.1 Assessment of Risks to the Natural Environment

We will present the impact analysis by sectors rather than by affected environmental receptors, as many of the agencies responsible for mitigation measures represent specific sectors.

4.1.1.1 Agriculture:

Impact 1.: Risks of degradation of the valuable landscapes/habitats and biodiversity reduction due to the extension and intensification of agricultural land use (new land take; overgrazing effects of pastures and natural meadows etc.).

The intensification of the cattle-breeding and increase of number of domestic animals under the conditions of limited reserves of agricultural land and pastures will lead to invasion of grazing activities into the untouched natural landscapes and sensitive and valuable alpine and subalpine meadows of Samtskhe Javakheti and Mtskheta-Mtianeti regions. The first signs of such degradation of natural landscapes due to overgrazing are already clearly expressed. These signs can be observed even in extremely sensitive and valuable meadows of “Nariani Veli”, which is part of Ktsia-Tabatskuri Managed Reserve, are in adjacent natural environs. The same is valid for sensitive meadows of Dusheti and Kazbegi municipalities of the Mtskheta-Mtianeti region. The observed landscape degradation trends are caused by increased number of sheep in Mtskheta-Mtianeti region and head of livestock in Samtskhe-Javakheti.

Reflection of the issue in RDSs:

RDSs acknowledge issues related to inadequate pasture management: In MM RDS it is stated that „Intensity of agriculture land use greatly affects biodevirsity. Extensive agricultural lands represent vital habitat for numerous species of animals and plants (for example: fields, meadows, pastures, farming and arable plots, gardens and etc.). Overutilization of pasture areas can lead to the soil erosion processes.” Extension of the existing and development of new Protected Areas, as well as introduction of modern management systems is seen as a mitigation measure: “Developing the protected areas of Kazbegi and Pshav-Khevsureti and establishing the innovation management systems” is defined as a task to meet planned environmental objectives. Further, the RDS states: “Extension of the National Park, involvement of local population in its management and activities will strengthen protection of primary ecosystems, regular and planned utilization of its resources, and also promote development of ecotourism in terms of economic consolidation”. The SJ RDS is less specific on this point.

SECHSA Recommendation on Mitigation Measures:

- Improve environmental management and monitoring systems and enforcement mechanisms for Protected Areas and Forest Fund lands. **Executing agencies:** MoENRP; APA; Department of Environmental Supervision; Municipal Authorities;
- Improve land use zoning and planning system. Ensure inventory and efficient use of reserve agricultural land plots.
- Introduce modern technologies of cattle breeding (production and supply of efficient fodder; develop farms focused mainly on localized area for cattle feeding; plan development of cattle farms only at sites remote from the protected landscapes;) **Executing agencies:** Ministry of Agriculture (MoA); Municipal Authorities; Agencies involved in training and transfer of know-how regarding the modern cattle breeding technologies;
- Cross-border cooperation: negotiate with the authorities of the adjacent regions of Azerbaijan and Turkey on a matter of possible use of spare grasslands in these countries for joint cattle breeding activities (joint ventures; shareholders etc.). **Executing agencies:** Ministry of Agriculture; Municipal Authorities;

Impact 2.: Pollution with pesticides and fertilizers;

Intensification of agricultural activities requires increased production and supply of pesticides and fertilizers. This, in its turn, increases the risk of pollution of soil and surface and groundwater resources with further effects on human health. Currently, agriculture represents the source of pollution throughout Mtskheta and Dusheti Municipalities of Mtskheta-Mtianeti region and almost all municipalities of Samtskhe–Javakheti (discharging mineral fertilizers and pesticides into the rivers, leakage into ground waters).

Reflection of the issue in RDSs: The risk of excessive use of agrochemicals that may have adverse impact on the quality of produce, as well as pollute environment is addressed in MM RDS but is not acknowledged under the SJ RDS. Following mitigation measures are envisaged under the MM RDS:

- Introducing the water and air quality monitoring system, regular control and promoting the measures to protect the surface waters and atmospheric air.
- Ecologization of the agricultural production, development of bio-agricultural production both, on the local and foreign markets and production of bio-products; establishment of the bio-agricultural complexes of the full cycle.
- Establishment and development of the extension and service centers, organization of the experimental and demonstration land plots, introduction of modern technologies and improving the population's awareness.
- Developing the protected areas of Kazbegi and Pshav-Khevsureti and establishing the innovation management systems

SECHSA Recommendation on Mitigation Measures:

- Introduce modern agricultural technologies. Organize agricultural business incubators, where the farmers and small or medium-sized agricultural enterprises will get information on modern efficient and less toxic fertilizers and pesticides, contemporary facilities for storage and transportation. The business incubators should facilitate access to best products on the world market. Introduce, where possible, ecologically clean technologies for production of crops without pesticides and with focus on organic fertilizers. **Executing agencies:** MoA; Municipal Authorities;
- Organize centralized systems of fertilizers and pesticides supply with proper transportation and storage facilities and good environmental management; . **Executing agencies:** MoA; Municipal Authorities;
- Improve the existing system of environmental monitoring of the quality of surface water objects in the target regions. **Executing agencies:** MoENRP; Municipal Authorities;
- Facilitate development of medium-sized collective enterprises. Training and know-how transfer, as well as environmental supervision could be organized more efficiently for such enterprises. **Executing agencies:** MoA; Municipal Authorities;

Impact 3.: Pollution related to poultry and cattle-breeding farms and food processing plants;

Intensification of cattle breeding and poultry is related to increased waste production (including hazardous wastes). Industrial waste of poultry processing plants already represents a very grave problem for Mtskheta-Mtianeti region. This, in its turn, increases the risk of environmental pollution, especially contamination of local water resources (small rivers are often used for cleaning and washing needs and wastewater is discharged into the rivers). The wastes and wastewater produced by food processing plants may also have tangible input in cumulative effects of environmental pollution.

Reflection of the issue in RDSs: This issue is not specifically addressed in RDSs, but only indirectly, within the context of a need of improving sewage systems, wastewater treatment plants and overall water pollution control systems. In MM RDS as a deficiency of the waste management systems it is mentioned that “the issue of specific waste disinfection and management (Mukhrani poultry plant, etc) is also ignored”.

SECHSA Recommendation on Mitigation Measures:

- Improve the environmental supervision over the farms and food processing plants to ensure compliance with the technical regulations and wastewater discharge standards; **Executing agencies:** MoENRP and its Department of Environmental Supervision; Municipal Authorities;
- Introduce modern cattle-breeding and poultry technologies and contemporary food processing plants with wastewater treatment and waste composting facilities for the production of organic fertilizers. Organize agricultural business incubators, where the farmers and small or medium-sized agricultural enterprises will get information on modern clean technologies and performance standards. Facilitate development of the medium-sized collective farms. Training and know-how transfer, as well as environmental supervision could be organized more efficiently for such collective enterprises, rather than for individual farmers. **Executing agencies:** MoA; Municipal Authorities;

Impact 4.: Risks of spread of anthrax and other dangerous diseases common for human and domestic animals (Zooanthropogenic Diseases)

Intensification of cattle-breeding and cattle migration between the regions is associated with the risk of spread of anthrax and other Zooanthropogenic Diseases. The risk is high due to the deficiency of the veterinary control system and existence of many registered and unregistered burial sites and pest-holes along the traditional cattle migration routes and near the villages in Samtskhe-Javakheti and Mtskheta-Mtianeti regions.

Reflection of the issue in RDSs: This issue is not specifically addressed in RDSs, but only indirectly: the lack of veterinary services is mentioned as a general problem and as one of the results of this deficiency, the often cases of anthrax and other animal diseases.

SECHSA Recommendation on Mitigation Measures:

- Improve the veterinary control and supervision system (central and at the municipality level).
- Update the register of burial sites and pest-holes. Execute disinfection activities where possible, or isolate pest-holes according to standards. **Executing agencies:** MoA; Municipal Authorities;

Impact 5.: Risks of losing endemic species of fish due to introducing and spread of alien species.

The fish farming in both target regions is supported mostly in artificial reservoirs, but also in the natural lakes and ponds. Even in case of farming in artificial reservoirs, the latest are not well isolated and the spread of cultivated species into the natural environment is not a rare case. According to information of local communities, we can conclude that the biodiversity and endemic species of the unique Tabatskuri lake in Samtskhe-Javakheti are already significantly impacted and in both target regions the endemic-trout species in mountainous rivers are gradually replaced by alien trout species escaping from artificial ponds. Further intensification of fish-farming may lead to significant and maybe irreversible impacts.

Reflection of the issue in RDSs: The risk of introducing foreign species is mentioned in general, as one of the environmental problems of the regions. No connection with particular activities is analyzed.

SECHSA Recommendation on Mitigation Measures:

- Introduce modern fish-farming technologies and contemporary facilities to promote the ecologically safe fish-farming. Organize business incubators, where the farmers and small or medium-sized agricultural enterprises will get information on modern clean technologies and performance standards. Facilitate development of the medium-sized collective farms. Training and know-how transfer, as well as environmental supervision could be organized more efficiently for such collective enterprises, rather than for individual fish-farmers. **Executing agencies:** MoA; Municipal Authorities;
- Improve the environmental supervision over the fish-farms to ensure efficient systems protecting from escaping the alien species of fishes into the natural environment and compliance with the technical regulations and wastewater discharge standards; **Executing agencies:** MoENRP and its Department of Environmental Supervision; Municipal Authorities;

4.1.1.2 Energy Sector

Impact 6.: Environmental risks associated with the plans of developing a system of small and large HPPs.

The potential risks often discussed are : a) climate changes at the local and regional levels (direct and cumulative impacts of several HPPs) with further indirect impacts (intensification of precipitation and erosion; increase of humidity and related change of floristic composition; b) change of hydrological regime and hydro-ecological features of the rivers and ravines affected by the HPP projects. c) irreversible damage of landscapes and habitats occupied by reservoirs and HPP facilities (the ecological impacts could be severe in case of cumulative effects of the several HPPs within the interconnected ecological areas; The impacts on climate are very often exacerbated, however the cumulative impacts of several HPPs should be thoroughly analyzed. Unfortunately, the mentioned risks are mostly assessed for separate HPPs in individual EIAs and the cumulative and indirect impacts are not properly analyzed.

Reflection of the issue in RDSs: This issue is not specifically addressed in RDSs

SECHSA Recommendation on Mitigation Measures:

- Develop Strategic EIAs for the system of HPPs within the entire region or at least – within one watershed. **Executing agencies:** MoENRP and Ministry of Energy;
- Develop the system of criteria for decision makers (methodologies for assessing minimum sanitary flow required to maintain hydrological and ecological features of the rivers; the ecological value and state of degradation of the river ecosystem; the socio-economic value of the plant; the value of the HPP in terms of ensuring energy security etc.). The system of criteria should be feasible for selecting eligible projects and their prioritization. This could be developed under particular SEAs for separate watershed or regions or under the overall SEA for the whole country. **Executing agencies:** MoENRP and Ministry of Energy;
- Assess possibility and capacity of alternative sources of energy

Impact 7.: Environmental risks and benefits related to the plans of developing alternative sources of energy.

The potential negative impacts of the wind-farms and solar power farms are related to the permanent take of significant areas of land and associated impacts on landscapes and habitats of the affected land. The other type of environmental impacts is related to the death of birds and bats due to collision with the facilities. These environmental impacts have local significance and could be managed through the site selection and mitigation plans developed under the project-specific EIAs. The strategic environmental impact on the environment of utilizing alternative energy sources is beneficial (reduction of toxic and greenhouse emissions; (strategic social impacts are addressed in social impact section).

4.1.1.3 Promoting development of entrepreneurship in the region through efficient services supporting small and medium-sized enterprises:

Impact 8.: Cumulative effects of environmental pollution

According to RDSs, less share of adverse impact on the environment falls on the large enterprises, functioning in the regions. Large production volume and investments enable them to equip their enterprise with modern cleaning and purification technologies, provide waste recycling and re-utilization. Much higher is a cumulative impact of many separate small and medium-sized enterprises, most of which are developed with the limited financing and poor environmental management and are not adequately controlled by the supervising agencies. Intensive promotion of the new small and medium-scale businesses may even further aggravate the situation. Cumulative impacts of small and medium enterprises is high in relation to pollution due to emissions, wastewater discharges and improper waste management, uncontrolled lodging and timber production etc.

Reflection of the issue in RDSs: As we have mentioned, this issue is raised in RDs. However, the only conclusion made was the need of overall improvement of the monitoring system.

SECHSA Recommendation on Mitigation Measures:

- Introduce modern technologies and contemporary facilities to promote the ecologically safe business. Organize business incubators, where the small or medium-sized enterprises will get not only skills of running their business but also information on modern clean technologies and performance standards. **Executing agencies:** GNTA, MoA; Ministry of Economy; Georgia Regional Development Fund (GRDF); Municipal Authorities;
- Improve the environmental supervision over the small and medium enterprises in order to ensure compliance with the technical regulations and emission and wastewater discharge standards; **Executing agencies:** MoENRP and its Department of Environmental Supervision; Municipal Authorities;
- While promoting small and medium enterprises, give preference to those projects that are beneficial for environment or at least, have less negative impacts. Use the project selection criteria provided in this SECHSA or develop similar criteria better matched to the specific investment package. **Executing**

agencies: Municipal Authorities; other agencies and funds involved in financing small businesses (micro-financing institutions; GRDF etc.)

4.1.1.4 Infrastructure: Local and Regional roads, water supply, sewerage and wastewater treatment facilities; natural gas supply

Impact 9: Impact of new local and regional roads on pristine environs

Transport infrastructure is key for regional development, however better access to some remote areas may cause transformation of ecosystems and landscapes preserved from anthropogenic impacts till present. New roads often make available access to the untouched environs (forests; wetland; other sensitive habitats) and may stimulate uncontrolled lodging in earlier preserved areas, poaching and increased tourist flows exceeding the carrying capacity of the area. Besides that, there is a risk of introducing pests and spread of forest diseases from affected and degraded forest sections to pristine and non-affected forests. Introduction of alien species of plants transmitted by vehicles is another risk.

Reflection of the issue in RDSs: This issue is raised in RDSs. The mitigation proposed in RDs envisages overall improvement of the forestry management system.

SECHSA Recommendation on Mitigation Measures:

- Improve the environmental supervision in the sensitive areas, which are becoming accessible with the new roads, in order to minimize illegal lodging and poaching **Executing agencies:** NFA; MoENRP and its Department of Environmental Supervision; Municipal Authorities;
- Improve forestry management practices in order to protect pristine forests from spread of plant diseases. **Executing agencies:** National Forestry Agency (NFA); MoENRP and Municipal Authorities;
- Improve plant protection and phyto-sanitary control mechanisms to prevent spread of diseases and alien species of plants. **Executing agencies:** Department of Phytosanitary of the National Food Agency

Impact 10.: Impact of developing transport infrastructure and traffic intensification on ambient air quality

Ambient air in the target regions is polluted mainly from motor vehicles and to a lesser extent, from industrial facilities and projects and agricultural sector. Important highways with intense and increasing traffic in the eastern and western as well as northern and southern directions, cross the entire territory. The mentioned above, in its turn, preconditions high degree of pollution, however, car malfunction and fuel quality problems make situation even worse. As the highways generally run through settlements, adverse effect on the population health along certain sections and, consequently, the risk of morbidity is significantly high.

Reflection of the issue in RDSs: This issue is raised in MM RDS. The mitigation proposed in RDs is limited to the overall improvement of the air quality monitoring system.

SECHSA Recommendation on Mitigation Measures: Adequate state policy should be provided, in particular: average age of the existent in the country motor vehicles should be reduced, motor fuel quality is to be improved and strictly controlled, strict norms on harmful exhaust gases released from the vehicles should be introduced and actually implemented in practice. **Executing agencies:** MoENRP; MoLHSA; MoIA;

Impact 11.: Impacts relate to development of water supply, sewage systems, wastewater treatment plants, gas and electricity supply

The potential negative impacts of the mentioned infrastructure projects are related to the permanent take of land and associated impacts on landscapes and fragmentation of habitats. The other types of environmental impacts are related to the construction activities. These environmental impacts have local significance and could be managed through the site/route selection and EMPs developed under the project-specific EIAs. The strategic environmental impact on the natural environment of the mentioned types of infrastructure projects is

beneficial as leads to reduction of waste and wastewater related pollution, fossil fuel related pollution and reduction of using timber as an energy source. In general, this will contribute to reduction of greenhouse gas emissions.

4.1.1.5 Exploration of Inert Materials

Impact 12.: Impacts on landscapes and hydro-ecological features of the river channels

Both target regions are rich with the raw construction materials. The impacts of each particular enterprise exploring inert materials are local and could be managed through individual permitting and licensing procedures. However, the cumulative impacts of many enterprises may be much severe and less manageable

Reflection of the issue in RDSs: The RDSs do not address the issue of cumulative impacts of extraction materials from different quarries and borrow pits;

SECHSA Recommendation on Mitigation Measures: Conduct resource assessment and develop exploration Master Plans or Strategic EIAs for each of the target regions. Define admissible areas and capacities for exploration of each particular site. Prohibit quarrying in the vicinity of sensitive landscapes and natural monuments. **Executing agencies:** MoENRP and its Department of Environmental Supervision; EPA; Municipal Authorities;

Impact 13.: Impacts on debris-flow prone areas

According to RDSs, within the both target regions there are many rivers and gorges forming debris flow areas and storing enormous amount of debris (rock fragments, stones etc.). This imposes serious risks to residential areas and even entire settlements. Periodical cleaning of these debris-flow prone river channels is one of the priority environmental programs suggested within the RDSs. Periodical cleaning of the river channels, on one hand, is beneficial and necessary to secure the local communities and agricultural lands against debris- and mudflows. On the other hand, use of huge amounts of stored debris will reduce the need in extracting inert materials from the other sources. However, extraction and transportation of the materials from the debris accumulation sites is more expensive, than extraction of materials from the riverbed quarries located close to the settlements and main roads. Therefore, the private operators have no incentives to clean the river channels from the debris masses, until they are paid by local municipalities and the local municipalities usually lack the financial resources.

SECHSA Recommendation on Enhancement Measures: Develop policy and establish regulations enabling to extract materials from the debris accumulation sites without any license payments. In case of such approach, the expenses on the river bed channel cleaning could be reduced to the level affordable for the municipalities. **Executing agencies:** MoENRP to initiate development and approval of relevant regulations; Supporters: EPA; Municipal Authorities; To be approved by the government;

4.1.1.6 Environmental Protection Component of RDSs

Both RDSs include components specifically aimed on environmental protection and rational use of the natural resources. **The specific environmental protection components of the strategies presented below have clearly beneficial impact on the natural environment of the target regions.**

Waste Management

Raised issues: The problem of environmental pollutants, in particular issue of waste management is acute in the target regions. Utilities sector (sewage in the settlements) represents the main pollutant of surface waters. As of today, none of the water treatment facilities or structures can provide wastewater treatment in compliance with the project quality. There is no biological purification of the water as well. Landfills represent a vital problem as well. None of the settlements has landfill, built in accordance with the established norms, while there are no rubbish dump places in the villages, and dumping garbage has spontaneous character, mostly into ravines and rivers; waste collection vehicles and machines as well as bunkers are inadequate and insufficient.

Actions proposed in RDSs: Both RDSs define among other priorities the necessity of constructing wastewater treatment plants and sewage systems, regional municipal waste landfills and other waste treatment facilities and improvement of the waste management system.

