

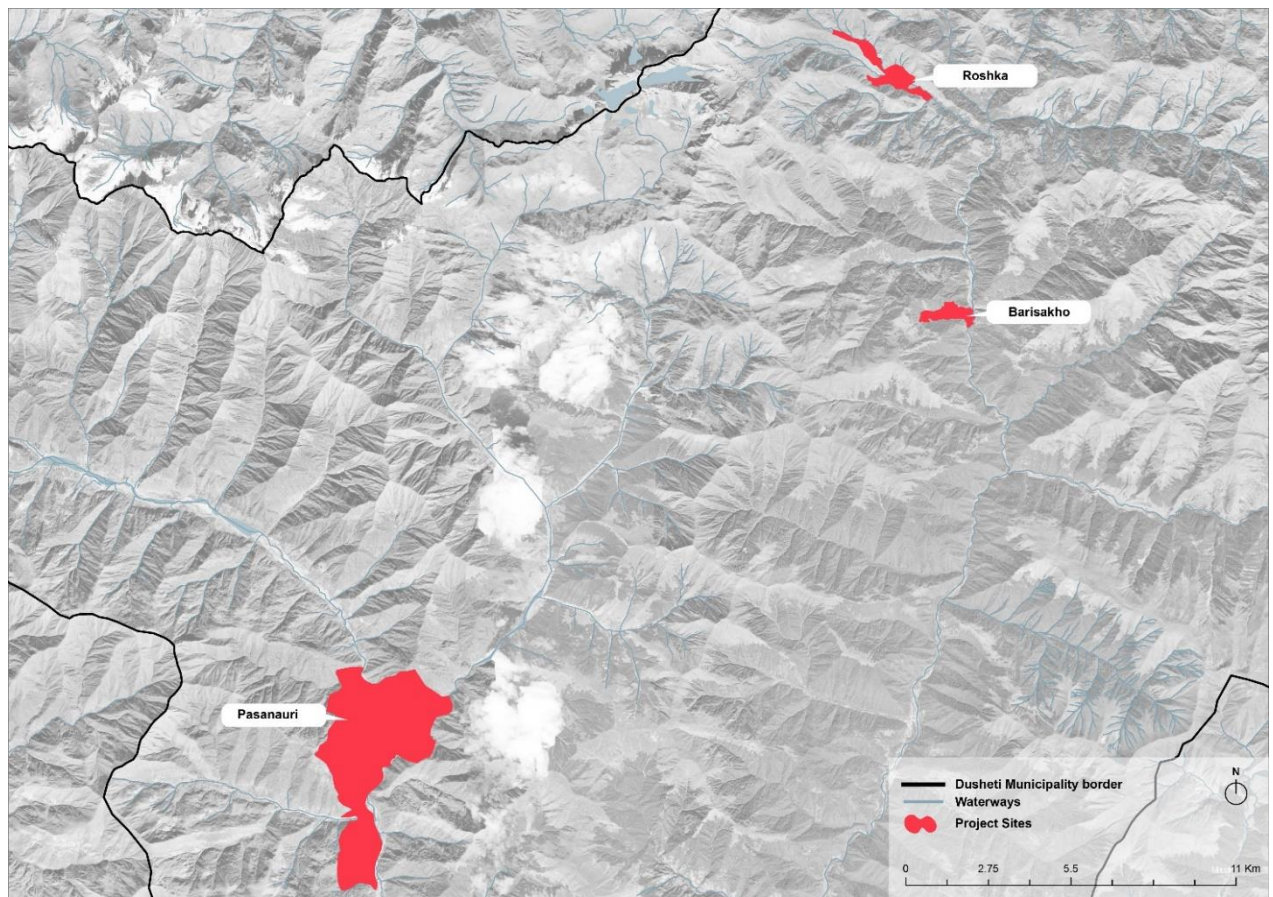
## DRAFT TERMS OF REFERENCE

### PREPARATION OF PASANAURI, BARISAKHO AND ROSHKA DEVELOPMENT PLANS (PBRDP)

#### A. BACKGROUND

1. Georgia has received a loan from the Asian Development Bank (ADB) toward the cost of the Project Readiness Financing (PRF) for the preparation of the Liveable Cities Investment Program (LCIP) multi tranche financing facility. LEPL Spatial and Urban Development Agency (SUDA) intends to apply a portion of the proceeds of this loan to procure an International Consulting Firm to create guiding documents for Dusheti municipality. These documents are designed to promote sustainable development, integrate climate change considerations into development planning, and facilitate effective community engagement in the planning process, all while preserving and promoting the unique cultural and landscape heritage of the region.

Figure 1: Project Sites in Dusheti Municipality



2. Pasanauri, in Dusheti municipality, sits at the confluence of Mtiuleti and Gudamakari Aragvi rivers, 1050 m above sea level, 47 km from Dusheti. It grew due to the strategic position along Georgia's military road and a nearby checkpoint. It's a popular resort with mineral springs for health, hosting 1148 people in 2014. Barisakho, a village in Dusheti, lies at the foot of the Gudamakri mountain range, by Khevsureti Aragvi river, 1460 m above sea level, 63 km from Dusheti. Pasanauri and Barisakho are climate-balneological resorts. The small village of Roshka was once the heart of the Roshka-Kmosti community. Barisakho had 153 residents, and Roshka had 10 in 2014. Khevsureti, known for its rich ethnographic history, attracted travellers, explorers, and artists throughout the Soviet era and under Russian rule.

3. During the phase of active development in selected sites, the absence of a planning document in Pasanauri, Barisakho and Roshka poses the risk of large-scale, unplanned, and

chaotic "development, "which limits the effective use of critical natural resources. The current challenges that selected locations are facing are the following:

- Absence of an integrated vision for development.
- Absence of resort development analysis and potential.
- Absence of the vision for immovable monuments of cultural and landscape heritage in Barisakho and Roshka.
- Inadequate registration of land plots.
- Poor demarcation between buildable and non-buildable areas.
- Degraded architectural image and absence of architectural regulations/guidelines.
- Low quality of social, recreational, and engineering infrastructure.
- Degraded mobility system with no strategic plans.
- Absence of land use masterplan and sectoral plans.
- Lack of zoning and development regulations, not identified, defined future development areas.
- Absence of encouraging/incentive policies and non-existence of special regulations zones.
- Absence of specific approaches and offers in Understanding, studying, and analysing investment objects or investment areas.

## B. OBJECTIVES

4. Pasanauri, Barisakho and Roshka development plans <sup>1</sup> That will be prepared in accordance with Georgia's Laws and Regulations will be a guiding tool/strategic document for the municipality that will create a legal framework to balance community development aspirations, the private sector, and local conservation goals. With the momentum of booming development in Pasanauri, Barisakho and Roshka, development plans will foster sustainable development.

5. Plans will follow best international practices while ensuring national legislation and strategies are aligned. It will foster participatory and inclusive planning, pay specific attention to nature-based and cultural heritage values, and provide tools for the long-term sustainable development of the project areas.

6. Plans will boost the vibrancy of mountain resorts by implementing comprehensive growth strategies that enhance their overall lifestyle.

7. This Terms of Reference (TOR) defines the activities required to prepare Pasanauri, Barisakho and Roshka development plans. The purpose of the plans is to preserve the areas from unwanted and uncontrolled development while maximising immediate benefits and future opportunities for local communities, public and private sectors.

## C. SCOPE OF THE ASSIGNMENT

8. The scope of this assignment includes Task 1- Development Plans for Pasanauri, Barisakho and Roshka (All sites should be worked on simultaneously) and Task 2- Priority Investment Plans (PIP)

9. In Pasanauri, the primary emphasis is on mobility, discussed on a multi-scale, considering planned infrastructure projects and the role of Pasanauri, bearing in mind the urban characteristics of Pasanauri and its identity as a resort area, focusing on urban design aspects.

10. The focus in Barisakho and Roshka is on the cultural heritage and distinctive features of the Khevsureti landscape, with a strong emphasis on community engagement. The village of Roshka acts as an intermediary distribution camp for travellers and climbers. The popular trekking trail Juta to Roshka via Chauki pass goes through Roshka Village, connecting Kazbegi municipality

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<sup>1</sup> Due to misleading translation from Georgian to English, the title of the project is "Development Plan," but it must be aligned with the code (Government Resolution No. 260 of June 3, 2019 "On the Rules of Spatial Planning and Urban Development Plans", Article 3.1, b.b).

with Khevsureti. The consultant should focus on the role of Roshka according to its strategic location and discuss the potential improvement of mobility within those municipalities. It is imperative to research this issue through a multi-scalar approach.

