

# **Municipal Development Fund of Georgia**



## **Rehabilitation of water supply system of Dmanisi town and 19 villages**

### **Environmental and Social Review**

**Funded by the World Bank**

**Second Regional and Municipal Infrastructure Development Project**

**September 2020**

## Sub-project Description

The sub-project (SP) envisages rehabilitation of water supply system of Dmanisi town and 19 villages in Dmanisi Municipality from Ormotstskharo head work: Dmanisi town, Angrevani village, Kakliani village, Sapparlo village, Gantiadi village, Tnusi village, Didi Dmanisi village, Boslebi village, Vardisubani village, Patara Dmanisi village, Mashavera village, Iaghuplo village, Pantiani village, Shindlari village, Mtisdziri, Kizilqilisa village, Zemo and Qvemo orozmani villages, Javakhi village, Dalari village.

The SP includes following activities:

- Arrangement of Ormotstskaro water intake at the foot of the slope, up to 200 meters in length, representing a channel covered with slabs on top and having holes on the side facing the slope for allowing water inflow;
- Laying gravity double-insulated steel pipelines to the village reservoirs that come from Ormotstskaro with total length of 325/6 – 9147 m, 159/5 – 14239 m, 114/5 – 1527 m and 89/4,5 – 44678 m;
- Building new pressure-regulating reservoirs in 14 villages, including a shared reservoir for Zemo and Qvemo Orozmani villages;
- Rehabilitating existing reservoirs in three settlements: Dmanisi town, Gantiadi village and Boslebi village;
- Arranging new gravity water pipeline system to supply water to Mtisdziri village;
- Reconstructing/rehabilitating the existing chlorination plant that implies equipping it with potable water disinfecting system which dissolves powder or granular calcium hypochloride  $[Ca(OCl)_2]$  in make-up tanks and transfers to a storage tank with connected dosing mini-pumps;
- Arranging and fencing sanitary zones for all reservoirs covered by the SP;
- Arrangement of water pipeline network of all settlements and customer metering;
- Rehabilitation of the existing building of the United Water Supply Company of Georgia (UWSCG) service center.

During the development of each piece of infrastructure, the relevant environmental norms and regulations will be respected to avoid or minimize negative impact on the public health and the natural environment. According to the Environmental Impact Assessment Code of Georgia, the SP is not subject to Environmental Impact Assessment.

Some sectors of the land area required for laying of water supply pipes are located within the State Forest Fund. However, the installation of the water supply and sewage pipes will not require tree-cutting. The respective land plots of the State Forest Fund will be transferred for special use to the UWSCG and be registered as the State property.

Investment Financing Agreement between Municipal Development Fund of Georgia and Self-governing was signed and Dmanisi Municipality, in cooperation with the UWSCG will be responsible for maintenance of the rehabilitated water supply system and related facilities.

## Environmental Screening and Classification

### (A) IMPACT IDENTIFICATION

<p>Does the subproject have a tangible impact on the environment?</p>	<p>The SP will have a modest short-term negative environmental impact and it is expected to have tangible long-term positive impact on the natural and social environment.</p>
<p>What are the significant beneficial and adverse environmental effects of the subproject?</p>	<p>The SP is expected to have positive long-term social impact through improvement of the water supply system in 19 villages of Dmanisi Municipality.</p> <p>The SP implementation will result in optimization of the water usage. The SP envisages rehabilitation of the existing water supply system/facilities which is very old with significant leakages, causing lower network pressure and decreased delivery efficiency. Improvement of water system, especially elimination of leakages, will cut water loss and help to conserve water resources in the region, and this is a benefit for the environment.</p> <p>Expected negative environmental and social impacts are likely to be short term and typical for small to medium scale rehabilitation works in urban landscape: noise, dust, vibration, and emissions from the operation of construction machinery; generation of construction waste; disruption of traffic and pedestrian access. All mentioned, the impacts are expected to be temporary and insignificant.</p> <p>Settlements covered by this SP do not have centralized wastewater collection and treatment systems. Regulations for handling wastewater in rural settings at the community level are being developed and will be followed once they come to force. Meanwhile, wastewater from the SP beneficiary villages will continue to be removed by the network of small gravity channels usually following streets and walking paths within the village, which are taken care of by community residents so that no congestion and waterlogging occurs.</p>
<p>May the subproject have any significant impact on the local communities</p>	<p>No new land take and resettlement are expected during the SP implementation. In order to prevent impacts on private properties, the relevant topographic plans were developed based on the topo-geodesic study that was conducted at the initial stage of the design development.</p>

<p>and/or other affected people?</p>	<p>These topographic plans included the info on the actual boundaries/red lines/ of the private properties registered in the public registry. Based on this data, the design developed the route/laying of the pipeline network (which runs mostly along the highway), thus not crossing the red lines/private properties was considered in the design.</p> <p>Some part of the SP area is part of the State Forest Fund. However, no tree-cutting is required. Procedures for de-listing of the SP area from the State Forest Fund are underway.</p> <p>The SP is supposed to have positive long-term social impact through the improvement of water supply system in 19 villages.</p> <p>The improved water system eliminates the risk of the cross-contamination of the drinking water. Among the socio-economic benefits should be noted: diminution of private health and public health expenditures.</p> <p>Negative impacts for local communities are short-term and limited to the construction site. They are related to the possible disturbance described above.</p>
<p>What impact has the subproject on the human health?</p>	<p>Minor negative impacts are related to dust, emissions, noise and vibration during the construction period, but are short term and limited to the construction site.</p>