Natural Disaster Management

Raised issues: The target regions are extremely vulnerable towards natural disasters; natural calamities, such as earthquakes, floods, landslides, mudslides, avalanches, droughts are frequently observed in the area. Demographic changes, unplanned urbanization, lack of control over the safety norms, social and economic inequality, environment degradation and climate change, and in the light of all mentioned above, absence of planning and realization systems for preventive measures at all levels of state management, result in increased intensity and frequency of disasters.

Actions proposed in RDSs: Developing the Action Plan to manage the risks of natural calamities and accidents and introducing the monitoring system for the particularly vulnerable areas, and prevention. Where possible, the degraded forest should be restored. Besides the direct ecological benefit the indirect effect of reducing erosion and landslide risks is important. It is necessary to develop a contingency plan and preventive steps for the region. In the region's territory where the risk of dangerous geological processes and the damage ratio is high, it is advisable to displace rural population as preventive measure.

Raised issues: Soil protection is a very important challenge for Georgia in general and for Mtskheta-Mtianeti and Samtskhe-Javakheti regions specifically. Soil losses are immense due to erosion processes, secondary bogginess and salinization of the soil, excessive forestation and feral vegetation owing to unproductive agricultural management and improper agricultural activities of people.

Actions proposed in RDSs: It is necessary to actually implement the law on conservation of soil and improving its productivity and take the appropriate measures.

Rational use of freshwater, mineral water and forest resources

Raised issues: Cumulative effects related to resource management. The impacts of each particular enterprise exploring water or forest resources are local and could be managed through individual permitting and licensing procedures. However, the cumulative impacts of resource use, executed without any coordination by many enterprises, may be much severe and less manageable. Due to unsystematic cutting of forests, significant damage has been inflicted to woods in the target regions over the last decades. Consequently, this resulted in increasing number of landslides, mudslides, soil erosions etc.

Actions proposed in RDSs: The impacts are acknowledged by RDSs and development of modern resource management systems is proposed as a mitigation measure.

SECHSA Recommendation on Enhancement Measures: Conduct inventory of the forest, mineral and water resources; Develop the resource use Master Plans or Strategic EIAs for each of the target regions. Define admissible areas and capacities for resource extraction for each particular site. It is necessary to establish a system of sustainable forest management that implies care and utilization of woods and forest areas by means of the methods and intensity, which ensure maintaining their biodiversity, productivity, self-recovery and vitality, also provides and will further ensure performing its appropriate environmental, economic and social functions at present as well as in the future, and does not lead to inflicting damage to the other ecosystems. Sustainable forest management provides the following, namely: maintenance and growth of the forests' quantitative and qualitative indicators, conservation of their biological diversity, efficient use of their economic potential taking into account environmental values of the forests, public participation in the forest management issues and fair distribution of the obtained benefits; **Executing agencies:** NFA; MoENRP and its Department of Environmental Supervision; EPA; Municipal Authorities;

Raised issues: Illegal commercial lodging is a major problem, however, even licensed operators are not following rational forestry principles. As a rule, out of all cut trees, only the assortment of best commercial quality (tree trunks) is removed, while part of timber resource is left on the spot. When the cut timber falls, it frequently damages the trees that are not marked for cutting, among them the species included in the Red List. The waste is not removed from the tree-cutting area. High levels of poverty in villages force people to obtain forest resources illegally and using improper methods.

Actions proposed in RDSs: Sustainable forest management and solution of social problems in the general context of rural development should be considered and discussed. As a result of distribution or change of responsibility for forest property structure (regional / municipal) as well as forest management, it is possible to improve the forest protection, and make management more sustainable, if communities and properly motivated private organizations participate in forest management. Local communities should be involved in local forest management, taking into account different layers of the society (young people, women) and their needs and requirements. They should feel themselves responsible for the resources, on which their present and future existence depend. It is essential to develop and implement the pilot projects that promote commercial use of forests by the local communities in order to create new jobs and income sources, as well as for the purpose to reduce poverty.

4.1.2 Assessment of RDS Related Risks to the Social Strata

4.1.2.1 Social risks and impacts related RDS implementation:

Issue 1: Landuse impacts related to RDS

Landuse impacts. Landuse patterns are strongly affected by the large scale industrial and infrastructure projects, which require permanent land take for locating facilities. Especially severe impacts are related to the energy sector (HPPs and transmission lines; gas and oil pipelines) and transport infrastructure (motor roads and railways; ports and airports). Cumulative impacts of several infrastructure projects developed in the same region may aggravate the impact. So far, as the both RDSs envisage intensive development of energy and infrastructure sectors, impacts on private land owners and land use should be viewed as major of the potential negative social impacts of the RDSs.

Reflection of the issue in RDSs: the issue is acknowledged in RDSs, although no specific provisions or approaches are proposed.

SECHSA Recommendation on Mitigation: the Government should improve the legislation and procedures regulating involuntary resettlement and introduce principles similar to WB OP 4.12. For particularly severe cases (e.g. HPP projects), when significant number of residents should be physically resettled, the focus should be shifted from cash compensations at replacement cost to development of complex program of relocation, livelihood restoration and adaptation programs for both – the resettled and the recipient communities. For the population severely affected due to HPP projects we propose provision of privileges, like low tariff or free of charge electric power supply.

Issue 2: Employment benefits do not accrue to local populations

There is a risk that jobs created during the implementation of the RDS subprojects do not accrue to local population, but the main benefits will be gained by the residents of other regions or even expatriates. This is relevant to temporary jobs (construction activities), as well as to the long-term employment opportunities.

Reflection of the issue in RDSs: the issue is not acknowledged in RDSs.

Mitigation: It is important a) to introduce regulations giving employment preferences for local communities; b) conduct professional needs assessment and ensure trainings for local population to enhance their professional skills in a fields identified through the needs assessment as most required

Issue 3: Uneven distribution of Benefits to different geographic areas in each region

Achievement of the strategic goals in the target regions cannot guarantee that certain groups of population will not be sidelined and benefit in a fair and equal manner. Diversity within the regions will result in more investments and greater growth areas that are richer in natural and cultural assets; have higher qualified and/or more entrepreneurial works force.

Reflection of the issue in RDSs: the issue is not acknowledged in RDSs.

SECHSA Recommendation on Mitigation: During the transforming general statements of RDSs into the actual Action Plans integrating particular subprojects, it is important that interests of all municipalities are addressed equally. The criteria for selecting the subprojects and conditions for preparing proposals should not be preferential for certain privileged areas (e.g. consultants needed for drafting proposals in acceptable format, should be available for all municipalities)

Issue 4 : Benefits accrue unevenly to different segments of the local population, and benefit vulnerable groups and/or women less. For example, land consolidation and commercialization of agriculture – which is being supported in RDSs as a positive trend of rural development – may worsen livelihoods of those who give up small land plots but fail to land new jobs and find alternative sources of income. It is expected that successful implementation of the major programs envisaged in RDSs will trigger creation of new employment opportunities. However, it is less probable that the vulnerable social groups, like disabled or pensioners will benefit from this opportunities equally.

Reflection of the issue in RDSs: the issue is not acknowledged in RDSs.

SECHSA Recommendation on Mitigation: SECHSA recommends to assess opportunities for developing programs aimed on providing privileged employment opportunities for the vulnerable social groups (disabled and pensioners; IDPs; women). This may comprise professional trainings, marketing of goods and services that could be produced or provided by disabled and IDPs; establishment of specific enterprises engaging vulnerable population; regulations encouraging the SMEs and private investors to engage representatives of the vulnerable social groups; SECHSA will recommend to encourage creation of cooperatives and other type of farmer associations aimed on joint cultivation of their land parcels, rather selling land to the commercial structures.

Issue 5: Strategies may result in in-migration, leading to social divisions and tensions between newcomers and long-term residents. This is especially important issue taking into account extremely low prices on agricultural land and high poverty rate. In case if the moratorium on selling agricultural land is ceased, many investors from other regions or expatriates will buy agricultural land. The poor will easily sell their land plots in favor of incomers and expatriates, gaining minor short-term benefit and losing long-term development opportunities.

Reflection of the issue in RDSs: the issue is not acknowledged in RDSs.

SECHSA Recommendation on Mitigation: The legislation regulating land selling and regulations determining minimal prices for land should be improved. Efficient facilities (e.g. business incubators) should be provided to the local population to ensure for them: a) access to business start up financing; b) know-how and technology transfer; c) professional trainings for personnel; d) training in financial management and marketing; e) support in getting access to external markets;

Issue 6: Induced development.

Induced development may occur, including migration to the better developed areas. Given the limited carrying capacity of the sites in terms of space and infrastructure, in addition to cultural differences, migration can become a potentially important problem. Under-regulated housing development is a recurring problem. A lack of zoning laws and the fact that land is almost exclusively privately owned may lead to a frontier mentality and result in unplanned construction activities and architectural mismatches.

Reflection of the issue in RDSs: the issue is not acknowledged in RDSs.

Mitigation: The Government is planning development of strategy for sectoral ministries and local self-governments and some strategic plans and guidelines will be developed and implemented to improve spatial planning and to introduce integrated Masterplans.

Issue 7: Natural Disaster Management.

Natural Disaster Management is a component of both RDSs. The risks for population associated with the natural disasters and the importance of the Disaster Management is addressed in RDSs. However, the RDSs for both target regions are mostly focused on preventive environmental measures and need of developing appropriate monitoring systems and lack social components, which should be focused, firstly, on notification and salvage operations and secondly, on socio-economic rehabilitation of the affected communities.

SECHSA Recommendation on Mitigation: we would recommend to enhance the emergency response systems and capacity of each region for salvage operations, as well as to develop the contingency plans and social aid programs, based on the statistic analysis of natural hazards and forecast of impacts.

Issue 8: Ethnic Tensions over Investment Decisions

While RDSs and RTDSs exclude any type of discrimination, ethnic tension may still arise over the government's investment decisions in Samtskhe-Javakheti. Unless special effort is made toward dissemination of information and inclusive development, then lack of integration, poor command of Georgian language, and other reasons may lead to exclusion or side-lining of non-Georgian population from the offered development opportunities. Lack of awareness and poor outreach may also result in misunderstand and disinformation about certain aspects of the implementation of regional strategies.

SECHSA Recommendation on Mitigation: Early consultations with local population and ethnic minority groups, integrating their concerns and social demands in the development project concept and provision and demonstration of fair distribution of benefits is essential prerequisite of success in achieving development goals.

4.1.2.2 Social Risks Related to Failure of RDS programs

The main social impact of RDSs is positive and beneficial for the population of the target regions, as well as for the whole country, as the objective of the RDSs is to establish efficient and sustainable economy and to improve the social conditions and life standards of the local population. Accordingly, the major social risk associated with the RDSs is a risk of failure of the planned programs and not achieving the objectives. The SECHSA has analyzed risks of failure of some components of the RDS programs and inefficiency in achieving related goals and provided recommendations for risk reduction:

Issue 9: Risks of failure of the RDS programs aimed on SME development

Both RDSs acknowledge SME development as important component of the strategy and most efficient way of delivering social benefits to a broad cross-section of the population. Development and sustainable operations of SMEs is an independent task outlined in RDSs, important at the same time for several prioritized sectors represented in RDSs (agriculture and food processing; tourism; construction companies; exploration of inert materials and production of construction materials; alternative energy sector;). Support of SMEs is considered as an important factor in creating jobs and poverty reduction. The Ministry of Economy and Sustainable Development (MESD) intends to promote micro businesses in all regions of Georgia. The RDP III program envisages provision of TA under the Component 2 in order to support prospective SMEs with business startup/expansion advisory services so that they can easily access micro finance programs offered by MESD. RDP III is focused on SMEs engaged in tourism and agriculture sector

Deficiency of the proposed facilities: The success of developing sustainable SMEs depends on several factors: a) availability of financial resources; b) access to know-how and efficient modern technologies; c) access to modern high quality materials (e.g. seeds, seedlings, animal species, fertilizers and pesticides for agriculture sector); d) access to markets; e) business start-up/expansion advisory service; The lesson learn from past experience is that the support programs and facilities focused only on one or few of these factors is inefficient.

Micro-financing facilities are introduced in Georgia long time ago but, despite certain success, the expected results are not achieved. Campaigns aimed on introduction of new species of plants (e.g. maize;) or cattle have not been supported by preliminary studies and training/advisory facilities and failed. Besides, there is a lack of responsibility: programs implemented to improve each factor could be quite expensive but nobody takes responsibility for the final result.

SECHSA Recommendation for enhancement of benefits: we propose complex approach for SME supporting programs. We consider that it will be much beneficial to develop Business Incubators, which address all of the mentioned factors important for SME development. The Business Incubators should provide: a) start up financing; b) advisory service in financial management and marketing; c) advisory service and facilitation in implementing modern technologies; d) provide access to modern materials, facilities and efficient technologies; e) advisory service and facilitation in entering new and prospective markets; g) The Business Incubators, as shareholders (either permanent, or temporary) will take partial responsibility for the development of sustainable enterprises. **The deepened analysis of business incubator concept and its efficient application for supporting SMEs planning to operate in a tourism sector could be considered under the Component 2 of the RDP III.**

Recommendation for addressing gender issues and needs of vulnerable social groups: While developing business incubators or other simpler facilities, take into account the need of providing specific facilities helping development of professional skills and business opportunities for women and vulnerable groups (e.g. IDPs, disabled or aged persons). These facilities could be developed on a basis of micro-financing institutions, supplementing their usual activities with training programs (marketing, simple technology transfer, financial management for individual entrepreneurs). Such facilities could be supportive for individuals interested in production of handicrafts, souvenirs, domestic food products, specific national clothes etc.

Issue 10: Risks of failure of the RDS Action Plans due to lack of needs assessment and improper selection of the subprojects

RDSs for both target regions are developed. For Samtskhe-Havakheti it is already approved and for Mtskheta-Mtianeti will be approved soon. Following step is development of Action Plans and concrete programs. It is important that during the elaboration of development strategies and policy, as well as detailed action plans and programs, real needs of the communities are identified

Recommendation: during the preparation of action plans and development programs, ensure meaningful consultations with the local communities within each municipality. Consult with NGOs and women organizations, as well as vulnerable social groups (IDPs, poor, disabled; ethnic minorities etc.). This will help to include in the Action Plans the projects, which are really meeting the demands of local population.

Issue 11: Risks of failure of the programs aimed on prevention of migration of population from Mountainous Regions. The outmigration of population from mountainous areas supports disproportional distribution of population, which is a problem for each target region, as well as for the whole country. The problem is especially severe for Mtskheta-Mtianeti region, where more than 60 high mountain villages are abandoned. This has also its political implication, as the zone of outmigration is close to the Russian border and South Ossetia conflict zones. The problem is acknowledged in RDSs and the central government and local authorities of the target regions are in a process of developing special regulations and socio-economic programs to stop outmigration of population.

SECHSA Recommendation: Facilitate development and approval of legislation for Mountainous regions and adoption of a system of privileges for the population and companies operating in these regions (low taxes or tax exemptions; low fees for electric power and natural gas; low corporate taxes for companies; specific beneficial conditions for providing start up financing and bank credits etc.). Establish a zone of specific economic regime. Improve infrastructure and social services. Establish business incubators for supporting SMEs operating in the mountainous areas.

Issue 12: Risks for Regional Development associated with low integration of large groups of ethnic and religious minorities in entire socio-economic system of the country. This is an issue of particular importance

for the Samtskhe-Javakheti region, where in many municipalities Armenian population is prevailing. In case if this part of population is not well integrated in country system, this will become a source of many social and political problems and hinder sustainable development of the region. The problem is not specifically addressed in SJ RDS, however it may have a tangible impact on the success of SJ RDS implementation. Lack of knowledge of Georgian language is one of the factors hindering socio-economic integration of the local Armenian population with the rest regions of Georgia. The programs aimed on teaching the Georgian language are not always successful, as sometimes this is perceived by local population as not needed or even as some expression of a pressure from ethnic majority.

SECHSA Recommendations: Create socio-economic integration plans for the regions with compact settlement of ethnic minorities. These plans should establish favorable economic conditions in the target areas and facilitate attraction of investments from other regions of Georgia and establishment of sustainable economic chains: a) easy access of products generated in target regions to the markets in the rest part of Georgia; b) easy access to materials produced in the other regions of Georgia;

Link the programs of teaching Georgian language with the training programs aimed on know-how transfer and capacity development programs for SMEs and individual farmer groups

4.1.3 Impacts on Cultural Heritage.

The major strategic impact of RDSs on cultural heritage should be beneficial, as the RDSs are aimed on improvements of the overall socio-economic conditions in target regions, and sustainable economic system is a necessary prerequisite for preserving cultural heritage.

Components of the RDSs aimed on improvement of environmental and sanitary conditions, in general are also beneficial for cultural heritage, as prevention of pollution or erosion processes and environmental degradation also indirectly protects the CH monuments located in the target area.

More specifically, strategic impacts of RDSs on Cultural Heritage are related mainly to the Tourism Development components of the RDSs. These issues are analyzed in details under the RDTs context in next chapter.

Development of large HPPs are associated with the potential changes of microclimate in certain zone adjacent to the reservoir. This issue is often exacerbated, however should be studied, particularly, in case of cumulative impacts of several HPPs developed in the same watershed or the same micro-region. In case if the climate modeling confirms that the changes of climate are really expected, indirect impacts of those changes on the CH monuments should be also analyzed and mitigation plan provided.

The other components of the RDSs, especially those related to the development of energy and infrastructure sectors, definitely are associated with the potential impacts on the cultural heritage. However, these are not strategic type of impacts, but direct and local impacts associated with particular projects. Such impacts are analyzed and prevented/mitigated at the level of project-specific EIAs and EMPs.

Potential direct impacts on CH related to tourism infrastructure development projects are addressed in ESMF for RDP III and similar approaches are applicable for RDS subprojects.

4.2 IMPACTS RELATED TO THE REGIONAL TOURISM DEVELOPMENT STRATEGIES

Introduction

The RTDSs for Samtskhe-Javakheti and Mtskheta-Mtianeti regions do not contain any review of potential environmental, social or cultural heritage impacts associated with the tourism development. Accordingly, the impact analysis presented below summarizes findings of SECHSA and SECHSA provides the recommendations on impact mitigation, to be considered during the RTDS implementation.

In particular, the SECHSA provides an overview of the medium and long term risks which may arise from tourism development in the project area and from RTDS implementation, as a result of exceeding carrying capacity of tourism destinations.

The features of the natural and socio-cultural environment, which are important resources for tourism, attract people because of aesthetic, recreational or educational/scientific value. However, many of the same features are particularly sensitive to disturbance by human activities. Negative impacts resulting from inadequately planned and uncontrolled tourism development can easily damage the very environments on which the success of the project depended. This in turn may severely reduce project benefits. In other words, without careful attention to the balance between the volume and type of tourist activity and the sensitivities and carrying capacities of the resources being developed, tourism projects can be not only environmentally harmful but also economically self-defeating. Accordingly, for the purpose of analysis of tourist impacts we tried to apply certain concepts like, carrying capacity or limits of acceptable change. At the same time, we recognize that these conceptions are useful only to the extent they focus discussion and discourse, but not as a practical tool for numerical estimations of limits of visitors.