### Task 1-Development Plans

The main tasks for all sites of the Consultant will include, but not limited to, the following:

- Research- Locate and collate as much relevant data and studies as possible on the project area, including its physical, social, environmental, and cultural aspects. Summarise takeaways from these studies into a GIS, including a compendium of thematic and analytical maps, alternatively referred to as a Research Phase.
- In line with international good practices, a participatory and inclusive planning approach should be fostered, and specific attention should be paid to nature-based and cultural heritage values, including mapping of high-value biodiversity areas.
- Follow a stepwise approach (i) collect data, engage with possible stakeholders; (ii) carry out fieldwork and analyse data; (iii) formulate a vision and strategy; (iv) develop a Concept Plan; (v) prepare the development Plan; and (vi) set-up an Information System.
- Prepare a Stakeholder Engagement Plan, which will guide the development of plan preparation and foster participatory and inclusive planning. Stakeholder groups may include the local population (including youth, women, and elderly groups with disabilities), local and regional authorities, and the private sector. Carry out focus group discussions, including separate discussions with women and vulnerable groups (elderly, persons with disabilities), to ascertain and refine these needs and aspirations while examining their feasibility and sustainability vis-à-vis the government's strategies and priorities.
- Based on Stakeholder engagement plan organize LAG-Local Action Group to have active public involvement and participation in decision-making.
- Develop a Strategic Environmental Assessment and a thematic and descriptive diagnosis for climate; natural resources, physical environment; protected areas (reserve, landscape, world heritage and cultural assets); risks and hazards.
- Break down sector-specific issues into distinct proposals, organize them into plans, and define guidelines/recommendations for (i) Sanitary protection zones; (ii) Provision of common-use infrastructure; (iii) Landscape protection and development;(iv) Waste management; (v) Historical-cultural zones and other needed sectors. Define if more research is needed on specific sectors.
- Create legal preconditions for resort-recreation development aligned with sectoral plans, aspects, and guidelines).
- Create a vision for enhancing mountain resort amenities and experiences.
- Determine resort development densities (current and possible threshold indicators) and corresponding balance indicators in accordance with the rules for plan development.
- Identify potential development areas within limited resources of buildable land. Proposing encouraging investment packages and special zoning for future resort/recreation developments.
- Create a mobility analysis using a multi-scalar approach, examining sites across various scales, considering their identity, and presenting guidelines/recommendations.
- [Research of cultural \(including archeological, historical\) heritage monuments and landmarks, specification of protection areas, specification of the list of cultural heritage in the research process.](#)
- Identify the potential of cultural heritage and ways of integrating it into the community and landscape.
- Define legal preconditions for public space/infrastructure development for.  
(i)Distinctive zones/centres/ administrative entities; (ii)For green areas; (iii) For social infrastructure; (iv)For transport and technical infrastructure; (v)For protection zones of cultural heritage objects; (vi)Defining priority development areas.
- Establish development management regulations in accordance with the development vision and strategy and the requirements of the Code. The main provisions of the development and the need for planning include (i)Sectoral aspects, guidelines/recommendations; (ii)Geohazard management recommendations;



(iii) Development of a resort management model/recommendations (similar international examples); (iv) Recommendations and strategies for the inclusion of the local population in the tourism economy/ecotourism; (v) Exceptions/restrictions and/or additional conditions related to the regulation of parking lots and parking spaces; (vi) Obligations to create public spaces and other means of attraction; (vii) Proposing architectural aesthetic appearance guidelines.

- Based on the Pasanauri, Barisakho and Roshka development plans and feedback from engaged stakeholders, create a branding and marketing plan to boost the area's reputation and build a clear image of the project areas that are communicated globally. Taking into account perspectives from representatives of the Georgian National Tourism Administration and aligning them with their current vision.
- Based on the strategy, its goals, and objectives, identify measurable indicators and targets. Suggest a monitoring system for the strategic document. This system will enable the municipality to track progress over time. Develop a roadmap for the municipality to delineate short and long-term steps, clarifying their next actions.

## Task 2- Priority Investment Plans (PIP)

The main tasks for all sites of the Consultant will include, but are not limited to, the following:

- Review the output of community consultations related to communities' views of the project, its impacts, and how their interests and aspirations could be addressed. Identify specific needs, concerns and aspirations of women and vulnerable groups. Build on this work and ascertain and refine community needs and aspirations while examining their feasibility and sustainability vis-à-vis the government's strategies and priorities.
- Undertake additional consultations and surveys, including with potential private sector organizations that might be interested in investing in appropriate facilities and activities in the project area.
- Based on the development plan vision, strategies, goals, and targets, select projects, and carry out a multicriteria analysis to prioritize and program projects over time.
- Prepare a plan of priority investments that could be implanted in the short term and in the medium and longer term. Responsibilities and estimated recurrent expenditures, such as staffing and training and operation and maintenance of facilities, should also be included in the plan.
- Include possible implementation arrangements for specific activities, possibly including government agency involvement and support, community participation, NGO involvement, private sector investments, and others as appropriate.
- Undertake a rapid assessment of the economic viability and financial sustainability of the proposed investments and select priority projects. Develop a comprehensive cost-benefit analysis (CBA).
- Provide suitable maps, plans, presentations, and other suitable graphical approaches to facilitate understanding of the activities and investments being proposed.

Extensive site surveys and/or site investigations, are not anticipated at this stage of the project, but should the need arise, the consultant should firstly agree a budget for the work as provisional sum. Any sub-contractors retained for the purposes of the surveys, site investigations projects will be contracted to, and paid by, the consultants. In case of need and upon approval of the Client for preparation of detailed urban design level project for selected area, provisional sum budget is considered.

## D. TEAM REQUIRMENTS

11. The assignment will be financed through ADB loan funds under Liveable Cities Project Readiness Facility and carried out in accordance with ADB policies and procedures as well

Georgian legislation. The consultant will be selected from international firms (with support from national experts) that have relevant experience in preparing development plans in accordance with the requirements defined above.

12. The firm shall demonstrate:
- (i) Preferably 10 years of international experience in direction of spatial and urban planning.
  - (ii) Preferably 5 years of international experience in preparation of development regulation planning documents, preferably in high mountainous areas.
  - (iii) Significant international experience in cultural heritage and landscape projects
  - (iv) Preferably 3 years of international experience of conducting surveys in mountainous areas.
  - (v) Experience of working with international organizations will be an advantage.
  - (vi) Experience in Eastern Europe, Western Europe, and post-soviet countries; previous experience in Georgia is an advantage.

13. Indicative consultant team composition and staff inputs is Table 1 below. Consulting firms proposing for the assignment may adjust the composition to suit their approach to meeting the requirements set out in these TOR, subject to not significantly exceeding the total consultant person-month inputs.

14. Consulting firms may also associate with other firms or individual consultants to provide the complete range of expertise required for the assignment. Position-specific requirements are provided in **Annex 3**. Consultants proposing for the assignment will be required to submit curricula vitae (CVs) for each of these positions with their proposal.

**Table 1: Indicative Team Composition and Estimated Inputs**

#	Title	Person-Months
	<b>International Staff-Key experts</b>	
1	Urban planner/Team leader	5
2	Landscape Architect	1,5
3	Transport/Mobility Specialist	1,5
	<b>National Staff-Key experts</b>	
4	Urban and regional planner / Deputy team leader	10
5	Environment Specialist	3
6	Tourism specialist	3
7	Stakeholder engagement specialist	3
	<b>International Staff-Non-key experts</b>	
8	GIS Specialist	2
	<b>National Staff-Non-key experts</b>	
9	Transport/Mobility Specialist	2
10	Infrastructure Engineer	3
11	Socio-economic specialist	5
12	Cultural heritage specialist/ Ethnographer	2
13	Landscape Architect	3
14	GIS Specialist	10
15	Branding/Marketing Specialist	2
16	Translator – Georgian/English	5
17	Head office support	3
		<b>64</b>



## E. DELIVERABLES AND TIME SCHEDULE

Table 2: Deliverables, Milestones and Payment Schedule

Phases	Deliverable	Milestone	Payment Schedule (% of contract amount)
1	Inception report	Month 1.5	
	Draft Research Report	Month 3.5	35%
	Research, Vision & strategy report	Month 4	15%
2	Concept plan report	Month 6	30%
3	Development plan report	Month 9	20%

\*The Payment milestone percentages may be revised during negotiations before finalizing the contract.

15. The expected deliverables are as follows:

**i. Inception Report. This report will include:**

- Methodology of the PBRDP
- Stakeholders mapping and Engagement plan
- Data collection/survey program
- The required changes to the outline scoping of the proposed works, if any.

**ii. Draft Research report**

- Data matrix and reports as defined by the Code.
- Preparatory studies and Base Map as defined by the Code.
- Mobility analysis
- Resort-recreation development analysis.
- Draft Vulnerability and Climate resilience assessment
- Draft Diagnosis and Spatial Analysis
- Draft Spatial SWOT analysis
- Summary of stakeholder engagement activities

**iii. Research, Vision & strategy report** This comprehensive report will include:

- Final Research report
- Development Vision
- Development Strategy
- Viability Assessment
- Summary of stakeholder engagement activities
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**iv. Concept plan report.** This report will include.