**(B) MITIGATION MEASURES**

<p>Were there any alternatives to the sub-project design considered?</p>	<p>As the SP envisages rehabilitation of the existing water supply system, alternatives regarding to the SP design were not considered.</p>
<p>What types of mitigation measures are proposed?</p>	<p>The expected negative impacts of the construction phase can be easily mitigated by demarcation of the construction site, traffic management, good maintenance of the construction machinery, observance of the established working hours, and organized disposal of waste to the formally agreed sites.</p> <p>The contractor will be responsible for the waste disposal at the permitted location, use the quarry materials from the licensed quarries only, prevent water and soil from pollution (fuel spills due to equipment failure, row asphalt / concrete spills etc.), avoid disturbance of population (noise, dust, emissions) through proper work / supplies scheduling, traffic management, good maintenance of the construction machinery, etc. Newly constructed reservoir and laid pipes will be disinfected and direct release of disinfectant into natural environment</p>

	<p>will have negative environmental impacts. Therefore, disinfectant will be deactivated in order to avoid environmental damage.</p> <p>Additionally, Construction site shall be properly secured, and construction related traffic regulated, that includes: installation of the signposting, warning signs, barriers and traffic diversions, construction site and all trenches shall be fenced and properly secured to prevent unauthorized access, appropriate lighting should be provided, adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement, ensuring safe access to homes, businesses, public service and other properties.</p> <p>In case chance find is encountered in the course of earth works, the contractor must immediately stop any physical activity on site and informs the MDF. The MDF promptly notifies the National Agency of Cultural Heritage Preservation of Georgia, which takes over responsibility for the following course of action. Works may resume only upon receipt of written permission from the Agency. Work may be renewed only under the basis of written permission of ministry.</p>
<p>What lessons from the previous similar subprojects have been incorporated into the project design?</p>	<p>MDF have a wide experience in implementation of medium and large-scale water system rehabilitation projects financed by various donor organizations. Deactivation of disinfectant will be envisaged to avoid environmental damage.</p>
<p>Have concerned communities been involved and have their interests and knowledge been adequately taken into consideration in subproject preparation?</p>	<p>On October 22, 2020, a public consultation meeting was conducted online through Zoom application due to the COVID pandemic situation in the country in order to discuss Environmental and Social Review of the SP for Rehabilitation of water supply system in Dmanisi town and 19 villages.</p> <p>Before conducting the online public consultation meeting, MDF with LSG went through several options and arranged the most optimal online consultation schedule. Zoom Application was chosen as the most convenient online form, as it is easy to access meeting with a provided link and representatives from the various villages of Dmanisi organized the online meeting from their villages in full compliance with the Covid-19 recommendations. Information regarding date/time and location (online) was published at MDF Official website, announcement papers were posted at Dmanisi town and 19 villages. In addition, MDF prepared information booklets for the rest of Dmanisi population.</p>

**D) CATEGORIZATION AND CONCLUSION**

Based on the screening outcomes,

- Subproject is classified as environmental Category
- A
  - B
  - C

Conclusion of the environmental screening:

- 1. Subproject is declined
- 2. Subproject is accepted

If accepted, and based on risk assessment, subproject preparation requires:

- 1. Completion of the Environmental Management Checklist for Small Construction and Rehabilitation Activities
- 2. Environmental and Social Review, including development of Environmental Management Plan

## Social Screening

Social safeguards screening information		Yes	No
1	Is the information related to the affiliation, ownership and land use status of the sub-project site available and verifiable? (The screening cannot be completed until this is available)	✓	
2	Will the sub-project reduce people's access to their economic resources, such as land, pasture, water, public services, sites of common public use or other resources that they depend on?		✓
3	Will the sub-project result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?		✓
4	Will the project result in the temporary or permanent loss of crops, fruit trees and household infra-structure (such as ancillary facilities, fence, canal, granaries, outside toilets and kitchens, etc)?		✓
If answer to any above question (except question 1) is "Yes", then <b>OP/BP 4.12 Involuntary Resettlement</b> is applicable and mitigation measures should follow this OP/BP 4.12 and the <b>Resettlement Policy Framework</b>			
Cultural resources safeguard screening information		Yes	No
5	Will the project require excavation near any historical, archaeological or cultural heritage site?	✓	
If answer to question 5 is "Yes", then <b>OP/BP 4.11 Physical Cultural Resources</b> is applicable and possible chance finds must be handled in accordance with OP/BP and relevant procedures provided in the <b>Environmental Management Framework</b> .			

# Environmental and Social Review and Environmental and Social Management Plan

## 1. Introduction

### 1.1. Background Information

The World Bank is supporting efforts of the Government of Georgia (GoG) to address decentralization and regional development challenges through the ongoing Second Regional and Municipal Development Project (SRMIDP) since 2014. In 2020, GoG requested, and the World Bank agreed on the provision of Additional Financing (AF) to the SRMIDP. Ministry of Regional Development and Infrastructure of Georgia (MRDI), Municipal Development Fund of Georgia (MDF) and the World Bank agreed that the AF of SRMIDP will follow the proven concept and design of SRMIDP.

The Project Development Objective is to improve access to quality municipal services and infrastructure. The Project consists of two parts (Part A and Part B).