"Tourism Carrying Capacity" is defined by the World Tourism Organisation as "The maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction". This definition picks up general idea that capacity is the point at which a destination or attraction starts experiencing adverse as a result of the number of visitors. In general, this concept is applicable for environmental receptors (protected areas, sensitive habitats), cultural heritage sites (historical buildings, monuments) or local social environment at the destination sites. According to this concept, the managerial actions aimed on mitigation of tourist impacts should be either aimed on increasing the carrying capacity of the site or, in case if it is deemed impossible, to control the amount of visitors under the threshold.

Carrying Capacity of the tourist destination site is determined by specific features of sensitivity against the corresponding tourist activities. E.g. caves are specifically sensitive to microclimate changes related to tourist flows. Bat colonies inhabiting caves are sensitive to noise and light caused disturbance, while aquatic fauna to the contamination and possible changes of hydrological regime. Carrying capacity of the cultural heritage sites is determined by physical fragility of the structures (buildings; paintings; remains etc.), as well as sensitivity of the site in terms of existing religious or traditional practices, which could be affected by the tourist flows etc.

Carrying capacity is not fixed. It depends on many different factors and develops with time and the growth of tourism and can be affected by management techniques and controls. Roughly, carrying capacity could be viewed as a range of thresholds. Each discrete level in this range is determined by specific combination of factors and corresponds to certain development period. Adequate managerial actions may neutralize the factors determining first level threshold and increase the carrying capacity of the system. However, with the growth of a tourist flow at the next stage of development, new limitations could be faced, determined by the other set of factors. Such vision allows applying tiered approach for management arrangements and planning, through identification of required immediate measures, medium-term actions and long-term plans or programs.

The planning should be based on identification of the most critical factors affecting current situation and determining the lowest threshold of carrying capacity in the range. Immediate arrangements should be focused on mitigation of these critical factors. Medium- and long- term measures could be planned to address factors that are supposed to limit carrying capacity at the next stage of development (some years later, in the context of tourism development). In general, the factors critically affecting the current situation could be identified to

the extent required for planning efficient mitigation measures, while the medium and long-term scenarios could be less clear and in this case optimal solution could be planning of future in-depth studies, rather than proposing detailed mitigation measures.

Based on above described approach, we have focused our efforts on identification of the major factors limiting the carrying capacity of the tourist destination sites at present and proposed relevant mitigation strategy. Following carrying capacity concept, we proposed to apply tiered approach for management arrangements and planning, through identification of required immediate measures, medium-term actions and long-term plans or programs.

4.2.1 Tier 1 Actions

The RTDSs aim to support responsible tourism and development of tourist products for the target clientele interested in history, culture, healthcare and wellness, quality wine, and adventurous natural settings, which tend to create less social pressure and bring more benefits to the host areas. Besides, tourism related activity in Samtskhe-Javakheti and Mtskheta-Mtianeti is currently down as compared to the levels at Soviet times and rebounding to the historical volumes would not lead to exceeding the basic carrying capacity. Thus, in a short-term perspective, only those factors are important that may lead to reducing this basic, historical level of the carrying capacity. For immediate actions (tier 1) we have focused our efforts on identification of the major factors limiting the carrying capacity of the tourist destination sites at present and proposed relevant mitigation strategy.

The following critical factors have been identified and mitigation strategies proposed as tier 1 actions:

1. Infrastructure limitations: In general, most critical possible impacts, related to exceeding of the carrying capacity of sites are:

- pollution due to poor sanitation, lack of toilets and sewage systems at the sites of destination
- pollution due to improper waste collection system at the sites of destination and lack of waste collection facilities
- pollution due to improper waste management and lack of waste disposal facilities region-wide
- bad quality of local roads and associated travel risks and discomfort, dust
- lack of integrated site management (deterioration of storm-water drainage systems, lack of electricity resulting in uncontrolled tree felling) causing development of erosion and local landslides

Mitigation: The issue is clearly recognized by the Government as major problem. The most part of these negative factors are addressed in the RDS and RTDS programs for target regions and partly are incorporated in RDP III program. Mentioned impacts will be mitigated through installing proper toilets, sewages, water supply systems, electricity, waste collection facilities and establishing efficient management systems. The same approach will be applied for developing tourism circuits and related destinations proposed in RTDSs. The urgent issue to be resolved is construction of regional sanitary landfills for final disposal of wastes generated by tourists and local population.

2. Uneven distribution of tourist flows and creation of peak flows at limited areas, which may result in local exceeding of carrying capacity: Uncoordinated development of the regional tourist infrastructure may result in focusing the tourist flows within limited areas, around the most advanced sites of destination.

Mitigation: The RTDSs considers integrated management and coordinated plan of development of different hubs and tourist circuits with balanced distribution of destinations within the target regions. Rehabilitation of infrastructure and monuments in different parts of Samtskhe-Javakheti and Mtskheta-Mtianeti is proposed also in RDP III (different circuits and destinations comprise Borjomi, Akhaltsikhe and Akhalkalaki hubs for Samtskhe-Javakheti and , Mtskheta, Khevsureti and Kazbegi hubs for Mtskheta-Mtianeti region. All this will enable distribution of the tourist flows according to carrying capacity of destinations and minimize risks of local overload. Small hotels spread along the tourist circuits will have less concentrated emissions, discharges, competition for resources, impact on traditional way of life and lower risks of revenue leakages, as compared with the scheme of developing large hotels.

4. Rapid growth of tourist visits in most fragile, pristine areas and natural heritage sites, which may result in local exceeding of carrying capacity.

The magnitude and scale of impacts depend on the size and type of tourism development proposed, relative to the fragility of its proposed environment. Recreational tourism involving a variety of sporting activities and a large hotel complex infrastructure has a greater potential to degrade fragile ecosystems than projects which attempt to attract tourists with scientific or educational interests such as birding, nature photography, or ethnography, historical sites and archaeology.

Mitigation:

SECHSA recommends diversification of the spatial distribution of tourism sectors and facilities: Large hotels and SPA and healthcare facilities will be developed in traditional resort areas, like Borjomi, Bakuriani etc. These resort areas were very popular in Soviet time and allowed to accommodate large amount of tourists without unacceptable load on environment. These resorts can rapidly increase their capacity and receive much more tourists than current flows. For protection of sensitive environmental sites, like protected areas (Borjomi-Kharagauli Protected Areas, including National Park, Kazbegi National Park etc.), it is recommended that only small boutique hotels are developed in areas adjacent to these sensitive sites, while the tourists accommodated in larger hotels located in urban areas (Borjomi, Akhaltiskhe, Mtskheta, Kazbegi etc.) will have a chance to visit these environmentally sensitive destinations for short time through touring activities. On the positive side, we would recommend to support 'ecotourism' projects, which can combine conservation of natural and cultural sites with economic and recreational benefits. Introducing an accepted world-wide practice of tourists contribution in favor for Ecological Funds could be also considered as a mitigation strategy aimed on creation of resources for better planning and management of protected areas.

5. Rapid growth of tourist visits in holly sites and operational churches and monasteries.

The carrying capacity of the operational churches and monasteries is not determined only by physical conditions and characteristics of the monuments and related infrastructure. The amount of tourists, movement of tourist flows and their activities should not affect the church services, routine life of the clergymen and prayers. As noted by the Georgian Orthodox Church representatives, *the clergymen should not become just a tour guides and/or part of attraction, but should have opportunity to conduct undisturbed routine church services.*

Mitigation:

Obligatory procedure of consultations with the central and local representatives of Church should be established, to ensure harmonization of tourism activities with the normal day to day operations of monasteries. Admissible peak amount of tourists visiting churches and monasteries, sites and trails allowed for tourists, as well as time schedule for visits, dress-code and behavior norms should be agreed with the clergymen.

4.2.2 Tier 2 actions are aimed to address medium and long-term impacts:

Tiered approach for remedying medium and long-term impacts does not mean that no immediate actions are considered in that regard. The specificity is that the immediate actions of tier 2 are focused on further in-depth assessment and evaluation and development of medium-term action plans to address medium and long-term impacts.

1. One of such proposed immediate actions is detailed elaboration of carrying capacity concepts, while developing new updated versions of the management plans for the protected areas located in Samtskhe-Javakheti and Mtskheta-Mtianeti region. The old management plans have expired for time being. Currently, temporary regulations are at place and the Agency of Protected Areas is planning to update the Management Plans. SECHSA proposal is to analyze within these management plans the impact scenarios related to increase of visitors and to provide set of managerial measures aimed on control of number of visitors and their distribution along the trail routes. In particular, SECHSA recommends Agency of Protected Areas to initiate in-depth studies of tourist flow impacts on macroclimate and air quality, water resources, stability of the karstic landscape and specific fauna of the Samtskhe-Javakheti and Mtskheta-Mtianeti caves. The outcomes of such studies should be used for determining acceptable tourist loads and carrying capacity of caves.

2. SECHSA recommends NACHP to assess in more details the expected change of spectrum and magnitude of potential impacts on cultural heritage, related to expected growth of tourist flows in long-term perspective. Adequate mitigation program and set of specific limitations could be elaborated based on the proposed in-depth assessment. Principles and methodology for estimation of carrying capacity similar to those proposed in the study “Sustainable Tourism Development in Kakheti through Cultural Heritage, 2012”, financed by WB could be applied for Samtskhe-Javakheti and Mtskheta-Mtianeti region as well.

3. SECHSA recommends initiating a comprehensive Regional Waste Management Plans (RWMP) related to waste management in Samtskhe-Javakheti and Mtskheta-Mtianeti regions. The RWMP should cover issues of waste collection throughout the Samtskhe-Javakheti and Mtskheta-Mtianeti region, separation, transportation and final disposal. Optimal number and location of disposal facilities should be determined. The non-compliant old landfills should be properly closed and sites reinstated. The RWMP should be developed under the context of Samtskhe-Javakheti and Mtskheta-Mtianeti RDSs approved by Ministry or Regional Development and Infrastructure (MRDI) and should adequately address industrial, municipal and tourism related waste management issues. It should be stressed that not only wastes generated by tourism sector, but industrial waste and pollution has its negative impact on tourism development. Implementation of the RWMP and in particular, development of waste collection system at tourism destinations and disposal facilities in region is necessary for the overall success of the RTDSs.

4. Strategic assessment and planning is required also to estimate specific safety risks for tourists (particularly, environmental risks) and for planning emergency response and salvage operations. SECHSA recommends following specific risks to be analyzed and addressed in follow up strategic assessments and management plans:

- Geohazard risks are characteristic to Samtskhe-Javakheti and Mtskheta-Mtianeti region. Risks of natural disasters and hazardous processes (flashfloods and flooding, debris-flows and mudflows, landslides, avalanches, etc.) should be assessed. Zoning of risks, notification system, prevention and response plans and salvage operations should be described in the plan and the relevant response systems should be developed.
- Forest fire risks: Development of Regional Fire Protection Plan, fire prevention guidelines, notification system, response plans and salvage operations should be described in the plan and the relevant response systems should be developed. This is important for the forested sites close to the tourist routes, as well as for the most valuable forest in more remote areas.
- Risks of transmission disease and Zoo-anthropogenic assessment of risks of the hazardous human and animal diseases: There are many registered and unregistered burial sites and pest holes of anthrax in both target regions. Any development related with the earthworks and excavations near the pestholes are associated with the risks of secondary recontamination and spread of disease. Preliminary more detailed Risk Assessment with thorough analysis of different archives and development of management and monitoring plan is required. Current capacity of the MoA is not sufficient to carry out relevant studies. Two aspects should be stressed in relation with the risks of Zoo-anthropogenic diseases, and particularly anthrax:
 - i) probability of secondary recontamination due to direct impacts of tourism activities is low, although the consequences could be high.
 - ii) probability of Zoo-anthropogenic diseases is increasing significantly **due to indirect and cumulative impacts** related to the tourism development: major transport infrastructure projects, like construction of Akhalkalaki-Kartsakhi railway are associated with the large scale earth-works and high risks of recontamination by soil infections.
- Risks related to uncontrolled contact with wild animals: during the recent years many cases are registered in Georgia, and particularly in Samtskhe-Javakheti and Mtskheta-Mtianeti region, of hazardous contacts with wild animals: wolves and jackal attacks and transgression of reptiles to the residential areas have been recorded. Proliferation patterns for wolves and other vermin animals should be studied, proliferation should be controlled and set of protection measures and notification/salvage system to be implemented. Contact with wolves and snake-bites are more probable in remote areas, for eco-tourists. Serpent vaccine storages should be ensured as well.

7. An important positive externality of tourism development is increased environmental awareness, both in the local population and governments on municipal as well as national levels. The main attractions of Samtskhe-Javakheti and Mtskheta-Mtianeti are natural and cultural heritage based, and if natural resources dwindle, then so will the inflow of tourists. As a consequence, environmental and cultural heritage protection issues are treated with increasing attention. These medium term positive impacts could be enhanced, and SECHSA recommends including awareness building programs for local population, tourists and investors aimed on protection of natural and cultural heritage. The awareness building programs could be coordinated by MoE, Agency of Protected Areas, National Tourism Agency and NACHP, within the frames of their competence.

4.2.3 Impacts on Biophysical Environment

There is evidence at the aggregate level that economic development may damage environmental carrying capacities. Tourism is not solely responsible, but tourism related development might be intensive in many of the most serious pressures: damage to fragile ecosystems, consumption of fresh water, aggregates, high quality (low, flat, stable, fertile) land and production of non-biodegradable solid waste.

Key possible impacts and mitigation measures to the biophysical environment may include:

- **Impact:** Loss of ecological resources and biodiversity in extremely sensitive areas due to greater access to remote destinations, increased tourist numbers, uncontrolled tourist behavior, introduced external species, and disturbance of habitats. Sometimes, tourists worn down the marked trails and created alternate routes, contributing to soil impaction, erosion, and plant damage. Most aggressive tourist sectors, like trophy hunting, biking, illegal poaching or other misbehavior of tourists could be a reason for significant biodiversity losses.

Mitigation: As a short-term system of actions, proper instructions and *management plans* are required for *tourism operator companies*, to control the tourist's behavior and to exclude high impact tourism activities within the sensitive areas. In long term perspective, SECHSA recommends to conduct in-depth assessment of correlations between the increase of number of visitors and threshold of tolerable impacts. The results of these strategic assessments should be used for developing management plans for medium and long-term management purposes. Awareness building programs for tourists, as well as phyto-sanitary control measures will be part of these management schemes. Phyto-sanitary measures should be implemented also country-wide. The capacity building needs for the MoA to ensure efficient control needs to be assessed and measures recommended.

- **Impact:** Increased tourist flow and induced development could be related to the loss of ecological resources and biodiversity in sensitive sites adjacent to tourist circuits (see sensitive sites defined in section 2) and competition for natural resources. Floodplain forest patches or fragments of medium- and high-mountain forests adjacent to project sites and roads are main receptors, as well as surface water resources. Induced development is probable for the areas located close to the tourist circuits. Illegal woodcutting, poaching, overgrazing and overall deterioration of environment could be a result of uncontrolled development and increased tourist flow. Because of the seasonal nature of many tourist activities, wildlife may be affected by large influxes of people at the critical times of migration, feeding, breeding or nesting

Mitigation:

- Restrict unplanned development and illegal construction through improving regulatory basis and enforcement mechanisms; Prepare land use maps and integrated development plans for the areas of concern around the tourist clusters and circuits in Samtskhe-Javakheti and Mtskheta-Mtianeti regions.
- Rehabilitate infrastructure and ensure power supply and, where possible, gas supply to minimize use of fire wood.
- Develop efficient system for combating forest fires at national and municipal level.

- Improve the efficiency of environmental supervision department. Ensure strict control on poaching, illegal woodcutting related to tourist activities, as well as induced development.
 - Encourage implementation of energy saving facilities and renewable energy schemes for use on tourism facilities and residential areas, as well as for investment projects. Consider energy saving and energy efficient technologies as one of beneficial criteria during the selection process. In future planning in addition to evaluating environmental and cultural factors, an integral part of ecotourism is the promotion of recycling, energy efficiency, water conservation, and creation of economic opportunities for local communities.
- **Impact:** Induced development could be related to landscape and visual impacts caused by road construction, unplanned development, illegal construction, and inappropriate solid waste storage and disposal.
Mitigation: Development of Master Plans and establishment of strict control on urban and rural design and construction, which is practiced in relation with the protected areas, should be expanded for all important tourist destinations, scenic landscapes, resort areas and recreational zones. Restrict unplanned development and illegal construction through improving regulatory basis and enforcement mechanisms.
 - **Impact:** Deterioration of surface and groundwater quality due to inadequate wastewater treatment facilities and dumping of solid waste into surface water bodies.
Mitigation: Eutrophication of sensitive lakes (e.g. Bazaleti lake) may occur even in case if the treatment facilities for the wastewater comply with common national standards. Requirements for the quality of discharged water in valuable lakes (Tabatskuri, Bazaleti etc.) with the specific and fragile ecosystems should be stricter, than common standards. The simplest solution, however, is to restrict construction of hotels, as well as any food processing plant at a distance less than 200m from the lake or stream inflowing into the lake. Strict control on compliance with the standard wastewater discharge requirements still should be valid for these facilities.

4.2.4 Social Impacts Related to RTDSs

Tourism is often viewed as an engine of economic growth that can generate considerable amounts of foreign exchange for the host countries. As a result many poorer countries are putting emphasis on the promotion and development of this industry for future economic prospects. However, the economic impacts of tourism, particularly certain types of tourism are far from clear cut and many of the negative consequences are understated.

Indirect linkages between tourism and local cultures, businesses, resident populations and workforces are potential problems. Failure to recognize them can diminish project benefits, as well as inflict adverse socioeconomic impacts on the local population.

Local infrastructure and services

Impact:

Tourists increase demands on local infrastructure- transportation, energy and water supply, wastewater collection and treatment, solid waste disposal, and healthcare facilities- and on the variety of public services that are usually the responsibility of local government. Often the demands have significant seasonal peaks. Competition with the local population for the resources and infrastructure may become a serious issue. Without coordination and planning, service demands may exceed capacity with adverse results for residents, as well as tourists.

Availability of clean water for drinking, provision of wastewater treatment consistent with the capacity of local water bodies to assimilate pollution load, and adequate facilities for solid waste disposal are critical issues for

this sector. If these services are provided by local government or independent utilities, the project sponsor should demonstrate that detailed information on the tourism development has been furnished to those agencies and that they are prepared and able to meet the project's needs. If the services are not available from local agencies, the plan for the project should show clearly how the developer proposes to provide them, and the impacts of the proposal should be considered in any EA or other environmental analysis.

Mitigation:

In case of Samtskhe-Javakheti and Mtskheta-Mtianeti Regional Development Program (RDP III), MDF, which is the implementing agency, during the recent years has already implemented in Samtskhe-Javakheti and Mtskheta-Mtianeti region large scale and local municipal projects aimed on improvement of the municipal infrastructure (water supply and wastewater systems, local roads). MDF has the exhaustive information regarding the existing utilities and their deficiency region-wide. The investment program is designed in a way that it includes improvement of water supply and wastewater systems in all project destinations, where the systems are deficient. Rehabilitation of infrastructure is considered also as a support for private investments in tourism and food processing sector. The same approach should be applicable for the overall frame defined by RTDs.