- Concept plan as defined by the Code.
- SEA scoping as defined by the Code.
- Summary of workshop activities
- Branding/Marketing Plan
- Priority Investment Plan

**v. Final Development plans.** This report will include:

- The Development Plans
- SEA as defined by the Code.
- Geo-Information System as defined by the Code.

- Final Priority Investment Plan
- Final Branding/Marketing Plan
- Compendium of analytical and thematic maps; All annexes with additional maps, data, analysis, presentations, guidelines, complete PBRDP GIS, etc.
- Stakeholder Engagement Summary Report.

16. Each report must include an **executive summary** and should not **exceed 40 pages**. **Annexes should be used for supplementary data.**

17. The consultant will provide **weekly reports** containing concise updates on process status, highlighting identified gaps, and signalling any required assistance.

18. All project reports shall be written in Georgian and English and shall be provided in both printed and electronic form. The consulting firm shall provide five printed copies of each report to SUDA. Electronic versions of the reports should be submitted in both MS Word and PDF formats. The consulting firm shall also provide SUDA with the final electronic version of all source files under self-explanatory file names and directory structure (including data collected, spreadsheets and models etc.). The detailed format requirements are provided in **Annex 4**.

## F. IMPLEMENTATION ARRANGEMENTS

19. A Monitoring Group (“Group”) will be created by SUDA and will consist of representatives from SUDA and Dusheti municipalities, functions of the Group will be to (i) ensure smooth communication and information sharing between group members; (ii) receive weekly progress update reports from the Consultant; and (iii) provide timely support to the Consultant on access to project relevant data as necessary.

20. As part of the review process, the Consultant shall submit the draft reports to SUDA as well as to all members of the Group and incorporate their comments during the finalization of the reports. These comments and inputs will be summarized in a comments matrix and shared with the group members for their information and deliberation as appropriate. Workshops will also be held with the Group on an as needed basis and upon request of its members. Workshops will help seek inputs from other stakeholders.

21. SUDA may mobilize several students/ Interns with the help of universities to work with consultants during the project full time, to promote urban planning education and increase awareness among students and create quality human resources.

## Annexes

- Annex 1: Project Area Descriptions
- Annex 2: List of Reference Documents
- Annex 3: Position-based TORs
- Annex 4: Formats of Documents



## ANNEXES

### Annex 1: PROJECT AREA DESCRIPTIONS

#### General Information about Pasanauri

##### **Brief Description of the Planning Unit**

Pasanauri is a township situated in Dusheti municipality, serving as the center of the community (Veshagurni, Zemo Amirni, Mejilauri, Ukanamkhari, Chiriki, Tskvedieti, Tsinamkhari, Tsinkobani, Tsiporti, Chikani and Khevsha).



*Pasanauri - photo credits-Shermazana*

Pasanauri Resort area serves as the hub of Georgia's historical-geographical region, Mtiuleti, and traditionally, it thrived as one of the key trading centers in ancient times. Mtiuleti encompasses the valley of Tetri Aragvi river. Situated at the confluence of the White and Black (Gudamakri) Aragvi rivers, in a valley embraced by the majestic Caucasus mountains, Pasanauri village rests at an altitude of 1050 meters above sea level. The township's establishment and growth were expedited by the construction of the Georgian military road, which strategically positioned a military checkpoint here. Legend has it that tolls were levied on passersby at this

checkpoint, hence the toponym "Pasanauri." Many are unaware that Pasanauri was formerly known as "Pas Areuli," likely owing to its pivotal role drawing visitors from across Mtiuleti for trade, resulting in varying prices. Furthermore, being historically situated along the Russian-Georgian military road, Pasanauri boasted a "Zastava," or military outpost, the name of which persists in one of Pasanauri's suburbs, known as "Zastao." Additionally, Pasanauri served as a rest stop for military personnel.

Pasanauri is a renowned climatic and balneological resort. Along the outskirts of the city, within the Aragvi valley, numerous mineral springs emerge, utilized for the prevention of gastrointestinal diseases. The moderate mountain climate enhances overall bodily health. Locally, it's believed that the white Aragvi water possesses healing properties, particularly beneficial for joint ailments. Moreover, Pasanauri is celebrated for its mountain cuisine.

Pasanauri is renowned for its breathtaking natural beauty, encompassing lush forests, majestic mountains, and captivating vistas, attracting numerous vacationers. The region boasts a moderately humid climate characterized by moderately cold winters and long, cool summers. The average annual temperature stands at 7.8°C, with January temperatures averaging -4.1°C and July temperatures reaching 18.5°C. Pasanauri offers various amenities including hotels, a tourist base, a hospital, a library, and other cultural and educational institutions. Granted township status in 1966, Pasanauri thrived during the Soviet era, hosting a livestock farm, secondary and music schools, a hospital, a pharmacy (established in the 1880s), two libraries, and a wool collection and processing enterprise. Additionally, it housed holiday homes, a tourist base, and hotels such as "Inturist" and "Aragvi," with the latter being the sole surviving hotel today. The township, as of the 2014 census, is home to 1148 residents.

Pasanauri experiences bustling activity during the summer months, attracting both foreign tourists and Georgian vacationers who frequent the resort. Visitors flock to Pasanauri year-round, renting apartments for extended stays, often until the end of August. The Tetri Aragvi bank, located near the center of Pasanauri, is particularly renowned for its acidic water, known for its therapeutic properties beneficial for gastrointestinal, ocular, and facial skin conditions. This spring is a major draw for visitors, especially families with young children, as frequent consumption of the water is believed to improve skin conditions. The acidic water, rich in minerals and vitamins, is highly prized for its health benefits, particularly for young children.

The acidity of the water has altered the color of the surrounding surface near the water outlet.

In Pasanauri, you will encounter another acidic water source, referred to by the local population as "Nadibaat Vedza". Residents emphasize the beneficial properties of this particular source for human health.

Due to the abundance of such sources, Pasanauri is also known as the repository of cure waters in its vicinity. Additionally, there is a third sour water source in the direction of Kazbegi; however, residents report that accessing this source is challenging due to its location in a hazardous area.

The area surrounding Pasanauri is characterized by forested mountains, predominantly oak forests along the edge of the Aragvi river, and mixed deciduous forests on the right side, featuring beech, aspen, oak, and other tree species. Pasanauri also hosts two artificial coniferous forests, primarily composed of pine trees.

Sunbathing along the Aragvi river is a common tradition in Pasanauri, established over many decades. The environment in Pasanauri is rich in medicinal plants, fruit trees, and berry bushes.

Near Pasanauri, there are three bridges crossing the Aragvi river. These bridges are predominantly constructed of iron pipes, with concrete reinforcement in the middle, ensuring their solidity and safety.

## **Historical References**

Historical information about the old church of Pasanauri is relatively scarce. Construction of the church commenced in the 1850s by engineering forces engaged in building the Georgian military road. The church, constructed in the Russian-Byzantine style, was dedicated to St. Alexander Nevelli. Following Georgia's Sovietization, the church was closed and subsequently demolished in the early 1970s.

On January 9, 2018, the post office in Pasanauri was designated as an immovable monument of cultural heritage by order of the director of the National Agency for the Protection of Cultural Heritage of Georgia. Built in the 19th century, the post office comprises two sections: the northern part has two floors, while the southern part has one floor.

The construction of the post office was prompted by the development of the Russian-Georgian military road. Post offices of this era typically served the dual function of information dissemination and transportation. The Pasanauri post office stood as the sole such facility along the Tbilisi-Stepantsminda Road, attracting numerous notable Georgians and foreigners traveling along the Georgia-Russia road.

## **Factors to consider and special and/or specific requirements.**

During the pre-project studies, the issues pertaining to the unified spatial development of the resort area within the township limits and surrounding areas should be analysed. This analysis should aim to formulate a unified vision and address the legal and planning issues concerning the development of the resort area of Pasanauri. It is important to identify the issues that must be considered in both the concept plan and the subsequent plan.

In the research and planning process, specific outlines of detailed plans for the development of the Pasanauri resort area, recreation areas, and separate zones should be provided, along with relevant recommendations. Additionally, a phased development plan for Pasanauri and a plan of city-building measures to stimulate resort development, taking into account investment packages, should be formulated.

Attention should be given to identifying problematic areas or areas of existing development that require detailed regulations based on the analysis. Resort and development-oriented events should be planned accordingly.