#### Part A

Component 1: Infrastructure Investment, Project Management and Monitoring (i) supports selected municipalities with the provision of basic municipal services and infrastructure in urban and rural communities; (ii) allows communities located in the lagging regions, those who suffer from reduced ability to be involved in economic activities, to receive basic services and amenities; (iii) promote private capital mobilization in the selected towns and villages by allowing additional resources for the Public Private Initiative (PPI).

#### Part B

Component 2: Contingent Emergency Response is a new component introduced to the Project upon provision of the AF. At present, this component has a zero allocation but allows for rapid reallocation of Project funds from other components to provide immediate response capacity to the Government following an eligible crisis or emergency in Georgia.

### 1.2. Institutional Framework

The Municipal Development Fund of Georgia (hereinafter: the MDF) is a legal entity of public law, the objective of which is to support strengthening institutional and financial capacity of local government units, investing financial resources in local infrastructure and services and improving on sustainable basis the primary economic and social services for the local population (communities). MDF is designated as an implementing entity for the SRMIDP and is responsible for its day-to-day management, including application of the environmental and social safeguard policies.



MDF prepares and submits to the World Bank for approval the Subproject Appraisal Reports (SARs), with safeguards documents attached. These may include, as case may be, an Environmental and Social Review (ESR) along with an Environmental and Social Management Plan (ESMP), an ESMP prepared using the Environmental Management Checklist for Small Construction and Rehabilitation Activities.

### **1.3 Legislation and Regulations**

According to the code of Environmental Impact Assessment of Georgia the SP is not subject to EIA and does not require preparation of EIA and obtaining Environmental Decision.

The SP triggers to the OP/BP 4.01 Environmental Assessment safeguard policies.

Taking into consideration that SP envisages implementation of civil works in twenty different settlements, which is a large area, and higher than national average likelihood of chance finds during earth works in Dmanisi municipality known for archaeological sites of international importance, the SP has been classified as B (+) category and requires preparation of an ESR and an ESMP as part of it, in compliance with the guidance of the Environmental and Social Management Framework.

## **2. Existing condition of water supply system**

Water supplying of Dmanisi town and villages is implemented from Ormotstskaro head work, by surface water abstraction from the rock, at 1430 and 1447 elevations. Water receiving plants and pipelines that are located at Ormotstskaro water intake have a great water loss. In pipelines, at 1500 m long section, 15 units of large jets were found. Water from the reservoirs is supplied to the Pantiani water collecting tank, as Pantiani water collecting tank cannot supply following villages with the necessary amount of potable water of the required pressure: Mtisdziri, Pantiani, Upper Orozmani and Lower Orozmani (Due to unfavorable location). This is why an additional pipe from W=8 m<sup>3</sup> and W=10 m<sup>3</sup> reservoirs that exist at the Ormotstskaro head work. Due to complex geological conditions the pipes are located in a narrow valley in a semi-shallow manner. Due to heavy rockfall, lines are deformed, pipe lateral sections are reduced at some places.

In Pantiani village, at 1295 elevation, W=80 m<sup>3</sup> tank, water distribution chamber and a chlorination station is arranged.

Roofs, entrance manholes, vent pipes, adjacent chambers, inlet and outlet valves and manholes of water for all 4 reservoirs are depreciated. Sanitary zone of the reservoir is fenced and protected. Water in Pantiani chlorination station is chlorinated in 80m<sup>3</sup> water distribution chamber. Secondary chlorination system using chlorine lime is arranged at Dmanisi reservoirs, in a depreciated plant. Total length of Dmanisi town existing distribution network is 40 km, for the past 8 years up to 40% of which is rehabilitated. The rest of the pipes were depreciated in the 60s of the last century and frequent damages are noted.

There are currently 1032 physical and 97 legal customers in the billing database of Dmanisi Service Center in Dmanisi.

Central lines and distribution networks of villages that are served by UWSCG (1. Pantiani; 2. Iaghuplo; 3. Mtisdziri; 4. Upper Orozmani; 5. Lower Orozmani; 6. Dalari; 7. Gantiadi; 8. Tnusi; 9. Boslebi; 10. Javakhi; 11. Didi Dmanisi; 12. Vardisubani) are depreciated.  $W=100\text{ m}^3$  reservoir in village Tnusi and  $2\times W=300\text{ m}^3$  reservoir in village Gantiadi is in operation.

In addition to the aforementioned villages an additional 7 is provided in the technical assignment (1. Shindlari; 2. Kizilqilisa; 3. Kakliani; 4. Mashavera; 5. Little Dmanisi; 6. Angrevani; 7. Safarlo), which automatically take water from springs (without purification) or from  $d=219\text{ mm}$  steel line of the company. In the villages mentioned above water supply plants, pipelines are arranged automatically, are depreciated and do not meet engineering norms and requirements. Currently, with the financing of the municipality, a new head work is under construction in the river Mamutli valley, near hydroelectric station, from where water with 3.5 km line is supplied to the new  $W=800\text{ m}^3$  reservoir in Mtisdziri village. This reservoir will serve following villages: Mtisdziri, Upper Orozmani, Lower Orozmani, Javakhi.

### **3. Subproject description**

The design envisages rehabilitation of water supply system of Dmanisi 20 settlements. Water supply system is cooperated. The project will positively resolve water supply issues in Dmanisi and 19 villages of this district. Water supply system is provided at the base of the Ormotstskaro, where water production is more than enough.

Water from Ormotstskaro head work will be supplied the following settlements: Dmanisi town, villages Angrevani, Kakliani, Safarlo, Gantiadi, Tnusi, Didi Dmanisi, Boslebi, Vardisubani, Little Dmanisi, Mashavera, Iaghuplo, Pantiani, Shindlari, Mtisdziri, Kizilqilisa, Zemo and Qvemo Orozmanebi, Javakhi and Dalari.