Socio-Economic Impacts

Impact:

Assessments of tourism projects should include analysis of the projected distribution of costs and benefits. Whereas the benefits of tourism may be assumed to accrue to local residents, residents are likely to incur more of the costs and may enjoy less of the benefits than visitors, immigrant workers or commercial intermediaries. For example, if high-quality employment opportunities are expected to result, how many jobs will be made available to local residents and for how long, especially if training is required to qualify them for the work? National or regional laws and regulations concerning expatriate employment will provide a base for evaluation of probable impacts.

The other socio-economic impact often associated with tourism is leakage. Leakage is the loss of tourist expenditure as a result of goods and services being brought in from outside the area. These may be the import of foods and other hotel requirements, outside managerial expertise, repatriation of profits by owners, overseas marketing costs, transport and other services from the tourist source country. Loss of business by local enterprises as all-inclusive supplies practiced by the large hotels and resort complexes. According to the UNEP 'about 80% of travelers' expenditures on all-inclusive package tours leak out of the country. Most of the money goes to airlines, hotels and other international companies and not to the local areas where the tourist facilities are located' (<http://www.unep.org/pc/tourism/sust-tourism/economic.htm>).

From time to time the economic impact analysis needs to be updated in terms of where the money is being spent. These are most likely to have all-inclusive packages providing everything the visitor needs leaving fewer opportunities for local businesses to prosper. The large hotel chains are particularly prone to leakages. This is because they tend to supply common standards across all their hotels. In countries with small domestic markets that may not supply or meet international standards for particular goods the hotels will import equipment, food and drink and other goods. Therefore much of the tourist expenditure ends up abroad. There are also prone to "export leakages" which result when the overseas investors repatriate profits. This is most likely when it is an international hotel chain. Where smaller-scale community based tourism dominates there is a near complete reliance on local goods and services. Although hotel operators are entitled to duty relief on imported goods only one hotel has taken advantage of this.

Mitigation:

Administration system regulating private investments in tourism and supporting businesses (food processing and supply; healthcare services etc.) should include mechanisms (legal, contractual, selection principles,

conditions for supporting etc.) creating incentives for the private investors to employ local population, use local products and suppliers;

The local labor force may need training in order to compete for jobs generated by the project and thus to participate fully in its benefits. Small business management, tourism management and similar training tools will be required.

As the criteria for investment projects, SECHSA recommends to support those of the food processing proposal, which envisage production of ecologically pure food products from local sources and traditional technologies. This should be beneficial for tourists, as well as for producers and will also serve to minimize the revenue leakages.

Marketing and advertising of high quality and ecologically pure products should be supported by the Government policy, as well as quality control mechanisms.

Impact:

As an indirect result of the planned tourism development, significant socioeconomic benefits can be expected to accrue, particularly in the rural areas. The greatest challenge is ensuring that economic benefits are shared equitably amongst local communities.

Mitigation: all the households, businesses and other stakeholders will receive their benefits equally and no preferences for selected households are practiced under the projects implemented within the frames of the RTDSs. This is relevant for business selection process in programs supporting private investments, selection of private buildings for rehabilitation, provision of equal opportunities for employment etc. No discriminative selection practices will be allowed.

Other social Impacts:

Other examples of the social impacts are summarized below:

- **Impact:** Developers are requiring the Government to improve the basic infrastructure before they move in. This diverts public money to upgrade public services away from where it is required most.
Mitigation: MDF has already implemented a lot of projects for improving municipal infrastructure in Samtskhe-Javakheti and Mtskheta-Mtianeti region and this program financed by different donors is ongoing. Additional financing for the infrastructure needed for developing tourist facilities will not affect this basic program of municipal infrastructure rehabilitation.
- **Impact:** Implementation of the infrastructure improvement projects may lead to increase of tariffs. Differentiation of tariffs for water, sewerage, and other services may be necessary to avoid burdening local users unfairly.
Mitigation: no additional increase of tariffs related to tourism related infrastructure component is envisaged.
- **Impact:** Construction of planned tourist facilities may cause displacement and involuntary resettlement. The projects that will be implemented under the RTDSs may impose resettlement impacts.
Mitigation: WB OP/BP 4.12 Safeguard Policy for Involuntary Resettlement will be applied to ensure full compensation of lost assets at the replacement cost, and additional rehabilitation of vulnerable and severely affected households. In order to reconcile the gaps between the Georgian legislation and WB requirements, MDF has elaborated Resettlement Policy Framework for RDP III. The RPF includes also compensations for the temporary impacts. SECHSA recommends the Government of Georgia to apply principles similar to those adopted in RPF for execution of resettlement related to the other projects under RTDSs.

- **Impact:** The influx of large numbers of foreign tourists into a local culture and the likely clash of contrasting life styles that may result can have impacts on local cultures; lead to change of traditional values. Stimulation of prostitution, drug proliferation, increase of criminality and transmission diseases is often associated with rapid development of tourism industry.

Mitigation: The RTDS strategies are focused on developing cultural heritage, wine, healthcare and wellness, eco – and agro-tourism sectors, for which the mentioned impacts are less severe. Large amounts of tourists will be concentrated only in traditional resort sites, like Borjomi and Bakuriani or Gudauri and Kazbegi, which are adjusted to accommodation of significant amounts of tourists and have traditions of managing healthcare and skiing facilities. In other clusters and tourism sectors, mostly small scale boutique hotels managed by local residents will be stimulated rather than large scale hotels owned by transnational companies. This will support local small and medium size business, employment of local residents and support for popularization of local traditions, lifestyle. Small hotels and cultural tourism have less impact on traditional values as compared with large transnational hotels, casinos, entertainment oriented facilities. Georgia is multiethnic and tolerable society and no religious conflicts are expected due to tourist influx. Specific behavior rules in certain religious or traditional sites will be explained to tourists through preliminary instructions given by tourist operators.
- **Impact:** Development of fast-food industry may affect local cousin and related small business. Changes to traditional lifestyles may result in negative social effects. For example, communities living in remote areas may find that they lose supplemental income from sources such as hunting, collection of fire wood, fishing, etc if access to these resources is restricted for tourism development.

Mitigation: The strategy proposed by RTDS aims restoration of traditional activities and lifestyle of old resorts (Borjomi, Bakuriani, Likani). Besides that the ITDSs are focused on developing cultural heritage, wine, national cousin and agro-tourism. Small scale boutique hotels and commercial and traditional food processing facilities managed by local residents will be stimulated rather than large scale hotels and large plants owned by transnational companies. This will support local small and medium size business, employment of local residents (mostly – family business) and minimization of leakages, support for popularization of local cousin, traditions. Development of supporting infrastructure will minimize the need for fire – wood. The project will not create new restricted zones.
- **Impact:** Induced development may occur at the fringes of tourist areas, including migration to the better developed areas. Given the limited carrying capacity of the sites in terms of space and infrastructure, in addition to cultural differences, migration can become a potentially important problem. Under-regulated housing development is a recurring problem in many developing country contexts and is not limited to tourism development. The latter exacerbates the problem however, with what are often large and aesthetically unpleasing buildings. A lack of zoning laws and the fact that land is almost exclusively privately owned may lead to a frontier mentality and result in unplanned construction activities and architectural mismatches. This is potentially a problem in Samtskhe-Javakheti and Mtskheta-Mtianeti, where lack of construction guidelines could jeopardize the colonial look of the town as it expands accommodations to receive more tourists.

Mitigation: The Government is planning development of strategy for sectoral ministries and local self-governments and some strategic plans and guidelines will be developed and implemented to improve spatial planning and to introduce integrated Masterplans.

4.2.5 Impacts on Cultural Heritage

Socio-cultural considerations are particularly important in impact assessment of the multi-component RTDS programs, as well as for RDP III. The relationships between cultural property issues and a project can range from direct to indirect.

Most typical of the direct impacts are outlined as follows: Any project which involves excavation, leveling or filling of earth as a part of construction or operational practices, is a potential threat to archaeological and

historical remains. Construction related dust, emissions and vibration may damage the monuments. The visual as well as the physical impact of accommodations and other structures that will be built to serve tourists should be considered. Ease of construction and 'efficient' design should be tempered by considerations for harmony with the surrounding natural environment and socio-cultural context.

More general cultural heritage impacts are related to heritage-based tourism, particularly cultural immersion tourism activities. Cultural sites can tolerate finite numbers of visitors, just as natural sites, and this should be assessed in project design. The number of visitors and areas of access need to be controlled in order to prevent sites from deterioration due to overuse and physical proximity (visitors touching walls, paintings, sculptures). Carrying capacity limits of the tourist sites are discussed in general in paragraph 4.2.1. The other particular aspects of the project impact on CH sites are discussed below.

Impact

According to RTDSs and particularly within the RDP III, the Government will invest in the upgrade and development of infrastructure in the historical settlements as well as in the proximity to the cultural and natural heritage sites. RTDSs envisage also restoration activities in CH buildings or their immediate proximity. Such interventions carry additional risks of damaging monuments in case the design and methodological approaches used are unfit for conservation of the historical and aesthetic value of these sites or if tourist visitation of these sites, increased as a result of the project interventions, is not managed in a sustainable manner. Cumulative impacts of developing various elements of infrastructure in and around historical settlements, in or around natural sites of recreational and aesthetic value also add to the potential risks of the project.

Mitigation

All the designs within the project related to conservation-restoration of historical buildings, blocks and cultural heritage monuments should be managed by NACHP. The works should be designed in compliance with the national legislation and international best practices. NACHP will recommend PIU specialist for supervising the works. NACHP will take part in acceptance of completed works related to restoration-rehabilitation of historical buildings. Infrastructure rehabilitation projects will be supervised by Ministry of Culture. Public and stakeholders will be consulted at the early stage of project development.

Impact: Influx of tourists may stimulate illegal trade with movable archaeological remains and activities of remain searchers.

Mitigation: Control mechanisms should be enhanced

Impact: Commercialization of traditional artisan industries can lead to loss of authenticity with negative results for the artisans and possibly for the buyers as well.

Mitigation: This issue could be a subject for further in-depth study and recommendations for obtaining and managing certain donor grants and Governmental subsidies on support of truly traditional artisan production (individuals or family business).

Impact: Shooting photos of wall paintings may result in damage due to photochemical reactions induced by flashing.

Mitigation: Shooting photos should be limited to in monasteries and especially near the wall paintings

Impact

Activities such as tours of archaeological sites may conflict with local traditions and/or religious beliefs. Investments in new facilities, where sites are considered as sacred, as in the case of religious shrines, the impact is complex. It is important that such interventions be scientifically sound, and that they respond, as completely as possible, to patterns of social organization and existing social and cultural institutions. Traditions should be taken into account during operation of the tourist facilities.

Mitigation

All the designs within the project related to conservation-restoration of historical buildings, blocks and cultural heritage monuments are managed by NACHP. The PIU and NACHP will consult local communities in project

destinations regarding the design of facilities and planned activities. In case if there are some specific restrictions and limitations from the point of view of local traditions and religious opinions, this will be considered and adequately addressed in the projects developed under RTDSs. Project staff should ensure that the cultural heritage of non-dominant cultures are accorded the same care as that of the dominant cultures. This is especially important for Samtskhe-Javakheti region with significant Armenian population. In such instances it is strongly advised that a team be formed to develop mitigation measures. The team should have an art or architectural historian knowledgeable about the particular cultural tradition, an architectural conservator, an anthropologist familiar with the population of the area, and a coordinator who would bring together the relevant government organizations, experts, and community leaders. Consultations with CH authorities (MoCMP, NACHP; Georgian Orthodox Church; Local Communities).

Following request the representatives of Georgian Orthodox Church will be regarded:

“The representatives of the Patriarchate should participate in the preparation of the program in question right from the beginning. In addition to the Patriarchate departments, the representatives of the eparchies and churches and monasteries officially covered by the program should be engaged in the process. As for the plan to consider the issues and agreement, this should be organized as follows:

- The plan of the rehabilitation works at the churches and monasteries and on their adjacent territories must be worked out by the Church servants jointly with the relevant departments of the Patriarchate.
- As for the tourist infrastructure, naturally this will be worked on by the relevant branch specialists.
- The parties will let one another know about the plans of the works to be accomplished and discuss the prospects and feasibility of their realization.

On the territories adjacent to churches and monasteries in the first instance, we should try to create the environment and schedule the events for the visitors in the way, which will maximally preserve the cozy environment necessary for the Church Service. For this, the following issues should be specified for the visitors:

- The number of group members
- Permissible visit duration to the territory, and
- Strictly and partially limited areas and code of dressing and behavior.

It is similarly important for this process to be controlled and managed by the church parish under the guidance of the Church servants.”

Dress code at monasteries. Restrictions come from the patriarchate of Georgian Orthodox Church and monastery authorities.

The following restrictions may be recommended to visitors:

- Women are requested to put skirts on over their trousers. Skirts are already available at all entrances for free.
- Women and men are required not to wear shorts or open t-shirts;
- Women are required to cover head with scarf; also already available at all entrances for free.
- Men are required not to cover heads with sport caps;
- Noise and shouting are forbidden at the territory of monastery complex;

Photography at the monasteries: photography without verbal permission at some monasteries is not recommended to avoid conflict with monastery representatives. At the monasteries to take photos of nuns and monks without their permission is not allowed. There are some exceptions with prior agreement to monastery authorities.

5. STAKEHOLDER ANALYSIS

5.1 Stakeholders

Stakeholders having regard to the development of the Regional Development Strategies and Regional Tourism Development Strategies could be subdivided on:

- Project Developing and Implementing Agencies
- Regulatory Bodies
- Beneficiaries and affected communities and social groups (including vulnerable groups). The main beneficiary is population of the target regions, local businesses and SMEs, tourists and visitors
- Georgian Orthodox Church
- Local businesses
- NGOs and CSOs

RDP III is designed to contribute to the achievement of overall strategic development goals of the Georgia's government in Samtskhe-Javakheti and Mtskheta-Mtianeti regions through selective investment into activities that support implementation of RDSs and RTDSs. The Project Development Objective is to improve infrastructure services and institutional capacity to support increased contribution of tourism in the local economy of the Samtskhe-Javakheti and Mtskheta-Mtianeti regions. The Project activities are expected to benefit the residents, tourists and enterprises in Samtskhe-Javakheti and Mtskheta-Mtianeti regions. They are expected to receive improved access to, and quality of, public infrastructure; increased volume of private sector investment in the region; and increased small and micro enterprises in renovated cultural heritage sites and cities. The Government will benefit from increased overall tourism spending and satisfaction, job creation, improved institutional capacity of agencies, and improved capacity to operate assets.

5.2 Project Developing and Implementing Agencies

1. Ministry of Regional Development and Infrastructure of Georgia (MRDI)

The MRDI is a key Ministry, which is handling development and implementation of the RDSs and RDS related Action Plans. In particular, the tasks of the Ministry comprise:

- Development and implementation of the regional development policy, concepts and state programs related to infrastructure development
- Development of proposals on decentralization and deconcentration of the governance system and on separation and distribution of authorities of central, regional and local self-government bodies
- Coordination of regional programs and projects funded from local and foreign sources and assessment of their performance level within the frames of its competences;
- Development and implementation of the projects related to road infrastructure, water supply and sewage systems, municipal waste management facilities and systems
- Development of proposals for supporting entrepreneurship, incentivizing investment activities, creating jobs, development of social infrastructure; elaboration of regional socio-economic development plans and programs and coordination of their implementation;

2. Municipal Development Fund of Georgia (MDF)

The RDP III Project will be implemented by MDF and builds on its successful project management of other Bank financed operations. MDF will be responsible for all project implementation, procurement, safeguards, financial management and disbursements. Established by Presidential Decree # 294 on June 7, 1997, it has since developed into a solid non-bank financial intermediary (FI) that plays a central role in funding and developing regional and municipal infrastructure. Funds have been provided by the Government of Georgia, several international financial institutions and donors (including ADB, EBRD, MCC, SIDA, KfW, etc.) and its own revenue. Its solid implementation capacity and performance are reflected by the growing interest from the Government and donors to channel their grants and credits through MDF to municipalities.

The MDF is governed by a Supervisory Board that is comprised of the Prime Minister, key Ministers, parliamentarians and civil society (Transparency International Georgia). The Board's functions include: (a) overall supervision of Project implementation; (b) inter-agency coordination; and (c) review and approval of the annual work program, budget and reports. The Supervisory Board met several times during Project preparation and endorsed its design, cost, implementation arrangements and procurement plan. Meetings have been held regularly with the Prime Minister and the Minister of Finance, who also lead donor coordination.

The Project will also benefit from the recent reorganization of MDF, which addressed key weaknesses of the organization. The reorganization aimed at ensuring that the MDF is financially sustainable and that it is strategic in the activities it undertakes. To support the latter, a new unit was created to develop stronger partnership with municipalities. To support the former, two new positions, a credit management officer and a risk management officer, were created to strengthen MDF's credit management responsibility as a non-bank financial intermediary.

MDF is the Implementing Agency for the RDP III Project and will be responsible for all aspects of its day-to-day management, including its adherence to the ESMF adopted for RDP III project.

Environmental and social governance under RDP III will be exercised by MDF through its Environment and Resettlement Safeguards Unit.

3. The National Agency for Cultural Heritage Preservation (NACHP)

The NACHP is an entity of public law subordinated to the MoCMP. The Agency was established on the basis of the thirteen state Museum Reserves and entrusted to carry out the protection, maintenance, inventory, research, conservation and rehabilitation of cultural heritage and to advise the Ministry on the heritage policy issues. The Agency is responsible for management and monitoring of national monuments and World Heritage Sites in the country and for granting permits for conservation and rehabilitation project for these monuments. The Agency is also responsible for protection the inventory and promotion of movable and immovable cultural heritage objects, scientific research, consulting and expertise in the field of cultural heritage.

NACHP will collaborate with MDF under the RDP III and take part in selection of the RDP III SPs (especially, the components envisaging conservation/rehabilitation works on CH monuments).

4. The Georgian National Tourism Administration (GNTA)

The GNTA is an entity of public law subordinated to the Ministry of Economy and Sustainable Development of Georgia. The responsibilities of the GNTA include development of State Policy and strategic plans related to the tourism sector. The RTDSs for Samtskhe-Javakheti and Mtskheta-Mtianeti regions are developed in cooperation of GNTA, MDF and WB.

5. Regional and Municipal Authorities

The Regional and Municipal Authorities are deeply involved in preparation of the RDSs and RDS related Action Plans, as well as in implementation of the mentioned plans and selected SPs. The Municipalities will manage implementation of the projects financed from the local budgets and will be engaged in the management of projects funded from central budgets and special funds.

The interests of municipal authorities in relation with the RDSs and RTDSs include sustainable development of tourist sector in region and in particular municipalities, creation of new jobs and support to small businesses, development of food processing business, improvement of municipal infrastructure, improved waste management and sanitation, minimizing resettlement impacts, and additional interfacing between communities, government agencies and Ministries.

Self-Government in Villages

Pursuant to the Code a Gamgebeli will be authorized to appoint in the municipality's administrative unit a Gamgebeli's representative – a "Village Trustee", whose powers will be determined by the Regulations of the municipality Gamgeoba.