## General Information about Barisakho and Roshka

### Administrative Location

Barisakho, situated in Georgia within Dusheti municipality, Khevsureti community center (villages: Akusho, Korsha, Gudani, Biso, Ghuli, Chkhuba, Chie, Blo, Amgha, Atabe, Akneli, Ache, Akhieli, Batsaligo, Buchukurta, Gveleti, Datvisi, Zeistecho, Kartsaula, Maghraani, Motsmao, Roshka, Ukanakho, Kobulo, Ghelisvake, Chirdili, Dzedzeurta, Chalisopeli, Chimgha, Chormeshavi, Tsinkhadu, Khakhmati). Positioned on the eastern slope of the Gudamakri ridge, Barisakho overlooks the Khevsureti Aragvi river on its right bank, standing at an altitude of 1460 meters above sea level and located 63 kilometers from Dusheti.



*Barisakho- Photo credit-Georgian travel guide*

Barisakho serves as the administrative center of Khevsureti, housing essential administrative and public infrastructure such as schools, medical centers, and police facilities.

Khevsureti is geographically divided into two distinct regions:

Piraketa Khevsureti (Barisakho Community council)

Pirikita Khevsureti (Shatili Community council).

Barisakho-Gudani is classified as a climate-balneological resort. The carbonic acid mineral waters of Barisakho are renowned for their therapeutic properties, catering to preventive, pulmonary, and gastrointestinal health needs.

Notable historical events include the Khevsuri people's revolt, notably the 1813 battle near Barisakho between the rebel Khevsurs and the Russian army, resulting in the defeat of the Khevsurs. By the latter half of the 19th century, Barisakho was home to 46 families. In 1934, the ceremonial opening of the Pshav-Khevsureti road (Dusheti-Barisakho) took place in Barisakho,



following its construction which commenced in 1930. The State Museum of Georgia houses a ritual water vessel adorned with a lion image (dating back to the XII-XIV centuries) dedicated to Barisakho's angel of Khmala, with an inscription from the XVII-XVIII centuries.

According to the 2014 census, the village of Barisakho was inhabited by 153 people.



*Roshka-Photo credits-Shota Tsiklauri*

Roshka is a village situated in eastern Georgia, within the Dusheti municipality of Mtskheta-Mtianeti region, part of the Khevsureti community. Nestled on the southern slope of the Mtiulet-Pshavi Caucasus, it is positioned along the banks of the Roshkistskali river, at an elevation of 2000 meters above sea level and located 74 kilometers from Dusheti.

Historically, Roshka served as the center of the Roshka-Kmosti community. Before the political unification of Georgia, it was under the domain of the King of Kakheti, later falling under the governance of the King of unified Georgia. Following Georgia's division into separate kingdoms in the 16th century, Roshka became an independent rural area and reintegrated under the rule of the King of Kakheti.

In the 17th century, Zurab Eristavi's attempt to impose serfdom in Khevsureti, within the newly formed Aragvi principality, was met with staunch resistance from the local Khevsureti population. The conflict culminated in the killing of Zurab Eristavi by King Teimuraz I in 1629, leading to Khevsurs' submission to the king of Kartli-Kakheti.

During the 19<sup>th</sup> century, migration from Roshka to Ertso-Tianeti became common among the mountain population. According to the 1924 census, the village was inhabited by 137 people primarily engaged in cattle breeding. By the time of the 2014 census, only 10 individuals remained residents of the village.



Khevsureti stands out as one of the most thoroughly studied regions from an ethnographic standpoint. Throughout the Soviet era and the period when Georgia was part of Russia, this place attracted numerous travelers, explorers, and artists eager to explore its "exotic" character and document its unique culture.

### *1. Geography*

Pshav-Khevsureti is situated in the northeastern part of Georgia, spanning across the southern and northern slopes of the main Caucasus ridge. Encompassing an area of approximately 1600 square kilometers, it comprises Pshavi, covering 560 square kilometers, and Khevsureti, covering 1050 square kilometers. It is the sole region situated on both sides of the Caucasus range. Khevsureti occupies the northern slope, encompassing the Arkhoti (Asa river valley), Guro-Shatili, and Arghuni (Arghuni river valley) valleys, while Piraketa Khevsureti lies on the southern slope, comprising the Aragvi valley of Khevsureti. Pshav-Khevsureti shares borders with Tusheti to the east, Chechnya and Ingushetia (Russian Federation) to the north, Khevi and Mtiulet-Gudamakari to the west, and Mtiuleti to the south. Bounded by high mountain ranges to the east and west, these include the Kidegani ridge, Chaukhi massif, Gudamakari, and Alevi ridges to the west, and the Mutso, Atsunti ridge, Borbalo mountain, and Kakheti ridge to the east. The region boasts a diverse landscape featuring medium and high mountains, encompassing mountain-forest, subalpine, alpine, subnival, and nival zones. Administratively, Pshav-Khevsureti falls under the Dusheti municipality of the Mtskheta-Mtianeti region and comprises the councils of Barisakho, Shatili, Magharoskari, and Ukanapshavi.

The Pshav-Khevsureti region is characterized by rugged terrain and intricate topography. A significant portion of the area is dominated by mountain-meadow landscapes, while the remainder features mountain-forest and glacial-nival landscapes. The highest and most remote ridges in the region are composed of shales and sandstones dating back to the Paleozoic era. Conversely, the Khevsureti side boasts higher elevations and is bordered by glacial ridges. Lower Jurassic shale and sandstone layers are also prevalent in Khevsureti, with the black slate of the Paleozoic age being easily fractured and traditionally utilized as a building material since ancient times. Glacially transported boulders, known as the so-called wandering boulders, dot the subalpine belt in areas such as Chaukhi and Roshka (at elevations of 1950-2000 meters above sea level), originating from the Chaukhi massif (3700-3800 meters above sea level). Remnants of ancient glaciers are visible along the main ridge and near Borbalo mountain. Marble deposits, copper, antimony nests, mountain crystal (quartz), and other minerals are found in small quantities throughout the Pshav-Khevsureti region. The landscape's distinctive features include knife-edged relief in river valleys (such as Arguni, Asa, Khevsureti, Pshavi Aragvi, and their tributaries) and the ridges connecting these valleys (elevated at 2500-3000 meters above sea level). Notably, the main watershed ridge (Khevsureti Ridge) is integral, forming part of the Greater Caucasus' main watershed ridge. It extends northward and includes an arc-shaped section between the Chaukhi massif and the peak of Patara Borbalo. This ridge divides Khevsureti into two sections, with peaks exceeding 2800-3000 meters above sea level, including the Chaukhi massif and Patara Borbalo peak. Other significant ridges include Gudamakari, Chimghis Klde, Caucasus, Mutso, Chanchakha, Khidotani, Archilosklde, and Atsunti ridge.

The slopes of the Khevsureti ridges are characterized by their steepness, with the lower levels being more inclined than the higher ones, forming precipitous slopes. These steep slopes contribute to the uniqueness and diversity of tourist routes, transitioning into relatively smooth ridges and lush alpine meadows. Particularly noteworthy is the Chaukhi rock massif, renowned for its striking and jagged peaks.

The highest point of the Khevsureti watershed, the Arkhoti head, stands at 3050 meters above sea level, locally known as the Roshka trail, although this depends on the specific location within Khevsureti. For instance, the pass may be referred to as the Roshka pass by residents of Roshka, while those from Arkhoti might call it the Arkhoti pass. These valleys are intersected by a network of rivers, predominantly sourced from snowy mountains with contributions from volcanic groundwater.

Rivers such as Khakhmatis Tskali, Okherkhevi, Buchukurtias, Likokis Tskali, Datvisis Tskali, and Akukos Tskali flow into the Aragvi valley, where Pshavi water joins and supplements them, ultimately converging with the white Aragvi. The hydrological system of these rivers is characterized by seasonal fluctuations, with springtime snowmelt causing periodic flooding.

While Khevsureti was first mentioned in historical records in the 15<sup>th</sup> century, evidence suggests continuous habitation since the Bronze Age, although comprehensive archaeological research has been lacking. Nevertheless, sporadic discoveries indicate a long history of human settlement in the region.

Historical sources indicate that the area known as Pkhovi in the past had a longstanding allegiance to the kingdom, primarily driven by religious discord. This defiance against religious conformity played a pivotal role in shaping the local identity of Pkhovi, later recognized as Khevsureti. Even into the twentieth century, Christian faith in Pshav-Khevsureti retained distinct pre-Christian elements.

Throughout history, attempts to impose Christianity on Pkhovi were met with resistance, often necessitating forceful measures. In the fourth, eleventh, and thirteenth centuries, central authorities endeavored to Christianize and subjugate the region through military conquest. By the fifteenth century, Pkhovi had been fragmented into Pshav-Khevsureti, emerging as distinct entities in historical records. The sixteenth and seventeenth centuries introduced a new challenge for Khevsureti: the plunderer raids led by Leks from the North.