Ormotstskaro head work is an inclined rocky slope, where several dozen sources come out. It was considered expedient when designing water intake at the foot of the slope up to 200 meters in length to arrange a channel covered in slabs on top. The channel from the side of slope will have holes and water will flow through those holes. Consumers are supplied with water from the chambers (that are arranged at the end of the channels) using pipelines.

Supplying pipelines in the village reservoirs that come from Ormotstskaro goes by gravity. First branch is directed to the Pantiani reservoir. The next branch is village Iaghuplo reservoir and so on.

Existing reservoir is rehabilitated in Dmanisi town, in villages Boslebi and Gantiadi, which supplies water to the village Tnusi.

Mtisdziri village will not have a reservoir and it will be supplied by maximal hourly flows.

Chlorination for all 20 settlements takes place in the existing chlorination rehabilitation plant.

Water pipeline network arrangement is planned in the settlements in order to supply water to all consumers. SP will cover installation of water meters, while the customers will be expected to arrange for individual connections which happens on the private-owned land plots.

### **Water Pipeline Intake**

Main water supplying source for Dmanisi and surrounding villages is the Ormotstskaro aquifer, which flows down the left slope of the Naziklich River Valley, near the hydroelectric station diversion channel. It is 1,0-1,2 km away from the hydroelectric station and It is 1,5-1,6 km away from Pantiani village (See attached schematic plan dwg 1 and dwg 2).

Hydrological research works on these sources were carried out. Studies have found that Ormotstskaro have three main way outs:

1. Upper terrace springs, with an estimated flow rate of 150-200 L / sec.
2. Lower terrace springs whose estimated flow varies between 250-300 l / sec.
3. The third source group flows east of the first two and their estimated flow does not exceed 25 l / s.

Because the power of the lower terrace springs meets the required estimated flow (59 l/sec) of water consumers, the project approves arrangement of water intake drainage channel for collection of spilled water from these sources.

Currently, water intake plants function at all 3 springs, which supply with water some of the settlements. These plants are damaged in many places due to antiquity and large amounts of water are lost.

Depending on the situation, the proposed project envisages construction of a new water intake which will be able to absorb the water in a quantity sufficient to satisfy all expected water users in the future.

### **Chlorination Station**

Existing chlorination station will be used for chlorination arrangement. It is located about 1.5 km away from Ormotstskaro. Water supplied from this building to all settlements will be treated. This is conditioned by the location of the Ormotstskaro at the highest elevation. Water supplying from the chlorination to the transmission water pipeline is done without breaking the water jet.

Chlorination station shall be equipped with a calcium hypochloride [Ca(OCl)<sub>2</sub>] for potable water disinfection. The system implies to be a system where an Ca(OCl)<sub>2</sub> powder or readily dissolving granular Ca(OCl)<sub>2</sub> is dissolved in make-up tanks, then transferred to a storage tank with connected dosing pumps. Dosing mini pumps will be placed near this tank. This system shall be equipped with all necessary safety devices which are ensuring a safe system operation under all conditions.

Potable water supplying to the chlorination station takes place from a water pipeline (from head work). To create the necessary pressure, transmission water pipeline supplies the chlorine water using the dosing pump. Chlorine dosing happens by water meter display installed at the same pipe. Water flow rate of disinfection water is 57.00 l/sec (205.0 m<sup>3</sup>/hr).

Sizing of the calcium hypochlorite make-up and storage tanks is based on a design dosing rate of 1 mg FAC/l for the design flow. The design foresees two calcium hypochlorite make-up tanks and one calcium hypochlorite storage tank. The dosing pumps shall be designed to allow a maximum FAC dose of 5 mg/l to the design flow when dosing pumps are in operation.

Concentration of disinfectant solution of the calcium hypochlorite has been set as 1% (10g/l) chlorine content (FAC). This amount of solution allows storage of the solution over extended time periods. Additionally, the selected concentration minimizes the chlorine loss in the sediment generated during make-up.

Nominal capacity of the pump dosing unit is 21.0 l/hour.

Calcium hypochlorite dosing should be proportional to the water pipeline water flow. The input signal for dosing pump control will be installed on the water pipeline. Installation of the flow meter and interconnection with dosing pump control system of the chlorination room shall be provided by the contractor.

All forms of calcium hypochlorite contain some materials which are insoluble. This material must be separated prior to dosing otherwise it may cause clogging and blockages.

Therefore, it is important that solution is prepared and allowed to settle before the clear solution is transferred to the storage tank.

In general, the solution will be prepared in the make-up tank one day, left to settle overnight and supernatant is decanted into the storage tank the next day. Two make-up tanks are foreseen to ensure these requirements.

All equipment (tanks, racks, pumps, piping, valves, vessels, etc.) for the system shall be constructed from materials resistant to all plant fluids and to maximum ambient conditions. All wetted parts must be non-metallic.

Calcium hypochlorite dosing shall be fully automatic and proportional to the water flow of the water pipeline.

The dosing pumps shall stop if calcium hypochlorite storage tank level falls below a low level. No equipment shall be produced prior to receiving written approval of the detailed calcium hypochlorite make-up and dosing system design by Engineer. No equipment shall be delivered to the site before the civil chlorination building construction is completed and approval by Engineer. The contractor shall be responsible for all works required until successful start-up of the Chlorination Station.