5.3 Regulatory Bodies

The regulatory bodies are the state entities having a role of issuing permits for implementation of the SPs or supervising the implementation process. The Construction permit for most of the SPs is issued by the local Self Governments. Construction Permits for large scale infrastructure, like airports, mainline water supply or gas supply systems, landfills – by the Ministry of Economy and Sustainable Development (MoESD). Positive conclusion of the MoENRP (through the procedure of Ecological Expertise of submitted EIA document) and of MoCMP is required for issuing Construction Permit for the project types listed in the law on Environmental Impact Permits (2008). The other SPs do not require preparation of EIA and Ecological Expertise. However, any construction activities within the protected areas or buffer zones, as well as within general or particular protection zone for cultural heritage monuments, should be carried out after obtaining relevant consent from the regulatory agencies: MoCMP and APA. Permits for conservation-restoration SPs is issued by the NACHP. Throughout project preparation process, all agencies involved at the national, regional and local levels were engaged in the development of the project design to ensure good utilization of local knowledge, their buying in and sustainability of their ownership.

Ministry of Environment and Natural Resources Protection of Georgia (MoENRP). MoENRP has the overall responsibility for protection of environment in Georgia. The Service of Permits of MoENRP will review Environmental Impact Assessment reports for those activities under RDP III which may require environmental permitting according to the Georgian legislation and will issue such permits as part of construction permits for the planned works. MoENRP is mandated to undertake control over the compliance of construction works with the terms and conditions of the issued permits.

The Ministry of Economy and Sustainable Development will review design documentation of SPs that may require construction permitting and issue such permits. Having environmental permits from MoENRP is mandatory for the issuance of a construction permit. The MESD is a state body related to both cultural and natural heritage management. The main task of the Ministry is to support and ensure sustainable development of the country. Among other issues, the Ministry deals with the alienation of state possessions including historic monuments and protected areas; urbanization and construction issues and development of tourism. The Department for Urbanization and Construction, the Privatization Department and the National Tourism Agency of Georgia are structural and subordinated units of the Ministry in charge of the above issues. The MESD compulsorily consults with the MoCMP when alienating, leasing or transferring the right of use of state owned monuments and heritage sites, developing the strategies for cultural tourism or undertaking other strategic actions which may have an impact on cultural heritage.

The Ministry of Culture and Monument Protection of Georgia (MoCMP) will provide its formal consent to the issuance of a construction permit for SPs requiring it incase construction is to be carried out in historic sites or zones of cultural heritage. If Construction Contractor encounters chance finds on a SP site, MDF must notify the MoCMP and receive its instructions on the further course of action. MDF may not authorize resumption of work until obtaining consent of the MoCMP confirming that all urgent measures are taken for the preservation of archaeological heritage.

The Constitutional Agreement between the State of **Georgia and the Apostolic Autocephalous Orthodox Church** (2002) regulates the relationship between the state and the Church. Its provisions (art. 7, 8 and 9) have a major impact on the management of cultural heritage in the country. By this agreement all the religious buildings and related structures on the territory of the country, in use or without function, standing or in ruins,

together with their parcels and also all the immovable ecclesiastic treasures protected in museums and archives are handed down in the ownership of the Church of Georgia (art.7 and 8).

The MoCMP must agree with the Church of Georgia in the process of adopting protection zones, rules and methodologies, planning and approving rehabilitation projects or scientific research of movable and immovable religious monuments. Together with the state, the Church is responsible for maintenance and care of the monuments in its ownership (art.7 and 9). The property of the Church is exempt from the state taxes (art. 5).

According to the Concordat the church is the owner of the majority of immovable listed properties in the country, most of which, at the same time, are living heritage sites, with the religious function being restored and enhanced after the fall of Soviet regime. Because of this special circumstance, the specific rules for maintenance and exploitation of these properties need to be elaborated.

5.4 Beneficiaries and Affected Communities and Social Groups

Local Population of the Regions and Affected Communities

Main beneficiary of the project is population of the target regions. First of all creation and sustainable maintenance of jobs and business opportunities, as well as increase of incomes is expected from the implementation of the RDS and RTDS. The other benefits expected from the RDSs are:

- improvement of environmental and sanitary conditions
- improvement of infrastructure and communal services
- better access to good medical services and education
- overall poverty reduction

The communities directly affected by the project may get not only benefits, but also negative impacts related to the SPs implementation: loss of private land plots and associated assets and incomes; environmental impacts and disturbances; competition for the local resources and benefits (with the project developers or incomers in case of induced development).

As of [General Population Census Results](#) 2014, , the population of Samtskhe-Javakheti totaled 160 504, which is a 4,3% of Georgian population. The last decade has demonstrated a decrease trend. 34% of the region's population (54,663 thousand people) lives in cities, and 66% (105,841 thousand people) – in the villages. Among the municipalities, the most residents are registered in the Akhalkalaki (60 975) and Akhaltsikhe (46 133) municipalities.

The population of the Mtskheta-Mtianeti region makes up 94 573 as of [General Population Census Results](#), 2014,. According to the population census data of 2002, the Mtskheta-Mtianeti population amounted to 125 400 persons. Most of them – 64 829 people (68,5% of the region population) – are registered in the Mtskheta Municipality, the least, 5261 people – in Kazbegi Municipality (5,5%).

Unemployment rate is reported to be 6.7% for Mtskheta-Mtianeti and 7.5% for Samtskhe-Javakheti. However, most of people accounted as employed are so-called “self-employed” people, who work on their agricultural land just for producing crops, that are used by the families for their own need but not for commercial purpose.

Vulnerable Groups

The certain social groups could be distinguished as vulnerable and treated as specific group of stakeholders. These could be ethnic or religious minorities, people under the poverty threshold, disabled and aged groups, IDPs and eco-migrants.

In Samtskhe-Javakheti the ethnic minorities (especially Armenians) are considered as important stakeholder. The Mtskheta-Mtianeti region is mostly populated by ethnic Georgians. A number of villages in Mtskheta Municipality are densely populated by ethnic minorities (Azeris, Ossetians, Russians, Assyrians, and Armenians).

Region	Total Population	Of which								
		Georgian	Azeris	Armenian	Russian	Ossetian	Ukrainian	Greek	Yezidis	Assyrian
Samtskhe-Javakheti	160 504	77 498	89	81 089	712	393	142	420		
Mtskheta-Mtianeti	94 573	89 343	2316	291	252	1327	80	44	61	709

The other large groups consist of Internally Displaced Persons (IDPs). The rest subgroups are poor receiving subsistence allowances, pensioners and women.

Internally Displaced Persons

Currently there are 1267 IDPs in the Samthkhe-Javakheti region. Their absolute majority is in the Borjomi municipality. No report describing their social, economic and other problems or assessing their needs is available at the moment.

After the 2008 war, the number of IDPs has dramatically increased throughout Mtskheta-Mtianeti region (up to 10 000) that represents 10% of the total population of the region.

Their social-economic conditions of IDPs living in Mtskheta municipality are satisfactory. However, their employment is not frequent. By order of the Government of Georgia (GoG) a youth club is being built for the IDPs in Tserovani settlement under Rural Support Project and a kindergarten in tsilkani village under infrastructure projects. The construction is financed with the allocations provided by the GoG to Mtskheta municipality.

In Dusheti municipality 349 IDPs live in Bazaleti sanatorium. 45 IDP households are socially vulnerable. Besides the financial support and allowances paid by GoG, the utility costs of these households are covered by the municipality. The IDPs are employed in local organizations as far as possible, namely 3 teachers in a public school, 2 IDPs – in agriculture and 3 IDPs – in the municipality board.

15 IDPs are registered in **Tianeti municipality**. Their social-economic conditions are average. Only a few IDPs are employed in various sectors. The local authorities provides assistance to the IDPs based on their demands and the financial resources of the local budget.

There are no IDPs in **Kazbegi municipality**.

Ecomigrants

As regards the environmental migration, several households live in landslide-prone zone in the villages of Dusheti municipality (Mleta, Vedzatkhevi, Sharakhevi), which need to be resettled as soon as possible.

Pensioners

In 2015, 35 235 people received pension and social aid package In Samtskhe-Javakheti region. This number makes 22% of the region's population and is not a high compared to the rest of Georgia. In Mtskheta-Mtianeti Region 22 401 persons receive pension and social aid package. This number makes 24% of the region's population.

Vulnerable receiving allowances (data for 2013 – 2014 years):

In 2015, subsistence allowance was received by 2843 families, which is 12,5% of those registered in the database in **Samtskhe-Javakheti**. This parameter is the lowest in Georgia. This household receive allowances amount 60 GEL per month for the head of household and for other members of family as poor (below poverty threshold).

In addition to the state programs, Samtskhe-Javakheti municipalities carry out various programs aimed at one-time assistance to the population below the poverty line, co-financing medical operations, reliefs for refugees and the people with disabilities, free dinner expenses, assistance to homeless children and other expenses stipulated under social or healthcare programs of the municipalities. The healthcare and social insurance programs designed by the municipalities' budgets are mostly homogeneous and do not differ from one another significantly.

In Mtskheta-Mtianeti region 6,060 households receive allowances as poor (below poverty threshold). The allowances amount 60 GEL per month for the head of household and for other members of family.

Gender data

52,4% men and 47,6% are employed in public and private sectors in **Mtskheta community** municipality. Therefore there is gender equality in this regard in the municipality.

The number of men and women employed in the municipality board and Sakrebulo of **Dusheti Municipality** is as follows: 43 men and 45 women in the municipality board and 4 women and 29 men in Sakrebulo. Most of the women have low positions. In general, involvement of women in political and economic activities of the municipality is evidenced by the fact that gender issues are associated more with social problems and not the economic ones.

In **Tianeti municipality** 215 women and 44 men are employed in the private sector and 320 women and 160 men – in public sector. One of the key factors promoting gender equality is professional training of the population, establishing vocational education institutes and training centers.

In **Kazbegi municipality** 505 women and 245 men are employed. The data shows that most of the employees are women. The lack of qualified specialists and low wages account for this situation, which is pointed out by the local population.

In order to keep gender balance some permanent structures should be in place in local authorities. Action plans of women promotion and gender equality measures should be developed. The increase of public awareness about gender equality, involvement of women in political parties and promotion of collaboration between local authorities and NGOs are essential for achieving the aforementioned objectives. .

Gender aspects have to be taken into consideration in municipal budgeting in order to ensure equal opportunities for both sexes and include gender-sensitive costs in the budget. Strategic plans of local municipalities should mainstream gender issues based on the participation of communities and active involvement of women

5.5 Local Businesses

Many small and medium sized businesses are represented in the target regions, especially those who are directly or indirectly associated with the tourism sector: owners of hotels, café, service providers etc. The list of companies operating in target regions is provided in CBA (2014) produced for RDP III. There are about 197

operating hotels, guest-houses and family houses in Samtskhe-Javakheti region and about 101 in Mtskheta-Mtianeti.

5.6 Potential Supporters and Opponents of the Projects Planned Under the RDSs, RTDSs or RDP III

Actually, it is logical to expect that all the stakeholders nominated as “beneficiaries” will be supporting the projects. However, in case of improper management and lack of consultations, the beneficiaries may be indifferent or even have negative attitude. To exclude these negative attitudes, it is important to properly inform the population about the projects and associated benefits and engage them in decision making, especially at the stage of selection of the local subprojects. Needs assessment should be conducted and the will of the local population integrated in the Action Plans developed according to RDSs.

The affected communities may have certain complains and resist to the project implementation. This may be related to physical impacts or inconsistency with the planned activities with the local traditions, religious beliefs and habits etc. This is especially relevant to the cases of ethnic or religious minorities or specific ‘sacral’ sites. Below we present a list including potential reasons for negative attitude.

Negative Factors:

- Loss of land and associated assets and incomes
- Physical disturbance (noise, dust, emissions, access problems etc.) during the construction
- Uneven distribution of benefits
- Induced development and associated competition for jobs, services and access to natural resources
- Uneven distribution of benefits by geographical regions
- Inconsistency of planned activities with the local traditions and habits
- etc.

The main instrument to remedy these risks is again meaningful and timely arranged consultation process.

6. ANALYSIS OF ALTERNATIVES

6.1 INTRODUCTION

Generally, analysis of alternatives within the frames of Strategic Environmental Assessment (SEA) considers comparison of environmental consequences of strategic decisions during selecting preferable development scenario out of several options, aimed on achieving the same goals. In Regional SEA different sectors could be compared to determine development priorities for the concerned region. Within that discourse pros and cons of tourism development could be compared versus development scenarios for other sectors, like industry, agriculture etc. Within sectoral SEA discourse different clusters of tourism could be compared. In both cases, “real” analysis of alternatives is possible if the proposed options are competitive and the preferred option should be selected. In case if the proposed scenarios are complementary and parallel implementation of these options is not unacceptable, than assessment of the options loses character of “analysis of alternatives” and takes a shape of “feasibility study”. However, interrelation of different scenarios (“competitive” or “complementary”), usually is being revealed during assessment and it is logical, that the results of such assessment are presented in a chapter “Analysis of Alternatives”. In general, this chapter contains analysis of different development scenarios, which often are considered as “competitive”, although in particular case could be “complementary”. For example, regional development of the sea-shore tourism (development scenario 1) and oil transportation facilities and terminals (scenario 2) are in most cases competitive scenarios, excluding or limiting each other as alternatives. However, in particular cases of successful spatial planning, these sectors could be viewed as complementary. Thus, analysis of scenarios, which are potentially competitive, is one of the subjects for this chapter.

Recently, the Government has completed several strategic studies to define priority economic sectors for Samtskhe-Javakheti and Mtskheta-Mtianeti regions Development.

The RDS 2014-2021 for Samtskhe-Javakheti region was completed and approved in 2013. For the Mtskheta-Mtianeti region the the RDS 2014-2021 is approved by the Regional Development Commission and published on the web-site of MRDI. The RDS documents were developed by the Regional Governor’s offices within their responsibilities, with extensive consultations with the municipal authorities, MRDI and local communities. The Regional Tourism Development strategies for Samtskhe-Javakheti and Mtskheta-Mtianeti Regions have been prepared in 2014 with the financial support of WB.

In the context of these strategic studies, analysis of alternatives in SECHSA is targeted on analysis of economic sectors proposed for the target regions as priorities within the RDSs and on analysis of tourism circuits and sectors proposed in RTDSs, and comparison of environmental, social and cultural heritage impacts in case if the proposed options are competitive.

6.2 REGIONAL DEVELOPMENT STRATEGY FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS AND ALTERNATIVE SCENARIOS

Regional Development Strategies for both target regions define priorities and propose to develop following sectors:

- **Agriculture** (modern technologies and new plant species for efficient cropping; Efficient technologies for cattle breeding and poultry; product storage and food processing facilities etc.)
- **Energy sector** (development of small and large HPP; use of alternative energy resources available in the region – wind-farms, solar energy)
- **Infrastructure** (regional and local roads; water supply and sewage; wastewater treatment plants; waste management facilities; electric power and gas supply; communication systems etc.)

- **Exploration and sustainable management of natural resources** (for both target regions the natural resources available for exploration comprises: fresh and mineral water resources; timber and forestry products; inert construction materials; Besides, certain amount of coal resources are in Samtskhe-Javakheti and the survey of potential oil fields is on the way)
- **Tourism** (more details related to tourism development will be discussed in chapters related to the RTDSs)
- **Supporting small and medium-size enterprises** (in tourism, agriculture, food processing, construction materials production, alternative energy, construction and service providing sectors)
- **Development of cross-border collaboration (trade, tourism, environment protection, energy sector,**
- **Environment Protection Programs**

It is proposed that all of these proposed sectors are developed in parallel as complementary components. No other alternative options (clusters) have been considered as feasible. Criteria used for prioritizing the prospective sectors were based on analysis of local resources, environmental and social conditions, traditions, market demand and other economical factors. All of these sectors could be developed in environmentally friendly manner and there are no feasible criteria for rejecting any of the proposed sectors.

It should be clearly understood, that development will be mostly dependent on activity of private investors and selection of business sector of their interest is decision of investors, while the Government has to control that the projects are developed in compliance with the requirements for the environmental, social and CH protection. In fact the Government proposes to support all the economic sectors within the target regions, developing of which is feasible from technical-economical standpoint.

6.3 TOURISM DEVELOPMENT STRATEGY FOR SAMTSKHE-JAVAKHETI AND MTSKHETA-MTIANETI REGIONS AND ALTERNATIVE SCENARIOS

Alternatives Proposed for Samtskhe-Javakheti and Mtskheta-Mtianeti RTDS

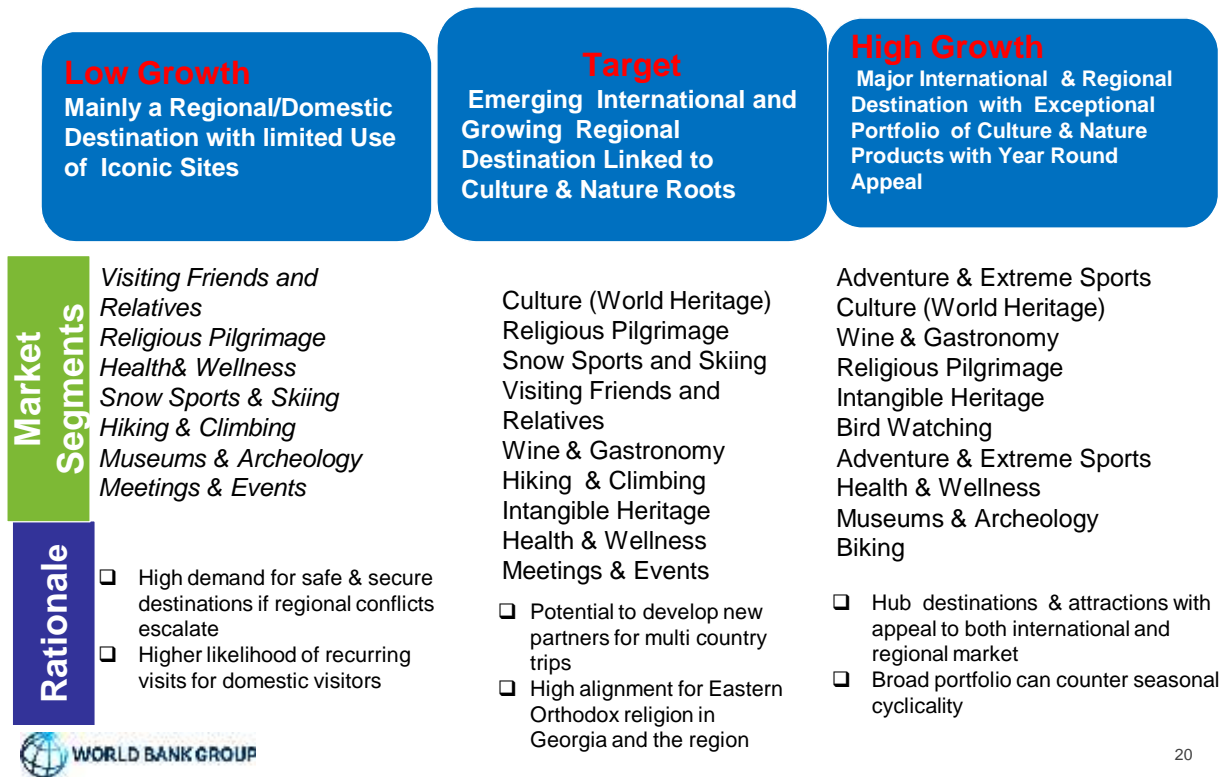
During the RTDS development, alternative value propositions were formulated based upon stakeholder meetings and staff analysis and are listed in the following figures. It was determined that the target value proposition would be the basis for the vision for both strategies. It is recommended that the value propositions and vision that follows be discussed in more detail by national and regional level stakeholders.