## *2. Location and Functional Value*

Roshka, situated as the center of the historical Roshka-Kmosti community, lies approximately 119 kilometers from Tbilisi. Historically, it was not an independent territory but rather fell under the authority of the King of Kakheti. Following Georgia's unification, it naturally fell under the control of the King of unified Georgia. Subsequently, amid Georgia's division into kingdoms and principalities, the community became a distinct rural area before once again becoming part of the King of Kakheti domain. The strategic significance of Roshka led to ongoing attempts by the people of Aragvi to assert control over this territory, as evidenced in various Georgian historical sources from the late Middle Ages. From an administrative and geographical standpoint, Roshka, along with Barisakho, serves as the "gateway" to Khevsureti, specifically Piraketa Khevsureti. The administrative function of Barisakho and the unique historical and ethnographic aspects of Roshka collectively contribute to their pivotal role in the overall development of Khevsureti.

## *3. Urban System and Settlements*

Barisakho, serving as the center of Khevsureti, holds significant importance as a key focal point for the region's overall development. Positioned as the primary attraction center, its strategic location and condition render it a pivotal urban node within the area. Continuing along the main axis from Barisakho leads to the historical village of Roshka, nestled on the southern slope of the Mtiulet-Pshavi Caucasus, alongside the Roshkistskali River. This river, an 11-kilometer-long right tributary of Aragvi, drains a basin covering 47 square kilometers. Flowing into Roshka valley, the Roshkistskali meanders gracefully amidst the mountains, with the large mountains serving as natural demarcations for the valley. The distinctive topographical setting, with mountains enclosing the valley, coupled with the gently undulating terrain and scattered village settlements, presents a striking panorama. Similar to other Khevsureti villages, the historical character of Roshka embodies a harmonious blend of intricate landscapes, artistic architecture, and

untouched surroundings, reflecting the traditional Khevsuri way of life. However, since the 19<sup>th</sup> century, migration within Khevsureti, particularly in its mountainous regions, has led not only to the depopulation of villages but also to the gradual dismantling of these settlements as cohesive artistic or architectural ensembles.

Khevsureti encompasses the valleys of Aragvi (Barisakho, Gudani - Piraketa Khevsureti), Arkhoti, Shatili, and Ardoti (Pirikita Khevsureti). It shares borders with Tusheti to the east, the Russian Federation (Chechnya) to the north, Khevi and Mtiulet-Gudamakari to the west, and Pshavi to the south. Khevsureti is characterized by deep ravines, with its name likely derived from this feature, signifying a place with deep ravines. Historically, until the 1950s, the basins of these valleys were home to 81 inhabited villages, with 35 situated in the basin of the headwaters of Aragvi. Presently, 33 villages in Khevsureti stand completely abandoned, while the population resides in 48 villages comprising 200 households totaling approximately 700 people. However, most of the population spends winters in the lowlands, with only 20 villages housing permanent residents in Khevsureti.

#### Khevsureti population dynamics

	Barisakho community (2010 – 2012)	Shatili community (2010 – 2012)
Households	204 - 163	67 - 56
Population	604 - 526	251 - 119

Barisakho and Shatili municipalities in Khevsureti comprise ten main communities. Apparently, the historical portrayal of Roshka should have been markedly distinct, primarily manifesting in the intricacy of its settlement patterns closely intertwined with its landscape and environment. Regrettably, the historical architectural heritage of the village is not as favorable as one might hope. Nonetheless, we believe that remnants of old dwellings likely lie within the foundations of relatively newer buildings. Even a cursory glance at the village reveals traces of its ancient historical nucleus. The juxtaposition of residential and agricultural structures forms a cohesive core intimately linked with one another, whose comprehensive interdisciplinary study is expected to unveil the village's historical essence.

From the 19<sup>th</sup> century onward, Roshka has experienced a gradual depopulation. Initially, the population began migrating to Ertso-Tianeti. According to the 1924 census, the village was home to a total of 134 individuals. However, as of 2014, only 10 people reside here. Presently, Roshka faces the inevitable prospect of complete abandonment, with much of the population being elderly and living in comfortable conditions. The primary challenge facing Roshka today is the extreme deterioration of living standards. Repopulating the village could be feasible if electricity and internet access were provided, ensuring essential services even during harsh winter months. The issue of access roads to the village has been addressed at this stage. Historically, Roshka was the seat of the Tsiklauri tribe. However, in the event of resettlement, it is plausible that new names might emerge to facilitate tourist development, potentially disrupting traditional practices. Alternatively, improved conditions elsewhere in Georgia might entice descendants of the Tsiklauri tribe to return to their ancestral lands. Establishing the function of Barisakho and expanding towards Roshki, integrating them into a unified tourist-resort complex, could profoundly alter the trajectory of Khevsureti's future development. Implementing this strategy within a cohesive framework would establish a regional tourist complex with unparalleled developmental potential, covering the entire Khevsureti region and significantly impacting overall progress.

#### *4. Adapting to Climate Change and Mitigating Circumstance*

The climatic conditions in the region are notably harsh. The average annual water temperature stands at +5 degrees Celsius, with winter air temperatures plummeting to as low as -18 degrees Celsius. Precipitation levels amount to approximately 1000 mm annually, with the majority falling in the form of snow. The overall climatic profile features subalpine and alpine meadows alongside forested slopes in Piraketa Khevsureti.

Current forecasts indicate an escalation in heat waves across Georgia, posing significant threats to human health, livelihoods, and biodiversity. Accelerated glacier melting is also anticipated, potentially altering hydrological patterns and amplifying flood risks. The impact of rising temperatures is particularly pronounced in high mountain settlements, a trend increasingly observed in recent years throughout Georgia. Therefore, it is imperative to assess the state of the mountain river network surrounding these settlements, identify potential hazards accurately, and devise preventive measures essential for climate resilience.

#### *5. Regional Integration*

Given Georgia's multifaceted potential, the future development of Khevsureti should be aligned with the balanced growth of the region. It's essential to understand the context of individual municipalities like Dusheti, both regionally and nationally, and delineate their roles and connections in the cohesive systemic development of the country. Connecting Barisakho and Roshka for the advancement of Khevsureti as a whole can serve as a unique model for comprehensively understanding a large-scale tourist area.

#### *6. Transformational and Planned Projects*

In recent years, Georgia has made significant infrastructure investments aimed at improving accessibility to various regions of the country. Considerable attention has been devoted to enhancing local-level communications. Moreover, the road linking Barisakho holds significant importance. This road could transform Barisakho into a certain hub, facilitating easy access to Piraketa Khevsureti and thereby opening avenues for tourist to Pirikita Khevsureti.

#### *7. Labor Sector and Human Capital*

Barisakho, being the center of Khevsureti, served as a crucial hub during the Soviet era, boasting essential social, educational, and economic infrastructure. Employment opportunities were regulated, fostering socio-economic stability across Khevsureti. Considering the global interest in mountain and mountaineering tourism, coupled with the allure of rural products and natural landscapes, leveraging these offerings could significantly enhance Khevsureti's appeal and substantially boost local employment. Therefore, revitalizing the Barisakho-Roshki tourist complex is crucial for the well-being of the local population.

#### *8. Natural Resources and Landscape*

Khevsureti is characterized by distinctive landscape with peaks and passes, including Kalotana Pass - 2978 m; Arkhota Pass - 3172 m; Sabetsre - 2798 m; Pkhitura Pass - 2654 m; Mount Tanie - 3499 m; Tsrol — 3950 m; Anatori Pass - 2768 m; Borbalo - 2990 m; Karati - 2912 m; Makhismagali — 3990; Datvisjvari ridge - 2676 m; Chanchakha Pass - 2655 m; Mariamtsminda — 3140 m; Archilo mountain - 3263 m; Andaki Pass - 2887 m; Didi Borbalo - 3294 m; Atsunta pass - 3431 m; Mount Tebulo - 4493 m; Mutsostavi - 3512 m; Maisti mountain - 4081 m; Chaukhi pass - 3338 m; Juta Pass 3287m etc. Hiking and horse-riding tourist trails pass through the above passes; Among them, Arkhota, Datvisjvari, Andaki, Tsunta Roshka are especially important. Barisakho and Roshka serve as the focal points of these unique tourist routes, emphasizing the special function of these two locations.

Khevsureti stands out for its natural resources and landscapes. The Dusheti municipality encompasses three distinct categories of protected areas: the Pshav-Khevsureti National Park, Asa Abtredil, and the Roshki Nature Monument, covering a total area of 79,908 hectares. These protected areas in Pshav-Khevsureti are located 150 km from the capital.

The primary objective for establishing the Pshav-Khevsureti protected areas is to conserve, rehabilitate, and sustain the biodiversity of the central region of the Eastern Caucasus.

The Pshav-Khevsureti protected areas are distinguished in Georgia for their exceptional landscapes and international biodiversity significance, housing rare and endemic species of flora and fauna safeguarded by the Red List of Georgia.

Remarkable examples of abiotic nature, such as the Tanie, Tsodviani, Mitkhuli, Kopala, and Astajuri lakes, along with unique glaciers and the mountain ranges, showcase the remarkable landscape diversity within Pshav-Khevsureti protected areas.