## **Calculation and arrangement of the water pipeline networks**

The project envisages water supplying of Dmanisi municipality 20 settlements: The centre – Dmanisi town and 19 villages. Each of them has an independent system - reservoir and distribution network, which takes water from Ormotstskaro head work using gravity water pipeline.

The project shows water pipeline network hydraulic calculation for two regimes of each settlement. The calculation is done for maximal flow of water consumption and for firefighting flow.

Due to difficult geographical conditions, a large majority of the settlements required vertical zoning of water pipeline. Inlet arrangement equipped with individual flow meters is planned for every customer of each settlement. Metering is also planned for inhabitants of 14 buildings in Dmanisi town.

Dmanisi town is the center of the municipality and is the largest of the 20 settlements. The estimated population is 3210 inhabitants. Dmanisi town has pressure reservoir with capacity of 3×1000 m<sup>3</sup>, the project envisages it's repairs. Total length of the Main distribution network (without the individual branches) is - 12562 m (according to the diameters PE100 PN10 d=90 mm - 12902 m, d=110 mm - 6077 m, d=160 mm - 4861 m, d=225 m - 332 m).

- Angrevani village - The estimated population is 66 inhabitants. Capacity of design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 2644 m (according to the diameter - PE100 PN10 and PN16 d=90 mm).
- Kakliani village - The estimated population is 396 inhabitants. Capacity of design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 6889 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 6049 m d=110mm 614 m d=160mm – 226m).
- Sparlo village - The estimated is 396 inhabitants. Capacity of design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 10697 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 10543 m, d=110mm - 103 m, d=160mm - 51 m).

- Gantiadi and Tnusi villages - The estimated population in Gantiadi is 660 inhabitants, In Tnusi - 492 inhabitants. Villages have a common pressure-regulating reservoir with capacity 250 m<sup>3</sup>. The project envisages rehabilitation of this reservoir. Total length of the distribution network 28153 m. (According to the diameter - PE100 PN10 and PN16 d=90 mm - 23745 m, d=110mm - 3404 m d=160mm - 1004 m).
- Didi Dmanisi village - The estimated population is 792 inhabitants. Capacity of design pressure-regulating reservoir is 300 m<sup>3</sup> (2×150 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 8720 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 7462 m d=110mm - 177 m d=160mm - 1081 m).
- Boslebi village - The estimated population is 516 inhabitants. The village has a pressure-regulating reservoir with capacity 250 m<sup>3</sup>. The project envisages rehabilitation of this reservoir. Total length of the distribution network is 8209 m (According to the diameter - PE100 PN10 d=90 mm - 7580 m d=110 mm - 324 m d=160mm - 305 m).
- Vardisubani village - The estimated population is 432 inhabitants. The capacity of a design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 693 m (according to the diameter - PE100 PN10 d=90 mm - 4829 m d=110 mm - 1264 m)
- Patara Dmanisi village - The estimated population is 156 inhabitants. The capacity of a design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 4252 m (according to the diameter - PE100 PN10 d=90 mm - 4162 m)
- Mashavera village - The estimated population is 786 inhabitants. The capacity of a design pressure-regulating reservoir is 300 m<sup>3</sup> (2×150 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 8447 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 8120 m d=110 mm - 18 m d=160 mm – 146m)
- laghuplo village - The estimated population is 588 inhabitants. The capacity of a design pressure-regulating reservoir is 300 m<sup>3</sup> (2×150 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is ---6569 m (according to the diameter - PE100 PN10 d=90 mm - 6114 m d=110 mm - 455 m)
- Pantiani village - The estimated population is 444 inhabitants. The capacity of a design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 4790 m (according to the diameter - PE100 PN10 d=90 mm - 4029 m d=110 mm - 370 m d=160 mm - 391 m)
- Shindlari village - The estimated population is 372 inhabitants. The capacity of a design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 6833 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 6259 m d=110 mm - 424 m d=160 mm - 150 m)

- Mtsdziri village - The estimated population is 264 inhabitants. The project envisages supplying village with potable water from a head work with maximal flows. Total length of the main distribution network (without individual branches) is 3949 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 3623 m d=110 mm - 92 m d=160 mm - 234 m)
- Kizilqilisa village - The estimated population is 816 inhabitants. The capacity of a design pressure-regulating reservoir is 300 m<sup>3</sup> (2×150 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 8472 m (according to the diameter - PE100 PN10 and PN16 d=90 mm - 8114 m d=110 mm - 187 m d=160 mm - 171 m)
- Zemo and Qvemo Orozmani villages - The estimated population is 998 inhabitants. The capacity of a design pressure-regulating reservoir is 300 m<sup>3</sup> (2×150 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 25238 m according to the diameter - PE100 PN10 and PN16 d=90 mm - 14099 m d=110 mm - 587 m d=160 mm - 1340 m d=225 mm -740)
- Javakhi village - The estimated population is 185 inhabitants. The capacity of a design pressure-regulating reservoir is 200 m<sup>3</sup> (2×150 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 5812 m (according to the diameter - PE100 PN10 d=90 mm - 6888 m d=160 mm - 1919 m)
- Dalari village - The estimated population is 185 inhabitants. The capacity of a design pressure-regulating reservoir is 200 m<sup>3</sup> (2×100 m<sup>3</sup>). Total length of the main distribution network (without individual branches) is 5812 m (according to the diameter - PE100 PN10 d=90 mm - 5091 m d=110 mm - 90 m d=160 mm - 631 m)

#### **4. Baseline Environmental Conditions**

The project is implemented in Dmanisi Municipality. Dmanisi Municipality is located in Eastern Georgia, In the western part of Kvemo Kartli. Dmanisi municipality is bordered to the east by Bolnisi and Tetrtskaro municipalities, To the north is the municipality of Tsalka, to the West is the municipality of Ninotsminda. The area of the municipality is 1198.8 km<sup>2</sup>.