The selection of the target version from alternatives was based on purely economic criteria: analysis of tourism market demands, existing tourism attractions and tourism strategic positioning. In reality all of these alternatives envisage development of environmentally friendly clusters of tourism with manageable impacts. The impacts should be analysed and appropriate mitigation provided (see. Section 4 of this SECHSA). Environmental, social or CH impacts were not important factors for selecting preferable option out of these proposed alternatives.

The clusters of tourism and circuits proposed in RTDSs for each region are provided below:
Samtskhe-Javakheti

Recommended value enhancements for the Resort Cluster include (a) identification of traditional winemaking and gastronomy, establishment of wine and food degustation facilities, set-up marketplaces where locals can offer old traditional food, fruits, wine, and spirits; (b) development of new ski-lifts, snowmaking facilities and new winter adventure products – snowmobiles tours, ski-tours- in Bakuriani; (c) Bakuriani needs a recreational area for visitors and improved park facilities and Borjomi would benefit from a new spa concept integrated with recreation and fun; (d) extend the outdoor activities in the territory of Boromi-Kahargauli National Park and improve services at the entrances: Likani, Kvabiskhevi, Tsimubani, Abastumani and (e) develop winter and summer events focusing on sports and USPs.

Alternative Value Propositions



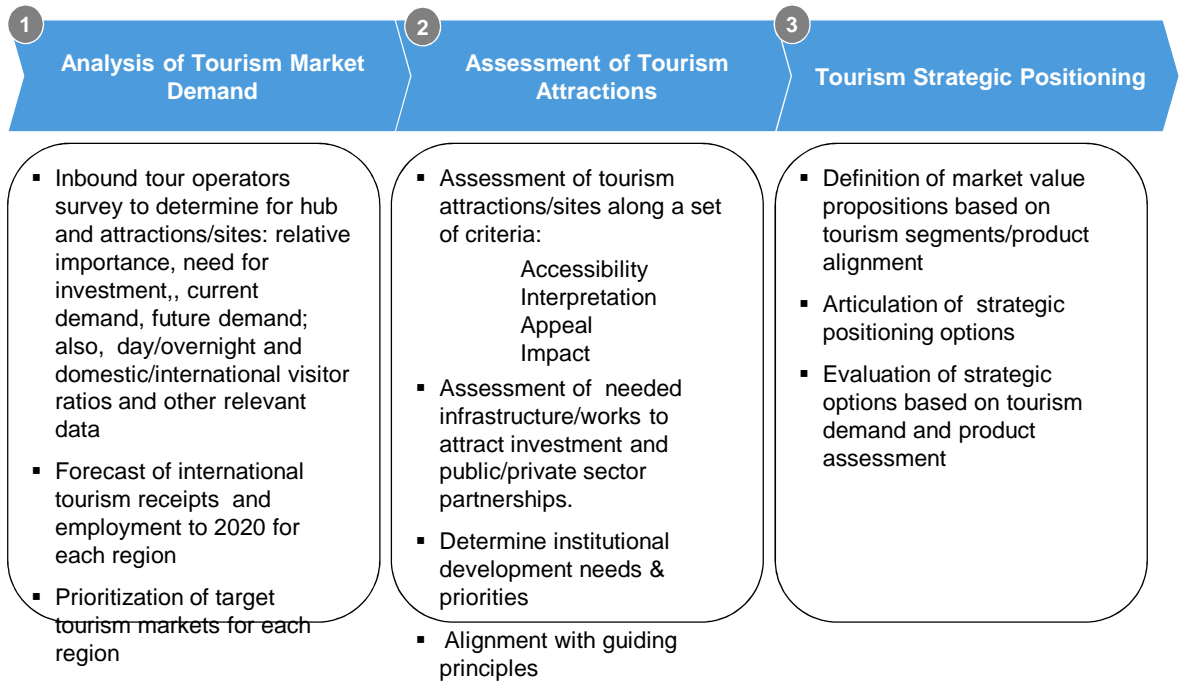
20

Alternatives for Samtsjkhe-Javakheti and Mtskheta-Mtianeti RTDS

The recommended value enhancements for the Cultural Heritage Cluster include (a) integrated management is needed regulated by the “heritage site management plan” (elaborated by NACHP) and mutually agreed upon by Church authorities (when the site is church property); (b) investments are needed for tourism services, including restaurants, bars, wine bars, museums, cultural performance venues, artisan shops and markets, and lastly, accommodations.; (c) training in basic hospitality skills, language training, marketing an heritage site management training by local training providers scheme in close collaboration with MoESD and VET programs.; (d) encourage participation of Monasteries in a visitor program to enhance the visitor experiences and reduce the risk of future conflicts and (e) special events are needed to help generate demand for the region, particularly in the summer and off seasons.

Recommended value enhancements for the Nature and Adventure Cluster include (a) improve access to Borjomi-Kharagauli and Javakheti National Parks and protected areas to Improve access to Borjomi-Kharagauli and Javakheti National Parks and protected areas; (b) protected areas need quality accommodations particularly near the locations of park entrances (Likani, Atskuri, Tsinubani and Kartsakhi); (c) improve visitor services through a concessions policy by which the government would build facilities and lease them to private sector operators or allow private investors to build and operate facilities within the park, in exchange for annual fees and a percentage of profits from operations and (d) partnership should be encouraged between protected areas and tour guides/companies specializing in adventure sports (mountain climbing, kayaking, rafting, etc.), involving organizations like the Adventure Travel Trade Association

Strategic Positioning Methodology



Factors considered during selecting preferable alternative

Tour Circuits and Routes

Recommended value enhancements include (a) thematic circuits and trail development is needed—for example, a wine route focused upon both ancient and modern winemaking (including the re-use of historical terraces along the Mtkvary valley) and (b) development of the heritage landscape – Vardzia Valley, starting at the Khertvisi Fortress (as a gateway), proceeding along the river Mtkvari upper valley, and ending at the Vardzia cave town. Similarly, off-road trails can be developed to explore the Javakheti high mountain historic roads and connect destinations such as Nichgori, Saro, Vardistsikhe or Bakuriani, the Tori ruins, and the Tetrobi protected area.

Samtskhe-Javakheti

Information provided by Georgian Incoming Tour Operators was provided in order to understand the value chain since they interact directly with tourists as well as experience first-hand the quality of tourism services and attractions in the region. Recommended value enhancements for the **Resort Cluster** include (a) the use of mountain guides national standards designed according to the international (UIGM) standards for professional education, training and certification; (b) Further development of a network of mountain huts, shelters and trails is important for improving the accessibility, safety, and overnight stay potential in order to increase local revenues of communities; (c) Integrated destination management covering Gudauri (winter) and Kazbegi (summer) should be explored; (d) Interesting stories and films about the first climbers and explorers of the Caucasus should be used for promotion and events; (e) Provide public bathrooms, public transportation, simple cafés, visitors desks (not necessary to have separate offices) incorporated with national park visitors centers, museum sales points, and information centers.

The recommended value enhancements for the **Cultural Heritage Cluster** include (a) investments in tourism services near cultural heritage attractions including restaurants, bars, wine bars, nightclubs, cultural performance venues, artisan shops and markets, and accommodations; (b) Specific training programs designed for heritage site guides; (c) Special events are needed to help generate demand for the region, particularly in the shoulder and off seasons. The involvement and role of Orthodox Church should be considered while planning activities and events.

Recommended value enhancements for the **Nature and Adventure Cluster** include (a) improve Visitor Access to Protected Areas; (b) improve visitor services through a concessions policy through which government would build facilities and lease them to private sector operators or allow private investors to build and operate facilities within the park in exchange for annual fees and a percentage of profits from operations; (c) Special events should be organized to help promote the national parks, e.g., a cross-country skiing competition or adventure race; (d) Specialized training will be needed for nature guides, mountain rescue, and specialized adventure sports (mountain climbing, kayaking, canyoning, rafting)

Tour Circuits and Routes

Recommended value enhancements include (a) A pilot project, for the development of a Wine Trail; (b) development of a Golden Path trail, from Tbilisi to Telavi using the spectacular by-pass road from Mtskheta to Kakheti via Jinali and Tianeti municipalities (existing road: Jinali – Sioni – Tianeti - Akhmeta - Alaverdi), focused on five cultural heritage sites; (c) development of a South Caucasus Tourism program, which will include the development of multi-country (between Georgia, Azerbaijan, Armenia, and Turkey) tours, trails and itineraries.

As it is clear from this list, quite a broad spectrum of tourism activities, which could be developed in **Samtskhe-Javakheti and Mtskheta-Mtianeti** regions, is considered as prospective and desirable. In fact only illegal or socially unacceptable activities, like sex tourism, treasure hunting, drug tourism, as well as such specific subsectors, which are not considered as environmentally friendly (hunting tourism etc.) are rejected by default as unacceptable. All of the listed activities are considered as acceptable in principle and adequate environmental protection is viewed as a matter of proper mitigation planning and environmental management, rather than rejection of type of activity. The proposed sectors of tourism are considered as alternatives for different locations and preferable options are selected according to specific environmental conditions, existing attractions and other features of each sub-region.

Propose clusters and sectors are not competitive or incompatible. RTDSs provided harmonized schemes of spatial distribution of different tourism sectors and activities. The tourism types, having severe environmental impacts, like trophy-tourism are not supported in RTDFS. In line with the RTDSs, SECHSA recommends to develop only “soft” sectors of tourism.

6.4 ALTERNATIVES OF RDP III PROJECT IMPLEMENTATION SCHEMES

Several Alternative strategies for the Project implementation have been proposed for RDP Projects (RDP I, RDP II and RDP III):

Scenario 1 considers Vertical Provision of Investments and Integrated Program, comprising infrastructure development, construction and rehabilitation of tourism facilities (parkings, shops, café, information centers etc.), restoration/conservation of cultural heritage attractions, support for private investments in tourism and food processing. The program envisages parallel development of key centers of attraction.

Scenario 2 envisages Horizontal Management of Investments, as it was for several years applied by MDF in WB and ADB financed municipal development programs. Scenario 2 envisages horizontal provision of investments for municipal and tourist infrastructure across several regions and local-self governments (LSGs).

Scenario 3 considers that no special intervention is required from the Government side and the process should be let to go spontaneously, as it goes.

Key difference between RDP I, II and III programs and the previous RMIDP projects is that this program is vertical which makes it different from horizontal, i.e. sectoral projects. This verticality is to result in better targeting, leveraging and geographic concentration of effort for higher impact. This approach provides framework conditions for private sector investment in the target areas.

The tourism development vision proposed in Tourism Development Strategies of target regions envisages developing of these regions as a high quality tourism destination throughout the year through attracting domestic and international tourists; building on its cultural heritage and biodiversity; and focusing on quality (tourist spending) rather than quantity (tourist arrivals). Success of tourism will depend on the use of an integrated approach, using the geotourism and applying vertical approach to a comprehensive urban regeneration effort in key centers of attraction. These will attract private investments, revitalize local business activity and develop a full-fledged regional tourism hubs and circuits.

These beneficial outcomes are expected as a result of the integrated development scheme (scenario 1): development of the RTDS tourism vision and proposed hubs and sectoral clusters and will require, at a minimum: infrastructure improvement to attract private sector investments; improved planning and organization (e.g. destination management organization and office); institutional strengthening and capacity building; association/cluster development; geotourism mapping and tour circuit development; improved visitor services, signage and interpretation; and marketing activities. Without such integrated (vertical) management, e.g. through decentralized horizontal management of investments directly to the municipalities (scenario 2) it is impossible to achieve such rapid economical growth.

Social Impacts

Integrated approach allows to better manage social impacts related to growth of tourist flows, like increased demand for infrastructure, sanitation, waste management, water and energy supply. Vertical scheme allows parallel development of general and specific tourist infrastructure and scheduled planning of enterprising campaigns. In case of horizontal schemes of management lack of coordination in developing tourism infrastructure and supporting infrastructure will result in local and temporary increase of tourist flows impacted by lack of water supply and sanitation infrastructure, safe roads, waste collection and disposal facilities. Such misbalance will adversely affect environment (pollution), local residents and tourists. Lowering the quality of services and in medium term perspective, resulting in decreasing tourist flows and related benefits.

Integrated management and clear policy aimed on comprising as much as possible local beneficiaries (employees, small businesses etc.) enables to minimize revenue leakages. Parallel investments aimed on support of local food processing enterprises, local cousin, wineries, system of small boutique hotels, shops and cafes, artisans and producers of souvenirs is a remedy against leakages,.

The influx of large numbers of foreigners (tourists or migrant workers) into a local culture and the likely clash of contrasting life styles that result, can have serious impacts on local cultures, lead to erosion of traditional values. Stimulation of prostitution, drug proliferation, increase of criminality, transmission diseases is often associated with tourism industry. The integrated management involving central and local government, engaging healthcare and social protection institutions, Church and other stakeholder groups enables to better manage these risks. Horizontal investment schemes, as well as large scale resort complexes are less manageable in that regard.

One more example of a negative externality is induced development and misbalanced migration related to tourism sector. Development of regional and local Masterplans and coordinated spatial planning, as well as managed distribution of facilities around the major tourist circuits enables to balance induced development. Horizontal schemes do not provide balancing mechanisms and construction of large complexes stimulated induced development concentrated around these centers.

Environment Impacts and Impacts on Cultural Heritage

Implementation of the complex program of rehabilitation of old and construction of new infrastructure of course will have certain negative impact on the natural environment and cultural heritage. However, the direct impacts of projects implemented in urban areas are mostly limited to typical environmental and social impacts related to civil works and transportation of construction materials. Besides the dust, emissions, noise, disturbance, safety risks, traffic disruption etc., cultural heritage impacts are of particular importance. Construction activities within the historical/cultural zone are always associated with certain risks of physical damaging valuable historical or architectural buildings, monuments or archaeological sites. Excavations in close vicinity with the buildings, vibration related to vehicle operations and heavy equipment may lead to structural damages of historically valuable buildings. Excavations may damage archaeological artifacts.

Direct impacts related to Construction of Facilities in Rural Area and Natural Landscapes are more diverse and add some more features:

- Footprint on natural landscape in cases, where the new infrastructure is built
- Risks of soil and/or water contamination due to improper waste and hazardous material management, improper vehicle maintenance and fueling operations, fuel leakages etc.
- Damage to natural vegetation
- Disturbance of fauna
- waste and pollution due to poor sanitation in workers camps
- temporary or permanent occupation of private land, resettlement impacts related to the necessity of land acquisition (at present stage of planning no resettlement impacts are reported, however, as the extremely important issue, this should be under strict control)
- Specific type of indirect impacts on cultural heritage is related to the cases when unsuitable facilities are constructed and operated near the historical monument, sacred sites, cemeteries, traditional recreational or leisure zone change the perception and “atmosphere” of monument or site, affect traditional way of life and habits of local community.

Conservation-restoration of historical buildings and monuments by definition is aimed on preservation of cultural heritage. However, improper planning and design, misbalance between reconstruction/restoration and preservation/conservation strategies may lead to unacceptable changes of materials/features and diminishing of the cultural heritage value of the affected monument. All interventions during the conservation-restoration works should be in compliance with the requirements of the Georgian Law on Cultural Heritage and the designs should be approved by the NACHP. However, besides the approval of the NACHP, appropriate public consultations and consensus with the local communities, general society, Church and academicians is required.

All these risks are manageable through application of good design, construction and operation practices.

The mentioned direct environmental and cultural heritage impacts are relevant to all of the 3 reviewed scenarios. However, application of vertical scheme of management, better intersectoral coordination and more strict overall control makes more reliable that efficient mitigation will be achieved through application of best construction and environmental practices. More efficient strict procedure for site selection will enable to avoid impacts on protected areas and sensitive habitats.

The coordinated development of tourist facilities and supportive infrastructure (water supply, wastewater, waste management etc.) envisaged by the vertical scheme of management (scenario 1) allows to solve the problem of increased waste and wastewater generation and to prevent related pollution. Misbalance of

increased tourist flows and deficiency of sanitation infrastructure, which is the case currently and is characteristic to uncoordinated development schemes (scenarios 2 and 3) will lead to environmental pollution.

The proposed integrated and coordinated development plan envisages parallel development of different tourist destinations of the region. This will enable to more evenly distribute the tourist flows and avoid local overloading. Large tourist complexes, which support high local concentration of tourists and impose high load on local environment, are limited to the traditional resort zones (Borjomi, Bakuriani etc.), which have sufficient carrying capacity to accommodate large amounts of tourists.

Integrated development of Masterplans and Spatial Zoning will balance induced development and related impacts on natural landscapes and ecosystems. Uncontrolled induced development associated with scenarios 2 and 3 is related to significant impacts on undisturbed natural landscapes, as well as with visual impacts and disfiguring urban and rural landscaped due to unplanned construction.

Coordinated management between agencies responsible for tourism, protected areas management, and pollution control will enable to avoid the deterioration of environmental resources. Integrated scheme enables preparation of tier 2 managerial actions through initiation of necessary strategic studies: Preparation of Regional Waste Management and Pollution Prevention Plans, updating of management plans for protected areas, development of Regional Forest Fire Protection Plan, Assessment of Epizootic Risks and planning prevention strategy against increase of sexually transmitted diseases etc., which are important in the context of increasing environmental risks related to tourism development.

Conclusion

Geotourism is "best practice" tourism that sustains, or even enhances, the geographical character of a place, such as its culture, environment, heritage, and the well-being of its residents. Project scenario selected for implementation (scenario 1) envisages an integrated geotourism development approach which bases itself on multisectoral investments and integrated management of vertical investments, aimed on coordination of developing tourism attractiveness of destination sites, increase of carrying capacity, sustainable support of most cost efficient tourist clusters and protection of natural and cultural heritage.

The major impact of scenarios 2 and 3 is reduction of sustainability of the economic development of region and related benefits for the local population.

6.5 SELECTION OF SUBPROJECTS WITHIN THE RDP III PROJECT FRAMES

At present 33 subprojects are proposed for RDP III – 17 for Mtskheta-Mtianeti and 16 for Samtskhe-Javakheti regions (see table below). This basic list also may be revised and some other subprojects added.