The principal value of the Pshav-Khevsureti protected areas lies in its vegetation, ranging from the mid-altitude mountain forests to the nival zone. This includes forests dominated by oak, mixed-leaved species, pine, and birch in the subalpine regions, as well as alpine meadows situated on steep slopes. Among the noteworthy tree species are lime, rowan-tree, maple, ash-tree, wild pear, while the shrub layer features species such as Caucasian azalea, rhododendron, elder, bilberry, currant, and raspberry.

Notable among the species listed in the Red List of Georgia are the high mountain oak, elm, and Radde's birch. The biodiversity of the region is significantly influenced by its geographical position at the juncture of the Central and Eastern Caucasus. The flora of Pshav-Khevsureti includes many rare species, with over 20 of them featured in the Red List of Georgia. Species that are rare across the region are also present here.

The degree of endemism, the proportion of species unique to a defined geographic location, is particularly high among the plant species in Pshav-Khevsureti. The area hosts 212 endemic species of the Caucasus, which means that 7 out of the 17 endemic genera found in the Caucasus occur here; consequently, 35.4% of the plant species in Pshav-Khevsureti are endemic to the Caucasus. The subalpine meadows are home to more than 200 species of rare grasses that are unique to Georgia.

The rich vegetation of the highlands supports a diverse animal population. Species such as deer, red deer, ruffed grouse, and various birds are common in the region. Predatory animals like the brown bear, lynx, and jackal also inhabit the area. Additionally, there are 11 species of reptiles, at least 5 species of amphibians, only one species of fish (red-dotted trout included in the Red List of Georgia) and rare insects like the diurnal butterflies Apollo, Arapard, lycaena and Arion.

Khevsureti is known for its mineral waters, locally referred to as Vedza. These waters, including Likoki Vedza, Nadirkhevi Vedza, Khakhmati and Ghuli Vedza, and Gudani spring, contain alkaline-saline compounds. Although various minerals like marble, mountain crystals, and copper are found in the rocks of the region, their small quantity and the challenging terrain have hindered their comprehensive study for industrial purposes.

#### *9. Ethnography, Cultural, and Natural Heritage*

The ethno-cultural heritage of Pshav-Khevsureti is unique. The fortresses of this area (Lebasikari, Shatili, Mutso, etc.) are impressive with historical crosses/icons and magnificent examples of mythology. Agricultural life and customs are interesting. The region is famous for its folk poetry and traditional customs. "The Ballad of the Tiger and a Young Man" was created in this region, featuring the settlement of "Khogai Mindia". Khevsuri people inspired the works of the well-known and beloved Georgian writer Vazha-Pshavela.



Barisakho is home to 205 unique historical structures. These include Jvari complex, castle-houses, hall complexes, tower complex, icon, and community crosses, showcasing the architectural diversity and significance of the region. The legendary Khmala poplar tree in Barisakho, associated with ancient castle ruins and a very tall poplar tree nearby, with myrrh traces. Moreover, the region is dotted with more than 200 material culture objects, including castle-towers, churches, and shrines. Many of these religious sites date back to the pre-Christian era, though a significant number have succumbed to destruction over time. The remnants of these sites offer an illustration of the historical, material, and spiritual culture of Khevsureti.

Natural phenomena (rocks, trees, springs, places, etc.) that are used for prayer and are considered sacred sites are noteworthy. These sites have contributed to the preservation and conservation of primary forests and unique ecosystems across extensive areas in mountainous regions. In the Khati forests, hunting, woodcutting, harvesting of trees, and even clearing of land are prohibited by the locals. This responsibility is handed down from generation to generation and remains unviolated to this day.

Objects of material culture primarily had martial and defensive purposes. Such structures were erected along the northern border. Architectural masterpieces from the late Middle Ages deserve mention: Guro Castle, Lebaiskari Castle, Kistni Castle Complex, Kachu Castle, Shatili, Mutso, and the Ardoti Castle Complex, along with Khakhabo ruined village castles, etc.

Anatori and Mutso ark dams are particularly intriguing for their locations, architectural significance, and functions. These edifices also date back to the Middle Ages. The cultural and historical monuments in the region are incorporated into the recommended tourist routes. The journey from Barisakho to Roshka presents a unique touristic and historical-cultural "world," serving as the starting point for a "cascade" of unparalleled attractions.

Dwellings are a distinctive element of Khevsuri life. The homes are primarily constructed from slate stone, with some featuring whitewashed exteriors.

Each village possessed its own defensive tower, a necessity given that during the raids of Leks, a village, representing a single large clan, could be suddenly decimated.

Roshka village stands as a unique heritage of Khevsureti, boasting a distinct artistic and architectural profile. Its historical core preserves antiquity, maintaining its historical memory.

In addition to the village's structure, the immovable cultural heritage monuments add intrigue, revitalizing the historical essence of the village and emphasizing its unity.

There are several culturally significant sites in Roshka village and its vicinity, predominantly linked to the communal life, beliefs, and rituals of the village. The key ones include:

1. The "Didgori St. George's Cross Complex," serving as the primary community shrine of Roshka-Kmosti. This complex comprises an icon hall, a cauldron, a shrine, and a candlestick tower.
2. The "Archangel Cross," the secondary shrine of the Roshka-Kmosti community, situated atop a high mountain on the left bank of the river Roshkistskali.
3. The ancient settlement of the village, positioned on the left bank of the river Roshkistskali, dating back to the developed Middle Ages period.
4. The 19<sup>th</sup>-century church, a preserved religious site in the village, holding cultural heritage status. Located at the village's end, on the right bank of Roshkistskali.

These mentioned sites are immovable cultural heritage monuments, subject to special protection under Georgia's cultural heritage laws. Additionally, the significance of the area is underscored by the presence of the Roshka Nature Monument, one of the components of the Pshav-Khevsureti Protected Areas, governed by the Law "On the Creation and Management of Pshav-Khevsureti Protected Areas" (April 16, 2014).

The Roshka Natural Monument encompasses the valley of the Roshkistkali river, extending from Roshka village towards the Caucasus. It features striking landscapes formed by the slopes of the Caucasus and an abundance of erratic ("creeping") boulders. Among these are two immense diabase (igneous rock) boulders, counted among the largest erratic boulders globally. Additionally, numerous smaller yet impressive erratic boulders are scattered across the higher reaches of the valley and near Roshka village.

These large boulders, deposited by glacial melts near Roshka village, hold significance in the local mythological system. According to local narratives, this area is associated with Yaksari, a mythological figure from the Caucasus, who is said to have arrived to aid ogres and humans.

It is challenging to ascertain whether this legend recalls a battle between Aragvi lords and Teimuraz or if the legends predate such events. However, it is evident that these boulders captivate tourists visiting Roshka village.

The natural monument resembles a field scattered with boulders, evoking a sense of wonder. Roshka boulders rank among the largest erratic boulders worldwide, with the largest measuring 22X20X8 meters. They are dispersed across the Abudelaury valley and below Roshka village. According to data from Georgia's protected areas, these boulders were deposited during the Pleistocene period by glaciers.

#### **Factors to consider and special and/or specific requirements.**

1. When evaluating the anthropogenic or natural landscape of Barisakho and Roshka, or any Khevsureti settlement, it's essential to take into account their distinctive features, which warrant care and preservation.
2. In Khevsureti, where each family often owns one valley or village, the ethno-cultural character, local society, and their customs should be respected. Development initiatives should not disrupt the residents' traditional way of life.
3. The culture and craftsmanship of Khevsuri woodcarving are highly esteemed, with each ornament bearing significance. Khevsuri attire is also adorned with intricate patterns, serving both decorative and protective purposes. Development efforts should consider fostering conducive conditions for these crafts as integral aspects of life and expressions of ethnic identity.
4. The architectural heritage of the village, though not uniformly preserved, may incorporate remnants of older dwellings within the foundations of relatively newer structures. Comprehensive studies are necessary to assess development costs and the restoration potential of such sites.
5. The pass is referred to as Roshka Pass by Arkhoti residents, while Roshka inhabitants call it Arkhoti Pass. Roshka serves as a convenient gateway to Arkhoti, facilitating the establishment of camping and hotel facilities. The distance from Akhieli Roshka - Barisakho spans 30-35 km, offering excellent opportunities for hiking and mountain biking enthusiasts. Access to the Kazbegi region, particularly the Sno valley, is viable on foot or by mountain bike. Equestrian tourism is also viable and necessary, covering the entirety of Khevsureti. Roshka can function as an intermediary distribution camp and serve as a hub for climbers, a role it has fulfilled for many years.