In Dmanisi municipality, the climate is moderately humid, with cold winters and warm summers. In the coldest month of the year, the average temperature in January is -100C; In the warmest month of the year, the average temperature in July varies between + 15- + 250C depending on the zoning. Drought is typical for the municipality. Precipitation is 650-800 mm per year. The maximum amount of precipitation falls in May, the minimum in December. During the summer months there is frequent heavy rains and thunderstorms, often accompanied by hail.

From the geomorphological point of view the municipality territory is diverse. The first-class orographic units are: Javakheti Ridge, built on volcanic rocks, Loki Ridge; Also volcanic plateaus of Gomareti and Dmanisi.

Javakheti volcanic ridge is located in the western part of the municipality. It is composed mainly of basalt andesite-basalt lava, which produces tectonically arched layers. The eastern stretching downhill slope of the ridge is rugged by canyon valleys.

Loki Ridge lies to the south of the municipality. Constructed mainly of volcanogenic structures of Cretaceous age, beneath which lies the old crystalline complex of Loki granitic massif. It is characterized by medium relief, erosive, structural and denudative forms.

Gomareti Plateau lies between the Kviriketi and Shindlar mountain massifs, which is almost entirely in the Shavtskaristskali River basin. The Shavtskaristskali valley cuts the plateau almost in the middle.

Dmanisi Plateau is in the upstream basin of the Mashaveri river, consisting of the Shindlari massif, the Loki Ridge and the Javakheti Ridge Slopes. It has a triangular shape on the plan. It narrows to the northeast. The height of the plateau surface varies from 900-950 m to 1600-1700 m.

The main river is Mashavera, It originates on the eastern slope of the Javakheti Range, at 2125 m above sea level. Mashavera flows to Vardisubani village within the municipality. It joins the Khrami River from the right of the Bolnisi Municipality territory. Total length of the river is 66 km, average annual flow is - 8 m<sup>3</sup> / sec. The main tributaries are: Shakhmarlo, Sarfdere, Moshevani and others.

Mashavera valley is characterized by wide and flat bottom. This is explained by the influence of lava flows from the Javakheti Ridge and its accumulation.

River Khrami flows on the northern border of Dmanisi Municipality. Important from its tributaries is the Shavtskarostskali River (Karabulakhi), which starts at the eastern slope of the Javakheti slope and joins the ravine to the right. The Shavtskarostskali River valley is cut at a depth of 500 meters, In the volcanogenic range of chalk. Above, the top of its sides is made of dolerite boulders; Further up, the valley near the village of Emo Karabulakhi is already made entirely of lava and is branching into some relatively shallow canyons. The main tributaries of the river Shavtskarostskali are: Dagermanderesi, Akha, Useinkendi, Tozdukhi.

The rivers of Dmanisi municipality are fed by rain and snow and also by lavas derived from large-yield springs. There are also small lakes in the Dmanisi municipality. The most notable are the Pantiani and Orozmani Lakes.

### **General hydrogeological conditions**

Hydrogeological conditions of the district vary in different areas and are conditioned by lithological composition, degree of rock filling, peculiarities of physico-geographical and geomorphological conditions.

Intensively crack young lava flows and streams of a complex in this region is well-watered.

Well-watered of these rocks is due to their relatively high hypsometric location and high filtering ability.



The complex is lithologically represented by alternating lava stanchion of andesites, basalts and andesite-basalts, with lava lake-sedimentary formations with capacity of 10-20 meters, the total capacity of the complex is about 800-850 meters.

The rocks are breached by a frequent network of cracks of exogenous and tectonic origin. This contributes to the intense infiltration of atmospheric precipitation, surface and condensing water into them.

Lake-sedimentary lava formations play a protective role, as a result, multilevel groundwater aquifers are formed in the Andesite-basalt lava.

Due to the large inclination of the water containing lava flows, groundwater flows in the direction of the Akhalkalaki Plateau Center, where they are discharged in the deeply penetrated canyon of the river Paravani (outside the study area). Because of this, springs are very rarely found on the slopes of the Javakheti Range and their flow rates do not exceed 0.1 L / sec.

In the lower parts of the terrain, these sediments are associated with strong frontal and group groundwater outflows.

The waters have a hydrocarbon calcium-magnesium composition, low mineralization (up to 0.2 g / L) and are characterized by excellent drinking properties.

The complex of upper Cretaceous volcanogenic and carbonate rocks contains deep and shallow circulating waters. The superficial part of the rocks is characterized by intense exogenous cracks, however, it is poorly watered due to the lack of atmospheric precipitation. Rare detection of groundwater is observed in small-scale sources (0.2–1.0 l / sec). The waters are fresh, with hydrocarbon-calcium.

## 5. Potential Impacts

### 4.1 Construction Phase

#### 4.1.1. Social Impacts

- **General set of social issues.** No significant social issues are associated with implementation and operation of this SP.
- **Resettlement Issues.** The SP does not imply private land acquisition and no permanent impacts are envisaged on private or leased agricultural lands and private assets or businesses.
- **Positive impact related to Job opportunities for construction workers.** Limited and temporary during construction and limited during operation.
- **Health issues related to noise, emissions, and vibration.** Limited and temporary.
- **Traffic Disruption.** Local traffic can be impacted limited and temporary by transport activities related to the SP.