Mtskheta Mtianeti Region

1	Arrangement of tourism infrastructure at Samtavro Monastery;
2	Improvement of access roads to the Bagineti castle;
3	Conservational works and development of tourist infrastructure at Dzalisa archaeological site
4	Conservational works and development of tourist infrastructure at Armazikhevi archaeological site;
5	Rehabilitation and enhancement of Mtskheta Recreational Park
6	Development of Tourism infrastructure at Jvari monastery
7	Adaptation of the Mtskheta old cinema building for establishment of the Mtskheta Archeological Museum

8	Urban regeneration of historical streets in Dusheti (infrastructural rehabilitation, street lighting, and restoration of houses' facades and roofs)
9	Restoration of Dusheti city park and construction of an artisan marketplace
10	Dusheti: Rehabilitation of Dusheti archeological base, access road to place and tourism infrastructure (Chilashivilebi palace)
11	Arrangement of tourism infrastructure at Ananuri castle
12	Development of Shatili village
13	Arrangement of East Caucasus Trekking Route/mountain huts in Khevsureti
14	Restoration of Stepantsminda Museum
15	Rehabilitation of Gergeti village road and access to trail to Gergeti Trinity Church
16	Arrangement of parking lot at Dariali Monastery and rehabilitation of access road to monks' cells
17	Arrangement of tourism infrastructure at Gudauri

Samtskhe Javakheti Region

1	Restoration of Borjomi Historical Museum
2	Tourism Infrastructure Development at Bakuriani Recreation Park
3	Arrangement of Bakuriani Central Trail
4	Restoration of access road to Sapara Monastery
5	Arrangement of tourism infrastructure at Sapara Monastery
6	Arrangement of tourist infrastructure for Tour of Tolerance in Akhaltsikhe
7	Arrangement of tourism infrastructure at Zarzma Monastery
8	Urban regeneration of Abastumani (including restoration of wooden houses)
9	Rehabilitation of Abastumani Observatory
10	Arrangement of Historical Trekking Route/mountain huts
11	Restoration of Saro darbazi houses, rehabilitation of access road and tourism infrastructure
12	Arrangement of tourism infrastructure at Khertvisi complex
13	Arrangement of tourism infrastructure at Akhalkalaki Fortress and arrangement of Akhalkalaki Fortress lighting (2 lots)
14	Rehabilitation and Safety Measures of an access road to Gogasheni village
15	Arrangement of touristic safety measures and tourism infrastructure at Vanis Qvabebi
16	Arrangement of Tourism Infrastructure at Vardzia Caves

For selecting the alternatives, SECHSA proposes to apply the principle of screening established in ESMF for this RDP III (see annex 1). For eligibility assessment of Public-Private Infrastructure Investments relevant eligibility criteria established by ESMF shall be used in addition (see annex 2).

The SPs changing features of monuments or projects within the protected areas should be rejected. During the complex multifactorial comparison of alternatives, preference should be given to the SPs with less environmental impacts.

7. RDP III AND SECHSA RECCOMENDATIONS FOR ITS IMPLEMENTATION

RDP III is designed to contribute to the achievement of overall strategic development goals of the Georgia's government in Samtskhe-Javakheti and Mtskheta-Mtianeti regions through selective investment into activities that support implementation of RDSs and RTDSs. The Project Development Objective is to improve infrastructure services and institutional capacity to support increased contribution of tourism in the local economy of the Samtskhe-Javakheti and Mtskheta-Mtianeti regions.

Component 1: Infrastructure Investment (US\$53.25 million)

Component 1.1: Urban Regeneration and Circuit Development (US\$46.00 million). This component will finance: urban regeneration of old towns and villages, including restoration of building facades, public spaces, museums, roads and water, and enhancement of cultural and natural heritage sites, including access and presentation.

Based on product development and marketing potential, infrastructure needs, and employment levels, the project will focus on sites along the circuit connecting the selected heritage, nature and ski sites. The proposed sites/subprojects discussed with the Government for financing under the Project will supplement what the Government has already invested in. These can be grouped into two categories:

Urban regeneration in three hub cities: Dusheti, Stepantsminda and Abastumani. The Project will also build on previous urban regeneration investments made by the Government, and may finance small-scale incremental investments needs, in Mtskheta, Gudauri, Bakuriani, Borjomi and Akhaltsikhe. Additional investment needs in Akhalkalaki, Ninosminda and Khevsureti will be subject to a great scrutiny.

Improved site management and construction of tourism facility and access road in the following cultural heritage sites: Saphara Monastery, Saro Darbazi houses, Zarzma Monastery, Vardzia caves, Vanis Qvabebi Caves, Khertvisi Fortress, Akhalkalaki Fortress, Tmogvi Fortress, Jvari monastery, Mtskheta archaeological sites, Ananuri Fortress, Gergeti Trinity Church, and Dariali monastery.

Component 1.2: Provision of Public Infrastructure to Attract Private Investments (US\$7.25 million). To encourage private sector investments in the region, this component will support a selected number of private sector entities in project areas that demonstrate interest and capacity to invest in tourism or agribusiness through investing in complementary public infrastructure that is necessary to ensure the viability of their investments (e.g. public facilities within vicinity of the investments, road/sidewalk, water/sanitation, communications, connection to main trucks, etc.). The investment proposals would be subject to screening by a selection committee and there will be appropriate conditions tied to that.

Component 2: Institutional Development (US\$6.60 million). The component will support institutional capacity and performance of the Georgia National Tourism Administration (GNTA), National Agency for Culture Heritage Preservation of Georgia (NACHP), National Museum, Project Implementing Entity (Municipal Development Fund of Georgia, MDF), and other local and regional entities in order for them to carry out the following activities: setting up of destination management office in each region; marketing and promotion; preparation of sustainable site management plans for all Project's cultural heritage sites; training for skilled workforce development and capacity building; cultural heritage advisory service to the NACHP to improve their capacity on protection and management of the World Heritage property Historical Monuments of Mtskheta to prevent its possible removal from the List of World Heritage in Danger; business start-up/expansion advisory service to tourism SMEs; performance monitoring & evaluation activities; and preparation of feasibility studies, design and construction supervision.

Handling RDP III Implementation

One of the SECHSA findings is a lack of coordination between key agencies during the RDS and RTDS development. To avoid similar problems with the RDP III implementation, SECHSA recommends enhancement of the management system. TA included in RDP III may not only assist in a capacity building of the separate entities engaged in RDP III implementation, but also may have an input in developing a more efficient inter-sectoral management structure for RDP III. Due to the multi-sectoral nature of this Project, SECHSA advises to establish Informal Working Group, which involves all agencies concerned- namely, MDF, Georgia National Tourism Agency, Culture Heritage Agency, Culture Heritage Fund, Agency of Protected Areas, Governor's Office, Ministry of Finance and Ministry of Regional Development & Infrastructure. The Working Group should ensure coordination and efficient involvement of concerned agencies and should be responsible for strategic decision making.

The MDF will be responsible for RDP III project implementation. For strategic decisions, like selection of the subprojects, the Working Group is considered as a Leading Agency. For development of infrastructure projects and for implementation of infrastructure and conservation-rehabilitation projects MDF, as the Implementing Agency for this program has the leading role. In preparation of the conservation-rehabilitation projects, if such projects will be finally proposed for RDP III, the NACHP is the leading entity. At the stage of operation and maintenance of all provided assets, the self governments will take responsibility. MDF and the local self governments will sign subproject investment agreements which will clearly assign local self governments the responsibility of operation and maintenance of all provided assets.

Handling Involuntary Resettlement and Grievances

RDP III triggers the WB's Safeguards Policy on Involuntary Resettlement OP 4.12. A Resettlement impacts would mainly relate to temporary relocation and/or loss of income or productive assets during construction. However, there might also be some cases of permanent resettlement. Resettlement Policy Framework was prepared and disclosed to the public according to the policy and a baseline social assessment was carried out in the target regions. Resettlement activities will be fully informed by this social assessment. In particular, consultations held with project affected people will be held in venues that are accessible, in a form and language appropriate for the group, and results of the meetings will be publically disclosed. Information on project affected people will be collected in a way that makes it possible to identify specific vulnerabilities that may make it difficult for that person or their household to cope with project impacts. Gender, disability, income, education and age will be considered when determining specific individual vulnerabilities. In Mtskheta-Mtianeti, special attention will be paid to mountain communities.

Resettlement activities shall incorporate a focus on livelihood restoration. To the extent possible, project affected people will be included in project-funded skills development activities. When this is not possible, the project will try to connect those affected with other government or donor-funded activities promoting skills, income generation, or access to finance. If no other activities exist that are appropriate for these individuals, RDP III will provide funding for individuals to start small businesses, to acquire skills, or to expand other livelihood activities, as appropriate. RDP III will pay special attention to livelihood restoration activities for women or for pensioners, given that these two groups are more likely to have difficulties adapting to different livelihood activities.

Monitoring and evaluation of resettlement and land acquisition shall be carried out systematically. Monitoring of impacts on resettled individuals and households, and on those receiving livelihoods restoration assistance shall take place immediately after the implementation of site-specific Resettlement Action Plans as well as six and twelve months after displacement has occurred. If after 12 months of displacement, negative impacts, such as reduced income are found, additional support shall be provided to those individuals.

Pooling of TA for the Support to Tourism and Agribusiness SMEs for higher efficiency

For maximizing impact of the TA included in RDP III, synergies may be built between similar activities planned under the WB -supported RDP, RDP II, and RDP III. Support to the SMEs in the tourism and agricultural sectors should be delivered in close cooperation with the Ministry of Economy and Sustainable Development, which runs a State program for SME support. Partnership should be sought with other donor-funded activities also targeting SME development. TA for SMEs should include dissemination of knowledge and information about the available low-emission technologies and green development in general, as well as provide incentives for SMEs for the acquisition of these technologies.

TA for supporting SME development should include advice for the governmental authorities, responsible for SME development, in relation with the most efficient technologies and facilities for implementing SME supporting programs. In particular, concept of Business Incubators, or other similar facilities, which complexly address all basic factors important for SME development, should be promoted. The concept of Business Incubators comprise: a) provision of start up financing; b) advisory service in financial management and marketing; c) advisory service and facilitation in implementing modern technologies; d) provision of access to modern materials, facilities and efficient technologies; e) advisory service and facilitation in entering new and prospective markets; g) The Business Incubators, as shareholders (either permanent, or temporary) will take partial responsibility for the development of sustainable enterprises.

Pooling of TA for the Support to the Vulnerable Social Groups

While developing business incubators or other simpler facilities aimed on supporting SME, SECHSA recommends to take into account the need of providing specific facilities helping development of professional skills and business opportunities for women and vulnerable groups (e.g. IDPs, disabled or aged persons). These facilities could be developed on a basis of micro-financing institutions, supplementing their usual activities with training programs (marketing, simple technology transfer, financial management for individual entrepreneurs). Such facilities could be supportive for individuals interested in production of handicrafts, souvenirs, domestic food products, specific national clothes etc.

Involving Cultural Heritage Agencies in Site Selection and Design of Activities to be Implemented in and around Cultural Heritage Sites

Component 2 of RDP III will finance training and capacity building for Capacity building for the staff of several cultural heritage and tourism management institutions of Georgia. Based on the experience from RDP and RDP II, it will be critically important to engage cultural heritage agencies at all stages of review, design and implementation of project-supported activities which deal with the physical cultural resources. Church should also be involved and consulted in cases RDP III finances works in or around places of worship. Seeking advice and guidance from international heritage institutions (ICOMOS, UNESCO) will be highly advisable when dealing with monuments of exceptional historic value. Membership of the Minister of Culture of Georgia in the supervisory board of the implementing entity of RDP III – the MDF – should guarantee political consensus on the important decisions regarding project investments into conservation and sustainable use of cultural heritage.

Clarifying Property and User Rights to the Public Infrastructure to be provided around Cultural Heritage Sites

Elements of public infrastructure which RDP III will provide as part of investment into upgrading of cultural heritage sites will be constructed on the State-owned land. User rights to such land plots may need to be transferred to the MDF during construction period, and then further on to the entity that will operate the infrastructure. Municipality, private company or Church may be given a mandate to operate the provided facilities. All arrangements pertaining land title and user rights as well as modality of operation and maintenance of the infrastructure shall be made well on time. Operating entities may require some orientation and training in particular aspects of their task.

8. DISSEMINATION AND CONSULTATIONS

8.1 CONDUCTED CONSULTATIONS

8.1.1 Consultation Process Before Disclosing SECHSA Executive Summary

Meetings in Target Regions

MDF and Governors of Samtskhe-Javakheti and Mtskheta-Mtianeti regions conducted presentations and consultation meetings with the representatives of Municipalities and general public.

The MDF representatives made presentation related to RDP III. The overall context and principles of the RDP III have been explained, the list of projects proposed for financing under the RDP III has been briefly overviewed and the projects selected for year 2015 financing have been reviewed in more details.

SECHSA consultant has briefly introduced the objectives of SECHSA, its relation to RDSs and RTDSs, approaches, need of addressing strategic (indirect and cumulative) impacts and elaboration of recommendations for the RDP III implementation.

In Mtskheta-Mtianeti the main issue raised by public was need of properly arranged consultation process. It was mentioned, that, for example, the local population is not against developing HPPs and transmission lines, which is important component of the MM RDS. However, detailed public consultations are needed on the matters of community safety and benefits. In relation with the RDS Action Plan, the public consultations are conducted during the selection of the subprojects to be financed by local budget and Georgia Regional Development Fund (GRDF).

Consultations with Scientists and Expert's groups

Extensive consultations with universities, academicians and environmental experts have been conducted during preparation of the SECHSA report. Consulted scientists and experts:

- dr.A.Kandaurov (ecology, fauna, protected areas);
- G.Sopadze (soils and landscapes),
- M.Gaprindashvili (geology, geohazard risks),
- B.Ukleba (hydrology),
- I.Kaviladze (waste management)
- M.Kimeridze (ecology, flora),
- Lali Akhalaia (Cultural Heritage)

Consultations on environmental issues were held with several NGOs:

- Orchis
- Campester
- Ecovision
- WEG etc.
- Information Center for Social Reforms
- ISR

These consultations were focused on description and understanding of local environmental and social conditions and analysis of potential impacts. The outcomes of these consultations are reflected in chapters 7, 8 and 9 of the SECHSA Report.

8.1.2 Disclosure of the SECHSA Executive Summary

SECHSA Executive Summary has been disclosed on MDF's web-site in February, 2015.

8.1.3 Consultations Conducted After the Disclosure of the SECHSA Executive Summary

During the development of SECHSA report, following parties have been consulted:

In February 2015 several consultation meetings have been conducted with:

- Municipal Development Fund (project Implementing Agency)
- Ministry of Culture and Monuments Protection
- National Agency for Cultural Heritage Protection
- Georgian National Tourism Agency
- Ministry of Environment and Natural Resource Protection
- National forest agency

February 26, 2015; Tbilisi, Municipal Development Fund

The meeting was attended by:

1. Rusudan Mirzikashvili, National Agency for Cultural Heritage Preservation of Georgia;
2. Ani Gvenetadze, National Agency for Cultural Heritage Preservation of Georgia;
3. Davit Tkeshelashvili, National Agency for Cultural Heritage Preservation of Georgia;
4. Besik Matsaberidze, Ministry of Culture and Monument Protection of Georgia;
5. Tamar Maisuradze, Georgian National Tourism Administration
6. Medea Janiashvili, National Tourism Administration;
7. Davit Tabidze, Municipal Development Fund;
8. Ana Rukhadze, Municipal Development Fund;
9. Medgar Chelidze, Consultant.

SECHSA Consultant presented the participants of the Meeting the objectives and SoW of SECHSA for the RDSs and RTDSs of Samtskhe-Javakheti and Mtskheta-Mtianeti regions and first findings reflected in Executive Summary. SECHSA Consultant asked participants to share their views regarding specific problems of the cultural heritage protection or tourism development associated with the RDSs and RTDSs, as well as their concerns in respect of planning and management of the RDSs, RTDSs and RDP III. The meeting participants considered the following issues:

Comments on Administrative system: It was confirmed that with the implemented legislative changes, distributing the responsibilities between the MoCMP and the NACHP of Georgia, during the implementation of the infrastructural projects and restoration/conservation projects immediately for the monuments of cultural heritage, the body responsible for permitting and monitoring is NACHP;

RDSs and RTDSs: Both, MoCMP of Georgia and the NACHP were to certain extent engaged in the development of the RDSs and RTDSs and worked immediately on the relevant sections. The engagement of the NACHP in the process of developing the RTDSs was limited to the participation in the workshop, at which the said strategy was presented.

In relation with the RDP III: Establishment of a work group will be important for the efficient management of the project and will promote the coordinated implementation of the RDP III.

the list of sub-projects implemented within the scope of the RDP III in view of the NACHP needs certain changes. The loan agreement must allow for such changes. The priorities of the Agency are not fully given on the list of sub-projects. Instead of developing the tourist infrastructure near the operating monasteries, the Agency thinks it more expedient to accent the urban rehabilitation projects and rehabilitation of the museums.

The Agency does not consider it expedient to direct the principal amounts within the scope of the RDP III to the development the tourist infrastructure near the operating churches and monasteries.

The requirements specification of the projects must be developed by active participation of all concerned parties, including the Church. Agreeing the Project design with the Patriarchate Council, eparchies and monastery superiors is associated with certain difficulties. Therefore, these bodies and persons must be engaged in planning of the sub-projects as early as possible. In case of the failure to reach the agreement with the Church representatives, it must be possible to use the finances of the sub-project for other purpose.

Designing and project implementation works must be accomplished by professional restorers (and not only architects). This is particularly true with the urban rehabilitation of Abastumani, where almost every house is a monument of a cultural heritage. The necessary condition of the Tender must be providing the design by a qualified restorer. The designing restorers must have the right of author's supervision what must be envisaged by the requirements specification, as well.

In addition, one of the conditions of the Tender must be to use certain experience in rehabilitation/restoration works. Sometimes, one lot covers the works of different types. If the same lot comprises restoration works, the winning company must have the relevant experience what must be envisaged by the Selection Criteria.

A permanent supervision of an archeologist is needed during the rehabilitation of Bagineti road.

The Tourism Agency considers it purposeful to direct the resources within the scope of the Regional Development Project-3 to provide the public infrastructure to attracte private investments what promotes the tourism development in the region.



February 27, 2015; Tbilisi, Ministry of Environment and Natural Resources Protection of Georgia

The meeting was attended by:

	Name, surname	Organization	Contact information
1	Gizo Chelidze	Head of the Department of Environmental Policy and International Relations	Mob. 599069912 g.chelidze@moe.gov.ge
2	Maia Javakhishvili	Department of Environmental Policy and International Relations	Mob. 595119751 m.javakhishvili@moe.gov.ge
3	Marina Sujashvili	National forest agency, Deputy Head of the Forest Care and Restoration and	Mob. 595300992
4	Davit Tabidze	Municipal Development Fund	
5	Ana Rukhadze	Municipal Development Fund	
6	Medgar Chelidze	SECHSA Consultant	

SECHSA Consultant presented the participants of the Meeting the objectives and SoW of SECHSA for the RDSs and RTDSs of Samtskhe-Javakheti and Mtskheta-Mtianeti regions and first findings reflected in Executive Summary. SECHSA Consultant asked participants to share their views regarding specific problems of the cultural heritage protection or tourism development associated with the RDSs and RTDSs, as well as their concerns in respect of planning and management of the RDSs, RTDSs and RDP III. The meeting participants considered the following issues:

RDSs: The MoENRP has confirmed that the ministry was engaged in the development of the RDSs, in particular, it was a member of a special work group engaged in this process. The MoENRP is engaged in the realization of the RDS programs, with one of its trends associated with the environmental protection. The Agency of Protected Areas and National forest agency were actively engaged in the development of the RDSs of the target regions in terms of developing rational forestry management systems. The Forestry Strategy is developed. The programs of forest protection against vermins are accomplished in both regions, and they are quite efficient. The National Forest agency has established 5 nursery-gardens, including those in Samtskhe-Javakheti and Mtskheta-Mtianeti. Besides, the forest restoration project is being accomplished in Samtskhe-Javakheti to restore the forest, which was destroyed in 2008. On the initiative of the Forest Agency, the project for school nursery-garden is also being realized. The Agency also works on growing the plantings of the species included in the Red List of Georgia at the nursery-garden of Sartichala. The plantings are needed to realize the compensation measures in case of cutting down the Red-Listed species as a result of the project implementation, as well as for the forest restoration measures. Certain actions to reduce the risks of catastrophes in Samtskhe-Javakheti and Mtskheta-Mtianeti regions are planned.