During the pre-project studies, an analysis of the potential for integrated development of the resort-tourist area within the boundaries of Barisakho Roshka and its adjacent areas should be conducted. This analysis should encompass the considerations necessary for establishing the

resort-tourist complex, as well as the legal and planning issues pertaining to the development of the project area. The following issues must be addressed in the concept and subsequent plan:

- Specific delineations to be considered in the detailed development plan for the project area and individual zones, accompanied by relevant recommendations, a phased development plan, and measures to stimulate development, taking into account investment packages;
- Special emphasis on detailed planning regulations, including the planning of formative and development-oriented activities based on the unique characteristics of the area. This includes the development of aesthetic parameters compatible with the historical-cultural context, in collaboration with relevant specialists;
- Comprehensive identification of land parcel registrations and the existing cadastral landscape, specifying the categorization of land (registered and unregistered parcels), and delineating abandoned settlements. Identification of territories and areas for development, and establishing clear boundaries between construction and non-construction zones.
- Analyse the development principles and conditions of existing development in comparison to similar resort and rural settlements in other countries. It is recommended to draw upon the experiences of mountainous regions in Austria, Switzerland, Slovenia, and Italy.
- Develop a comprehensive transportation scheme integrated into the regional transport system for new development. Conduct a regional transport analysis and explore potential alternatives for connecting Khevsureti with the surrounding region.
- Address the need to position Roshka as an intermediate distribution camp within the Khevsureti tourist network. Additionally, consider developing it as a gathering base for climbers, leveraging its longstanding operation in this capacity.
- Conduct an analysis of the current state of engineering infrastructure and devise measures to provide the area with necessary engineering networks.
- Conduct detailed studies of natural and man-made threats, considering seasonality. This includes analysing existing data from avalanche studies and, if necessary, conducting additional studies using established guidelines, instructions, and practices.
- Analyse risks associated with climate change, develop strategies to mitigate them, and incorporate them into the design process.
- Identify and account for all other limiting factors affecting development.
- Analyse and incorporate the potential for diversification of tourism and sports tourism within the recreational area.
- Develop a conceptual proposal for tourist, tourist-spots, resort vacation, and recreational infrastructure within the context of new development.
- If required, determine the need for special regulation of the Barisakho Roshka recreation area and prepare a project for border changes accordingly.

## Annex 2: LIST OF REFERENCES

### Guidance Documents

Examples of both normative-legal and best practices in Georgia should be used in planning. The following are mandatory guidelines for use in the development plan elaboration process:

Normative	Description
Constitutional Law	Constitution of Georgia
Organic Law	Code of Local Self-Government

Law	<b>Code on Spatial Planning, Architectural and Construction Activities of Georgia</b>
Law	On Environmental Protection
Law	On Cultural Heritage
Law	On Development of Mountainous Regions
Law	Code of ecological evaluation
Law	On Water
Law	Forest Code
Law	On the Protected Area System
Law	On Highways.
Law	On Traffic Jams.
Law	On Civil Security
Law	On Tourism and Resorts
Law	Waste Management Code
Law	On Geodesic and Cartographic Activities
Law	On State Secrets
Presidential Decree	On the System of State Geodesic Coordinates in Georgia
Government Resolution	On the Basic Provisions on the Use and Development of Territories
Government Resolution	On the Rules of Territorial Planning and Urban Development Plans
Government Resolution	On Protection of Georgian Surface Waters from Pollution
Government Resolution	Technical regulation - construction climatology
<b>Other</b>	<b>Description</b>
Spatial Planning	A key tool for effective governance and development, with particular emphasis on countries with economies in transition (Author: UN, European Economic Commission; New York and Geneva 2008)
New Global Agenda for a Sustainable Future	Document adopted by the 17th Session of the UN General Assembly: "Transforming Our World: A 2030 Agenda for Sustainable Development"
State Program	Action Plan of the Government of Georgia for 2019-2020

### Annex 3: POSITION BASED TORs

#### International Staff-Key experts

1. Urban planner/Team leader: This role will be fulfilled by the Urban Planner, with preferably 15 years of experience He/she shall demonstrate substantial experience in leading multidisciplinary team and addressing various and cross-cutting spatial planning issues. He/she shall demonstrate a good understanding of administration of projects and contracts. He/she will be the focal point for the Client.
2. Landscape Architect (International): Professionally qualified landscape architect (at least Bachelor or equivalent) with preferably 15 years of experience in landscape planning in similar context (e.g. in rural areas, mountainous regions, cultural heritage/biodiversity hotspots...). He/she will provide the team with international insights and best practices. He/she will also prepare concept designs for the selected priority projects under the PIP and look at ways to further reduce impacts through the development of planting plans and green infrastructure.
3. Transport/Mobility Specialist: Professionally qualified transport specialist (at least Bachelor or equivalent) with preferably 10 years of experience in transport and mobility planning in similar context (e.g. in rural areas, mountainous regions, cultural heritage/biodiversity

hotspots...) He/she will be responsible for providing transport and mobility-related inputs using multi scalar approach. In addition, he/she will work closely with the infrastructure engineer to propose concrete local transportation projects and/or services that can improve people's livelihoods.

#### **National Staff-Key experts**

4. Urban Planner: Professionally qualified urban planner (at least Bachelor or equivalent) with preferably 10 years of experience in spatial planning in Georgia. He/she will be responsible for assembling all inputs from the team and putting together all tasks. In addition, he/she will work closely with the International Regional Planner to incorporate best international practices.
5. Environment Specialist: Professionally qualified environmentalist (at least Bachelor or equivalent) with preferably 10 years of experience in environment planning in biodiversity-sensitive projects in Georgia. He/she will be responsible for providing environment inputs. In addition, he/she will be leading the preparation of the Strategic Environmental Impact Assessment. He/she will be responsible for mainstreaming climate change adaptation and mitigation issues and leading the climate vulnerability and resilience assessment.
6. Tourism Specialist: Professionally qualified tourism specialist (at least Bachelor or equivalent) with preferably 10 years of experience in tourism and ecotourism development in Georgia. He/she will be responsible for providing tourism-related inputs. In addition, he/she is to be consulted on propose concrete tourism projects that can improve people's livelihoods.
7. Stakeholder engagement specialist Professionally qualified social expert (at least Bachelor or equivalent) with preferably 10 years of experience in stakeholder engagement activities in Georgia. In addition, he/she will be leading the preparation and implementation of the Stakeholder Engagement Plan and will have a mediator role between community, municipality and other relevant stakeholders.

#### **International Staff-Non-Key experts**

8. GIS Specialist: Professionally qualified GIS expert (at least Bachelor or equivalent) with preferably 10 years of experience in ArcGIS. He/she will be responsible for providing GIS-related inputs and will propose methodology for efficient use of the software.

#### **National Staff-Non-Key experts**

9. Transport/Mobility Specialist: Professionally qualified transport specialist (at least Bachelor or equivalent) with preferably 10 years of experience in transport and mobility planning in Georgia. He/she will be responsible for providing transport and mobility-related inputs. In addition, he/she will work closely with the infrastructure engineer to propose concrete local transportation projects and/or services that can improve people's livelihoods.
10. Infrastructure engineer: Professionally qualified infrastructure engineer (at least Bachelor or equivalent) with preferably 10 years of experience in infrastructure engineering in Georgia. He/she will be responsible for providing engineering-related inputs. In addition, he/she will prepare cost estimates for the selected priority projects under the PIP.
11. Socio-economic specialist Professionally qualified Socio-economist (at least Bachelor or equivalent) with preferably 10 years of experience in economic and financial analysis of projects in Georgia. He/she will be responsible for providing economic/financial-related inputs. In addition, he/she will carry out economic and financial analysis for all investments



identified under the PIP and CBA. He/she will be responsible for providing social-related inputs.

12. Cultural heritage specialist/ Ethnographer- Qualified professional cultural heritage expert with preferably 10 years' experience in art history and ethnography in Georgia.
13. Landscape Architect- landscape architect (at least Bachelor or equivalent) with preferably 5 years of experience in landscape planning in Georgia, specifically in mountainous areas.
14. GIS Specialist: Professionally qualified GIS expert (at least Bachelor or equivalent) with preferably 5 years of experience in GIS development in Georgia. He/she will be responsible for providing GIS-related inputs.
15. Branding/Marketing Specialist: Professionally qualified marketing expert (at least Bachelor or equivalent) with preferably 10 years of experience in marketing and branding development in Georgia. He/she will be responsible for providing marketing-related inputs. In addition, he/she will be leading the preparation of the Branding/Marketing Plan.
16. Translator (Georgian/English): Qualified professional with preferably 5 years of experience in providing Georgian/English translation services (written and oral) for activities similar to those of the assignment, including meetings with high-level officials.
17. Head office Support: The Consultant is responsible to determine and provide in its proposal additional non-key experts who may be necessary to deliver the outputs described in Section F of the TOR.

## Annex 4: FORMAT SPECIFICATIONS

Art. 11 of the Code specifies: “Structure of spatial planning and urban development plans: the graphical part shall comply with cartographic norms and scales established by the Georgian legislation. “

On this basis, the Consultant should be guided by legal documents as follows.