- **Safety and Access.** There will be reduced access to areas adjacent to rehabilitation and potential hazards to vehicles and pedestrians during rehabilitation downtime.

#### **4.1.2. Impacts on the physical Cultural Property**

The SP does not envisage impacts on the physical cultural property. However, as the civil works are planned to be implemented in Dmanisi municipality known for the unique archaeological sites of international importance, the likelihood of encountering change finds during earth works under SP is higher than the national average.

#### **4.1.3. Environmental Impacts**

##### **Soil Pollution**

Potential pollutants from a SP of this nature include the following (this list is not exhaustive):

- Diesel fuel, lubrication oils and hydraulic fluids, antifreeze, etc. from construction vehicles and machinery;
- Miscellaneous pollutants (e.g. cement and concrete);
- Construction wastes (packaging, stones and gravel, cement and concrete residue, wood, etc.).

##### **Water Pollution**

Water pollution may result from a variety of sources, including the following:

- Spillages of fuel, oil or other hazardous substance, especially during refuelling;
- Releasing silt water from excavations;
- Silt suspended in runoff waters (“construction water”);
- Washing of vehicles or equipment;
- Exposure of contaminated land and groundwater;
- Impact on surface and/or groundwater with chlorine-containing solution generated from washing and disinfection of the newly installed water pipes.

Spillages may travel quickly downhill to a watercourse or water body. Once in a watercourse, it can be difficult to contain the pollution which can then impact over a wide area downstream. It is therefore vital that prompt action is taken in the event of any potential water pollution incident.

Once the working width has been stripped of topsoil, the subsoil becomes exposed. During earthworks in a wet weather this may result in uncontrolled release of suspended solids from the work area.

##### **Air Pollution and Noise**

Potential impact of air pollution is minimal and related to operation of vehicles and heavy machinery at the construction site and during transportation of materials.

- Noise and vibration arising from heavy machinery and vehicles;

- Air emissions (from vehicles, bulldozers, excavators etc.);
- Dust (from vehicles);
- Fumes may be a concern linked to supply and transportation of materials.

### **Construction Related Wastes**

#### ***Construction Wastes***

The following types of inert waste are anticipated to be produced from these activities:

- Natural materials (soil and rock);
- Contaminated soil with non-hazardous substance or objects;
- Packaging materials;
- Metals (including scrap metal and wire) – negligible amount of metal waste is expected;
- Debris and domestic waste located on the area for tourist infrastructure arrangement.

#### ***Hazardous Construction Wastes***

Small quantities of the hazardous wastes will arise mainly from the vehicle maintenance activities. A number of hazardous wastes, which could be generated, include:

- liquid fuels;
- lubricants, hydraulic oils;
- chemicals, such as anti-freeze;
- contaminated soil;
- spillage control materials used to absorb oil and chemical spillages;
- machine/engine filter cartridges;
- Oily rags, spent filters, contaminated soil, etc.).

### **Transport related impacts**

- Noise & Vibration Impacts;
- Traffic congestion (nuisance);
- Air pollution;
- Mud on roads;
- Refuelling, maintenance and vehicle cleaning and related risks of soil and water contamination.

### **Topsoil losses due to topsoil stripping**

- Topsoil washout due to improper storage and reinstatement;
- Silt runoff to watercourses and water bodies;
- Exposure of contaminated land.

## **4.2 Operation Phase**

The project will have a positive impact on the operation phase in terms of improving the living conditions of the local population.

## **5. Environmental and Social Management Plan**

This Environmental and Social Management Plan (ESMP) has been prepared to ensure that negative environmental impacts associated with this SP are minimized.

The contractor is required:

1. To obtain construction materials only from licensed providers;
2. If contractor wishes to open quarries or extract material from riverbed (rather than purchasing these materials from other providers), then the contractor must obtain licenses for inert material extraction;
3. If contractor wishes to operate own asphalt (rather than purchasing these materials from other providers), then the contractor must obtain an environmental permit with an established ceiling of pollutant concentrations in emissions;
4. If contractor wishes to operate own concrete plant (rather than purchasing these materials from other providers), then the contractor must prepare technical report on inventory of atmospheric air pollution stationary source and agree with the Ministry of Environmental protection and agriculture of Georgia (MEPA);
5. Construction waste must be disposed on the nearest municipal landfill (in accordance with written agreement between the construction company and the local municipality. The records of waste disposal will be maintained as proof for proper management as designed.
6. If over 200 tons of non-hazardous waste or over 1000 tons of inert materials or 120 kg of hazardous waste is generated annually (calculation apply to a calendar year) as a result of contractor's general activities, they shall prepare and cause the Ministry of Environmental protection and agriculture of Georgia (MEPA) to approve the Waste Inventory and Waste Management Plan for the Company, appoint an environmental manager, and submit an information on his/her identity to the Municipal development fund of Georgia in accordance with requirements of the Waste Code of Georgia.
7. If trees cutting or replanting will become necessary during the project implementation, the Construction Contractor will inventor the trees to be cut down or to be replanted before starting the construction and submit to MoEPA (for Red Listed tree species) and Dmanisi City Hall (for trees not included in Red List) for obtainment tree cutting permission. The permission document will include the compensation measures based on the presented inventory. The compensation fees will be paid within the scope of the project as well as compensation activities will be implemented by the construction contractor. The trees shall be cut under supervision of designated specialist.
8. In case of encountering a chance find during the earth works, hold works immediately, promptly notify construction supervisor and MDF and do not resume works until formal notice from the supervisor/MDF. It is responsibility of MDF to formally disallow physical activity at work site upon the notice on a chance find and to promptly contact the National Agency of Cultural Heritage Preservation of Georgia. MDF will give a notice to contractor allowing resumption of works in agreement with the Agency.