RTDSs: MoENRP has not been engaged in RTDS development or RDP III planning.



Several Public Consultation meetings have been carried out during February 2015, related to Executive Summary of SECHSA and environmental and social frameworks for RDP III.

February 18, 2015

Dusheti Municipality Administration Office; 27 Rustaveli street, Dusheti

Those present:

1. Beqa Gharibashvili, “Dusheti municipality – First Deputy Governor”
2. Niko Dudaury, “Dusheti Municipality - Head of the architecture department”
3. Emzar Sindzaradze, “Dusheti Municipality - Specialist of the Architecture and Supervision Department”
4. Zura Khatchuri, “Dusheti Municipality - Head of Property Management and Economic Development department”
5. Amiran Dzagherishvili “Dusheti Municipality -Head of Statistics Economic Development and Envioremental Department”

6. Ketevan Tsiklauri, “Dusheti Municipality – Head of Education, Sport, Culture and Monument Protection Department”
7. Dodo Chokheli, “Dusheti Municipality – Head of administration Department”
8. Razthen Dudaury, “Dusheti Municipality- Head of the urban development and spatial planning”
9. Shadi Khadad, “Dusheti Municipality – Head of Cultural Heritage”
10. Paata Mighdiseli, “Dusheti Municipality – Head of Internal Audit”
11. Mikheil Kariauli, “Dusheti Municipality- Head of co-ordinatin Unit”
12. Zizi Papiashvili, “Dusheti Municipality - PR Manager”
13. Taniel Chkhutiashvili, “Dusheti Municipality – Majority deputy of comiton
14. Tinatin Tsotskhalashvili, “Dusheti Municipality - Assistant of Governor”
15. George Lapanashvili, “Dusheti Municipality – Chairman of the Comition”
16. Vaja Tchintcharauli, “Dusheti Municipality – Chairman of the Comition for Spatial-Teritoryal arrangement and infrastructure”
17. Meri Poladashvili, “ Dusheti Municipality - Deputy of Comition, Fraction “tanadgoma” Chairman”
18. Zurab Revazishvili, “eko-speqtr”
19. Berik Khutsishvili, “Mountains and valleys Union”
20. Otar Dudaury, “Mountains and valleys Union”
21. Vano Kurtanidze, “Participant of Organization “Moqalaeq”- project “students for Self governance” “
22. Nika Sabashvili, “Participant of Organization “Moqalaeq”- project “students for Self governance” “
23. Robi Nadiradze, “Participant of Organization “Moqalaeq”- project “students for Self governance”
24. Nino Patarashvili, Municipal Development Fund;
25. Mikheil Tseretelii, Municipal Development Fund;
26. Elguja Kvantchilashvili, Municipal Development Fund.

Nino Patarashvili opened the meeting, greeted the participants and overviewed objectives of the meeting. She briefed the public on the Regional Development Project (RDP) III, which will be implemented with the WB support. Patarashvili noted that the Project Development Objective is improvement of infrastructure services and institutional capacity to support the development of tourism-based economy and cultural heritage circuits in the Samtskhe-Javakheti and Mtskheta-Mtianeti regions. She explained that it is a new project to be implemented with the WB support and is similar of RDP being implemented in Kakheti region and RDP II being implemented in Imereti region. Patarashvili talked about the Project funding, mentioning that the tentative budget is comprised of the WB loan in the amount of \$60 million, and the contribution of the Government of Georgia - \$15 million; and the total Project cost is \$ 75 million. The Project covers Samtskhe-Javakheti and Mtskheta-Mtianeti regions, and will be implemented by the MDF. Patarashvili briefly overviewed WB’s environmental and social safeguard policy requirements applicable to RDP III and all subprojects under it.

Irakli kaviladze greeted the public and presented draft Environmental and Social Management Framework (ESMF). He noted that RDP III falls under Category B and thus only B or C category subprojects will be eligible within its framework. He briefly discussed safeguard policies of the WB triggered for RDP III, and structure and content of environmental and social documents to be prepared for all subprojects under RDP III. Kaviladze spoke about environmental and social liabilities of the parties involved in the Project implementation, reviewed process of disclosure and public consultations to be held for draft site-specific Environmental Management Plans (EMPs), and environmental procedures, which are applied by the MDF at the subproject’s identification, assessment and implementation stages.

Further, Kaviladze presented the draft Resettlement Policy Framework (RPF). He noted that the document specifies principles and procedures of all types of resettlement which may occur under RDP III, as well as the categories and rights of persons affected by subprojects, and analytical work and documents to be prepared prior

to-, during-, and after implementation of Resettlement Action Plans (RAPs). He also reviewed the main principles of the WB's safeguard policy OP/BP 4.12 Involuntary Resettlement and the Georgian legislation regulating the same area. He described how public consultation process will be applied to the development of RAPs and how the grievance redress mechanism will work.

Finally, Kaviladze talked about the Environmental, Social, and Cultural Heritage assessment of Regional Development and Regional Tourism Development Strategies of Mtskheta-Mtianeti and Samtskhe-Javakheti regions carried out for the purposes of designing and implementing RDP III within the context of these Governmental documents. He presented to the public the draft Executive Summary of SECHSA Report and explained how regional stakeholders will be consulted on the findings of SECHSA prior to finalizing full report on this study.

Following these presentations, participants of the meeting were given the floor for comments and questions. The major part of the questions posed by participants were dedicated to subproject selection and financing procedures and priorities. In respect to resettlement issues, interest was provoked by compensation and reimbursement mechanisms.

Questions asked and comments made:

Questions:	Comments:
<p>How are priorities determined for funding subprojects? What is the subproject cycle: which stages are to be covered from the beginning till the end, are there any time limitations?</p>	<p>Subprojects are selected based on the needs and demands of the municipalities. There are no standard timeframes and limitations set against the selection process. In case of urgency, it is possible to retroactively finance individual activities, provided that it is proposed in line with the required standards and quality.</p>
<p>How the projects and design companies are being selected?</p>	<p>Contractors (both for design and construction works) will be selected through the Bidding. If the municipality has already prepared and completed design of the planned subproject, there will be no need of announcing the Bidding for design company selection. Completed design of subproject will be submitted to the MDF for further processing.</p> <p>If the municipality is not able to come up with an adequately designed subproject, then the MDF itself gets involved in the subproject preparation process and ensures development of the subprojects oriented on the municipality requirements.</p>
<p>It should be better to select the project designs through the competition, not through announcing bidding for selection of project design companies.</p>	<p>The WB procurement guidelines do not provide appropriate procedures for announcement of competition aiming at selecting project designs.</p>
<p>What is the main goal of the Project and what change will the Project make on the ground?</p>	<p>The main objective of the Project is to improve infrastructure services and institutional capacity in the regions of Samtskhe-javakheti and Mtskheta-Mtianeti regions for the promotion of tourism-oriented economy and sustainable use of cultural heritage sites.</p> <p>Some new initiatives of the government in the selected regions are part of the overall economic growth policy of encouraging private investment in the regions. Tourism development is recognized as an important source of economic growth.</p>

Questions:	Comments:
	<p>The Project aims to create extra value for the regions to redirect the tourists from cities to the provinces. The growth of tourist flows will be beneficial for municipalities through the increased incomes as a result of the Project implementation</p>
<p>The quality of water supply and sewage systems of Dusheti do not comply with the required standards and norms and may cause morbidity of the population. Does the Project envisage rehabilitation of water supply and sewage systems in Dusheti?</p>	<p>The rehabilitation of water supply and sewerage systems are not included within RDP III, as management of regional water supply and sewerage systems is under the competence of the United Water Supply Company of Georgia LLC. For information, rehabilitation of Dusheti water supply system is financed through the program financed by the European Investment Bank. No information regarding rehabilitation of the sewerage system is available.</p>
<p>Who is responsible for environmental assessment of subprojects and development of environmental management plans?</p>	<p>Subprojects which belong to category B but carry relatively high environmental and social risks will require carrying out of the Environmental and Social Review, including preparation of EMPs. For lower risk Category B subprojects, development of simplified EMPs will be sufficient. In an unlikely case of a subproject requiring environmental permits according to the national legislation, conduct of a full scale environmental impact assessment will be needed. For all civil works contracts, EMPs will be part of tender packages and will then be included into contracts.</p>
<p>Are the municipalities adequately informed by MDF regarding SPs under RDP3 and do they have sufficient available information on Project financing?</p>	<p>There were conducted numerous meetings in the municipalities and project-financing related issues were discussed with their representatives.</p>
<p>What are the principles of resettlement and evaluation of the assets of affected persons?</p>	<p>The Resettlement Policy Framework is prepared based on the WB's Operation Policy and the Georgian legislation in force. Compensation will be granted to every single person which is directly affected by the Project implementation. Registered formal owners of land titles as well as informal land users will be eligible for some compensation, but the type of compensation will differ: cost of the land plot</p>

Questions:	Comments:
	<p>will be paid only to those holding a land title. In other cases, the affected persons will be entitled for compensation of crops, plants and other type of economic activity led without having formal rights to the land.</p> <p>The assets are valued according to their market price or at replacement rates. For example: a land plot is valued at a market price, while plants are compensated at the replacement rate.</p>
Is it possible to appeal against the valuation results?	Of course, it is possible. The local grievance redress mechanism and court are designated for this purpose.

Representatives of territorial administrations and other participants of the meeting emphasized the necessity of strengthening cooperation between the MDF, territorial administrations and municipalities. At the end of the meeting, N. Patarashvili wrapped up the suggestions and remarks expressed at the meeting and stated that the final versions of Environmental and Social Management Framework and Resettlement Policy Framework will be posted on the MDF website. The finalized Executive Summary of SECHSA report will also be posted on the MDF's. The draft final full report on SECHSA will be prepared after completing stakeholder consultation process in the two selected regions and disclosed through the MDF's web page. Public consultation on the draft full SECHSA report will be held to seek feedback from the stakeholders at the local, regional and national levels, will be finalized and re-disclosed.



February 18, 2015

Akhaltshikhe Municipality Administration Office 27, Shalva Akhaltshikheli street, Akhaltshikhe

Those present:

1. Nodar Balakhashvili, Akhaltshikhe Municipality Administration (Gangeoba), Head of Infrastructure, Spatial Arrangements and Architecture Service;
2. Alisa Gimishian, World Vision International, Samtskhe-Javakheti Development Programme for Child Welfare;
3. David Lomidze, Head of Akhaltshikhe Sakrebulo;
4. Alex Gambashidze, Head of Health and Social Commission, Akhaltshikhe Sakrebulo;

5. Teimuraz Bardzimadze, Head of Financial, Economics and Property Commission, Akhaltsikhe Sakrebulo;
6. Besik Goksadze, Environment and Agriculture Commission, Akhaltsikhe Sakrebulo;
7. Zviad Janashvili, Environmental Supervision Department, MoENRP, Samtskhe-Javakheti Unit;
8. Phridon Tabatadze, Environmental Supervision Department, MoENRP, Samtskhe-Javakheti Unit;
9. Giorgi Diasamidze, Akhaltsikhe Municipality Gamgeoba;
10. Roini Nebadze, Village Greli, Akhaltsikhe Municipality;
11. Roini Sudadze, village Greli, Akhaltsikhe Municipality;
12. Tamaz Zedgenidze, village Greli, Akhaltsikhe Municipality;
13. Emzar Gvirjishvili, village Greli, Akhaltsikhe Municipality;
14. Beqa Iadze, village Greli, Akhaltsikhe Municipality;
15. Giorgi Nebadze, village Greli, Akhaltsikhe Municipality;
16. Teimuraz Lomadze, village Tsnisi, Akhaltsikhe Municipality;
17. Niaz Diasamidze, village Greli, Akhaltsikhe Municipality;
18. Marina Gachechiladze, Governor Administration;
19. Iordane Chagiashvili, Governor Administration;
20. Guram Melkadze, Deputy Head of Akhaltsikhe Municipality Gamgeoba;
21. Merab Beridze, Rector of Akhaltsikhe University;
22. Besarion Melkadze, Infrastructure and Spatial Arrangment Unit of Governor Administration;
23. Ketevan Inasaridze, Head of Procurement Unit, Akhaltsikhe Municipality Gamgeoba;
24. Nodar Talakhadze, Head of Economic and Property Unit, Akhaltsikhe Municipality;
25. Vasil Sisvadze, Head of Cultural Developmnet, Sport and Youth affairs, Akhaltsikhe Municipality;
26. Alex Zedginidze, Akhaltsikhe Municipality Gamgeoba;
27. Giorgi Kopadze, Akhaltsikhe Mayor;
28. Zaza Melkadze, Head of Akhaltsikhe Municipality Gamgeoba;
29. Giga Gvelesiani, MDF;
30. Ekaterine Dadiani, MDF;
31. Anna Tavdgiridze, MDF;
32. Tamar Kardava, MDF;
33. David Tabidze, MDF;
34. Anna Rukhadze, MDF.

Akaki Machutadze, State Representative-Governor opened the meeting and greeted the participants. He briefed the public on RDP III, which will be implemented with the WB's support and underline that investment sub-projects within the in Samtskhe-Javakheti Region has been determined based on several discussions with WB and the Municipal Development Fund (MDF).

David Tabidze, Head of Safeguards Unit, MDF, briefly reviewed RDP III, which aims to improve infrastructure services and institutional capacity to support the development of tourism-based economy and cultural heritage circuits in the Samtskhe-Javakheti and Mtskheta-Mtianeti regions and the tentative budget is as follows: WB loan – USD 60 mln., Government of Georgia's contribution - USD 15 mln. He briefly discussed subprojects which were selected for funding under RDP III. D. Tabidze explained that the main purpose of the meeting is consultations with public on draft Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF), which have been prepared for RDP III.

Ana Rukhadze, Environmental Specialist, MDF, presented draft ESMF and RPF. She noted that the RDP III falls under Category B and thus only B or C category sub-projects will be eligible within its framework. She briefly discussed safety regulations of the WB and national environmental legislation applicable to RDP III; presented a structure of the Environmental and Social Review reports, including Environmental Management Plans (EMPs),

or simplified EMP Checklists for Small Construction and Rehabilitation Activities as a tool for environmental management planning for low risk sub-projects (small scale construction and rehabilitation works). She reviewed procedure of stakeholder consultations on EMPs being applied by the MDF at the sub-project identification, assessment and implementation stages, as well as environmental monitoring and grievances redress mechanism to be set up for the RDP III. Further, Anna Rukhadze presented information on the RPF. She noted that the document specifies principles and procedures of resettlement and land acquisition under RDP III, as well as the categories and rights of persons affected by the sub-project and documents to be prepared prior to, during and after implementation of Resettlement Action Plans. She also reviewed the main principles of the WB safeguard policy (OP/BP 4.12) and Georgian legislation on Involuntary Resettlement and coherent principles of their implementation under RDP III, public hearing procedures for the Resettlement Action Plans and grievance redress mechanism.

Following the above mentioned presentations, participants posed questions. Major part of the questions was dedicated to project selection and priorities. In respect of resettlement issues, interest was provoked by compensation and reimbursement mechanisms.

Questions asked and comments made:

Questions:	Comments:
Is it possible to amend the presented documents?	It was repeatedly explained that the aim of the consultation meeting is to discuss the draft versions of ESMF and RPF. Those documents will be finalized with incorporation of feedback.
Sub-projects are planned to be implemented in the vicinity of the cultural heritage (CH) sites. Consequently, there is higher than average likelihood of encountering chance-finds during excavation works. Development of tourism infrastructure near the CH sites should not lead to loss of archaeological values. Civil works near the Saro Darbazi houses, Tmogvi Fortress, Saphara Monastery will be particular interest from this regard. What kind of measures are envisaged to protect archeological values?	<p>It was clarified that if Construction Contractor encounters chance finds on a subproject site, MDF must immediately notify the Ministry of Culture and Monument Protection and receive its instructions on the further course of action. MDF may not authorize resumption of work until obtaining consent of the Ministry of Culture and Monument Protection confirming that all urgent measures are taken for the preservation of archaeological heritage.</p> <p>Representative of Akhaltsikhe Municipality Gamgeoba noted that access road to Saphara monastery is repaired almost every year. So far have not find any archaeological object. However, if such case occurs, the procedures defined will be fully followed.</p>

Questions:	Comments:
Several rehabilitation projects are ongoing or are planned to be implemented in Akahltsikhe Town. Civil works for rehabilitation of water supply and sewage systems are ongoing as well. Better coordination is necessary to avoid overlaps.	Representative of Governor Administration explained that the three-year action plan is adopted, which pools all projects planned within several programs. Mentioned Action Plan enables us to implement numerous ongoing sub-projects under the programs, in coordination with different stakeholders in order overlaps to be avoided.
Bishop of the Diocese was unable to attend the meeting. However, he requested to undertake consultations with representatives of the Orthodox monasteries and patriarchy. They have views on placement of tourist infrastructure near the churches. Consequently, Church involvement is important.	All sub-projects within the RDP III will be discussed in advance with participation of all stakeholders. Their interests will be adequately taken into consideration in subproject preparation.
What are the principles of compensation for the assets of affected persons?	The Resettlement Policy Framework is prepared based on the WB's Operation Policy and the Georgian legislation in force. Compensation will be granted to every single person, which is directly affected by the project implementation.
May an affected person appeal if compensation is not acceptable?	<p>Of course, it is possible. A Grievance Redress Mechanism will be set up to deal with both the environmental and social issues of the sub-projects. A Grievance Redress Committee (GRC) will be established in each Gamgeoba. Complaint will first informally reviewed by GRC, which takes all necessary measures to resolve the dispute amicably.</p> <p>If any aggrieved person is unsatisfied with the GRC decision, the next option will be to lodge grievances to the MDF. The MDF shall review the complaint in compliance with the procedures specified in the Administrative Code of Georgia.</p> <p>If the MDF decision fails to satisfy the aggrieved person, they can pursue further action by submitting their case to the appropriate court of law (Regional Court).</p>

After discussion on ESMF and RPF, Anna Rukhadze briefly reviewed draft Executive Summary of the Strategic Environmental, Social and Cultural Heritage Assessment (SECHSA) of the Regional Development and Tourism

Development Strategies of Samtskhe-Javakheti and Mtsketa-Mtianeti. She explained the objectives of the assessment and overviewed issues outlined in the in the Executive Summary. Stakeholders consultation methodology and plan for running SECHSA full report through the residents of the region was presented and discussed with participants of the consultation meeting. Participants of the meeting were informed that draft final report on SECHSA will be prepared after completing stakeholder consultation process in the two selected regions and disclosed through the MDF's web page. Hard copies of the report will be available at the MDF office in Tbilisi and Municipal offices in Mtskheta and Akhaltsikhe. Consultation meetings in Tbilisi, Akhaltsikhe and Mtskheta to be conducted after disclosure of the SECHSA Report with involvement of all stakeholders: affected communities, NGOs and civil society, Government Bodies, Georgian Orthodox Church, and municipal Authorities. Feedbacks received during consultations meetings will be reflecting in the final SECHSA report which will be re-disclosed.

Representatives of territorial administrations and Governor's administration expressed positive attitude and support for the RDP III and noted that the Project is of great importance for the development of tourism in the region.

At the end of the meeting, David Tabidze wrapped up the suggestions and remarks expressed at the meeting and stated that the final versions of ESM and RPF will be posted on the MDF's website.



Upon the receiving “No-Objection” from the WB, the present draft SECHSA report will be disclosed and the consultation process will be continued.