- Government Resolution No. 260 of June 3, 2019, “On the Rules of Spatial Planning and Urban Development Plans”.
- Order of the Minister of Environmental Protection and Natural Resources of Georgia No. 1, January 28, 2009 “Regarding the division of state topographic maps (plans) into sheets and approving the rules for their designations.”
- Presidential Decree No. 206, April 30, 1999, “On the System of State Geodesic Coordinates in Georgia”.

### Final Product (Handover Form)

The album is made in print and electronic form. For the initial submission of the report prepared at each stage of the service, the form of submission can only be electronic. Unless the Customer requests the submission of individual parts in tangible form. Final reports are required in both forms.

- Printed album 3 copies.
- In electronic format (PDF) as a CD-ROM - 5 copies; and
- Electronic version of geoinformation systems materials on DVD - 5 copies.

The printed album should be prepared by printing it on appropriately sized paper and binding it accordingly. The software for preparing (assembling, formatting, and/or downloading) the electronic form album can be any and final presentation format - PDF, unless the specific assignment requires the use of a specific software and file format. **The use of the file protection mechanism is not allowed without the customer's consent.** The electronic form is sent on CD(s) and/or memory card(s). Especially large files can be submitted using a cloud-based database.

### Technical Characteristics of Submitted Documentation

The documentation should comprise.

- Text part
- Graphic part
- Booklet

including maps, plans, and other cartographic materials. Additionally, the text part may incorporate illustrations such as photographs, graphs, and small schematic drawings.

The prescribed paper format for the text part is A4, with the allowance for A3 format inserts (illustrations, diagrams). The scale and format of the graphic part are determined by the project's specifications.

All pages in the document, except the title page, should be numbered. The main text should be typed in 11-point "Sylfaen" font, while supporting text should be at least 8-point in the same font. The spacing should be set at 1.0.

The graphic part should feature a stamp indicating the project name, customer and executing company details, conventional notations, textual notes, drawing name, scale, format, sheet number, total sheet count, date of execution, and heads of the executing company and responsible specialists.

Non-cartographic schemes in the graphic part may not adhere strictly to the requirements for the base map but should provide sufficient information.

When distributing information on graphic part sheets, the following mandatory requirements should be observed:

- The main drawing should be centrally positioned, from the left or upper edge to the stamp.
- the stamp with relevant information placed on the right side vertically, or horizontally at the bottom.
- Annotations should not obscure the main drawing, and main text should not overlap the drawing.

Considering the above requirements, albums must include the following sections:

- 1) **Cover:** This section should include the document name, project title, planning unit name, summary of performed works, and the date and place of completion.
- 2) **Title Page(s):** Details of the contract and the stage of work, requisites of the customer and the contractor, persons responsible for the document, and information about concerned state agencies, municipal bodies, and/or involved parties should be provided.
- 3) **Qualification Page:** Information about the qualifications of the natural persons executing the document should be included.
- 4) **Summary:** This section should provide a brief description of the completed work and its relevance to the present assignment and the contractor's action plan.
- 5) **Definition of Terms** (any terms different from those in the Code) and explanation of abbreviations (if any).
- 6) **Table of Contents:** The content of the album should be outlined according to the sections and their locations on the pages. Chapters, sub-chapters, paragraphs, and points should be separated as desired, and it is recommended that the table of contents be "active" and linked to the text.
- 7) **Main Text:** The main text should be formatted appropriately and follow the standard structure.
- 8) **Bibliography:** Used literature and/or a list of sources referenced in the text should be provided, following ISO 690 standards for bibliographic references.
- 9) **Appendices:** This section should include any graphic parts, related documents/sources, or other materials supporting the main text, if applicable.

Title pages of albums, textual thematic parts, and stamps of the graphic part must be certified by the managers and specialists responsible for the account from the planning team. This certification should be in both material and electronic documents, with a personal signature for material documents and a qualified electronic signature for electronic documents.

Any statistical or factual information referenced in the documents must be accompanied by a full reference to the relevant official source, including page numbers. In electronic format, relevant links should be provided. Additionally, documented interviews and meetings should be recorded in the form of minutes and accompanied by photographs.

When submitting intermediate and final documentation specified by the assignment, a complete (detailed) list of the composition of the printed and/or electronic versions must be attached to the material.

Materials should be presented in drone and satellite formats as appropriate. Additionally, materials should be presented with 3D version maps as needed.

The graphic part(s) should be presented with a stamp and a frame in A3 size or sheets of appropriate format, bound in an album. These should be confirmed by the signatures of the supervisor and the author(s)/performer(s) of the project.

Even in the absence or unavailability of information valuable for research and/or planning, it is necessary to show the results and provide appropriate references afterward. This should include an explanation of the limitation(s) that led to the said result.

The booklet will serve as a concise summary of the entire project, translated into easily understandable language, complemented by graphics and simplified vocabulary. It aims to ensure that local communities can comprehend the document clearly. This brochure will also function as a valuable tool for media and communication specialists to utilize as needed.

A4 Format, Max 40 pages.

## Formats of maps

The DMP basic plan must qualitatively meet the requirements set out in the plan development method. The format of the basic plan should be determined according to the scale of the recommendation and may be non-standard.

**The dimensions of the basic mapping format shall be in accordance with the range given in Annex N3 to the Plan Development Rule, in accordance with the DMP detalization.** The digital part of the baseline maps should be integrated into the design information system.

Based on the baseline maps, at least the following thematic maps / plans should be prepared separately:

Section	Contents	Specifications
Situation map / plan	Spatial context of the planned object	<p>The basis of the drawing is an orthophoto, observing all its features.</p> <p>The necessary elements of the projection:</p> <ul style="list-style-type: none"> <li>• The design object (dotted line); and</li> <li>• Landmarks that define the location (major landmarks and/or roads).</li> </ul>
Boundary map / plan	Design object boundaries	<p>The basis of the drawing is a topographic map / plan (according to the level of research), observing all its characteristics.</p> <p>Given the level of research, the essential elements of projection are:</p> <ul style="list-style-type: none"> <li>• <b>Municipality boundary</b></li> <li>• Designed unit boundaries.</li> <li>• Boundaries of built-up and undeveloped areas of settlements; and</li> <li>• <b>Boundaries of balance units</b> for which data collection/analysis has been conducted and further planning needs to be introduced; Places of interest (social infrastructure, culture and recreation, religious and cultural, administrative, etc.)</li> </ul>
Physical environment map/plan		<p>The basis of the figure is a map / plan of the borders with all its features, including the protected zones of cultural heritage.</p> <p>Taking into account the taxonomic level, the necessary elements of the projection are:</p> <ul style="list-style-type: none"> <li>• Buildings, including cultural heritage sites and inappropriate facilities;</li> </ul>

		<ul style="list-style-type: none"> <li>○ Functional purpose;</li> <li>○ Floor number;</li> <li>○ Physical condition;</li> <li>○ Age;</li> <li>○ Construction grade;</li> <li>○ Architectural and artistic value (valuable objects are singled out);</li> <li>○ Existing urban and natural spatial dominants;</li> <li>○ Points of perception of important panoramas;</li> <li>• The network of transport infrastructure with all its characteristics observed;</li> <li>• The network of technical infrastructure, respecting all its characteristics;</li> <li>• Boundaries of green areas, water bodies and natural values;</li> <li>• Boundaries of areas with natural and technogenic hazards, taking into account geological-seismic and climatic-environmental data; and</li> <li>• Places of interest (social infrastructure; culture and recreation; religious and cultural; sports, administrative, etc.).</li> </ul>
Legal environment map / plan		<p>The drawing is based on a boundary map/plan and a cadastral map, observing all their characteristics:</p> <p>Necessary elements of the projection are:</p> <ul style="list-style-type: none"> <li>• Data from the state register on land plots in the area, for the relevant stage of the project, according to the form of ownership (state, municipal, private, etc.);</li> <li>• Information on regulations and boundaries of the established regimes;</li> <li>• Boundaries of the current spatial planning documents;</li> <li>• Statistical data, taking into account all its characteristics; and</li> <li>• Results of the survey on the expression of interest and involvement</li> </ul>

### Technical Requirements Related to Geo-informational Materials to be Submitted.

In accordance with legal requirements, the standard cadastral structure must include supporting **information layers, permit issuance management layers, and planned development layers.**

The cadastral software is ArcGIS 10 or another compatible alternative (preferably with a free license). The minimum technical requirements for the geographic information material to be provided are as follows:

- Geo-information materials should be created and processed in ArcGIS 10 version personal geodatabase format; and
- Personal geodatabase should be in WGS 84 \ UTM 38N Georgian state coordination system.

The final version of the geo-information materials (meaning certain layers) should be checked for topological errors (topological accuracy 0.025 m).