Copies of extraction licenses (if applicable), agreed technical report on inventory of atmospheric air pollution for operating concrete plants (if applicable), and waste disposal agreement must be submitted to the MDF prior to the commencement of works.

GOST and SNIP norms must be adhered.

## ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
<b>Pre-Construction Phase</b>			
General Conditions	Incompliance to Georgian Law and World Bank requirements	<p>The following permits/licenses and agreements should be obtained by the works contractor and submitted to the MDF:</p> <ul style="list-style-type: none"> <li>– Agreement for disposal (stockpiling) of excessive soil</li> <li>– licenses for inert material extraction</li> <li>– Permits for production of such construction materials that belongs to the activity subject to ecological examination</li> <li>– Technical report on inventory of atmospheric air pollution stationary source and agree with the Ministry of Environment Protection and Agriculture</li> <li>– Agreement on household and construction waste disposal on the nearest landfill.</li> </ul>	Construction contractor
Notification of the local community on upcoming activities	Incompliance to Georgian Law and World Bank requirements	Place informational banner on the construction site. Information about the contact persons in the MDF, works supervisor company and local municipality administration to whom people can apply with the complaints on environmental and social issues shall be placed on the banner. The banner must be made by weather resistant material. Inscriptions on the Informational banner should be in Georgian and English languages.	Construction contractor
Arrangements for implementation of environmental measures	Incompliance to Georgian Law and World Bank requirements Significant environmental and social impacts	<ul style="list-style-type: none"> <li>– Appointing a person responsible for protection of social and natural environment and ESMP implementation,</li> <li>– Training of workers regarding to social and environmental protection measures to be implemented</li> <li>– Delivery of supplies required for implementation of planned mitigation measures</li> </ul>	Construction contractor

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
<b>Construction Phase</b>			
<p>Construction works, including:</p> <ul style="list-style-type: none"> <li>- Preparation of construction sites</li> <li>- Earth works</li> <li>- Installation of facilities</li> <li>- Machinery operations</li> <li>- Transportation operations</li> </ul>	<p>Deterioration of ambient air</p>	<ul style="list-style-type: none"> <li>- All vehicles shall be maintained so that their emissions do not cause nuisance to workers or local people. All vehicles shall be checked and repaired in case of need to eliminate increased level of noise due to damaged parts;</li> <li>- Regular maintenance of diesel engines shall be undertaken to ensure that emissions are minimized, for example by cleaning fuel injectors. All plant used on site shall be regularly maintained so as to be in good working order at all times to minimize potentially polluting exhaust emissions;</li> <li>- Vehicle refueling shall be undertaken so as to avoid fugitive emissions of volatile organic compounds through the use of fuel nozzles and pumps and enclosed tanks (no open containers will be used to stored fuel);</li> <li>- Materials transported to site shall be covered/ wetted down to reduce dust. The construction site shall be watered as appropriate. Protective equipment shall be provided to workers as necessary;</li> <li>- During demolition works destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site;</li> <li>- The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust;</li> <li>- earth works shall be suspended during strong winds;</li> <li>- Construction materials and storage piles shall be covered;</li> <li>- Stripped soil/ excavated ground shall be stockpiled properly;</li> </ul>	<p>Construction contractor</p>

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
		<ul style="list-style-type: none"> <li>– There shall be no open burning of construction / waste material at the site;</li> <li>– There shall be no excessive idling of construction vehicles at sites;</li> <li>– The SP territory shall be reinstatement immediately after finalizing of construction works.</li> </ul>	
	Propagation of noise and vibration	<ul style="list-style-type: none"> <li>– The maximum speed shall be restricted in residential areas to the safety level during the pass of the trucks;</li> <li>– Proper technical control and maintenance practices of the machinery shall be applied;</li> <li>– Activities shall be limited to daylight working hours;</li> <li>– No-load operations of the vehicles and heavy machinery are not allowed. Proper mufflers will be used on machinery;</li> <li>– Ensure that machinery is in good technical condition.</li> </ul>	Construction contractor
	Damage of soil	<ul style="list-style-type: none"> <li>– Demarcation of construction sites' boundaries and access roads before construction works are launched;</li> <li>– Adherence to demarcated work site boundaries during operations;</li> <li>– Stripping of topsoil from work sites (whenever possible) before starting of earthworks and stockpiling for subsequent reinstatement, in compliance with the Technical Regulations on Stripping, Stockpiling, Use and Reinstatement of Topsoil (2014);</li> <li>– Topsoil shall be stored in stockpiles, no more than 2m high with side slopes at a maximum angle of 45°. The following shall also be taken into consideration:</li> </ul>	Construction contractor

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
		<ul style="list-style-type: none"> <li>• Dedicated storage locations shall be used that prevents the stockpiles being compacted by vehicle movements or contaminated by other materials;</li> <li>• Topsoil shall be segregated from subsoil stockpiles;</li> <li>• No material shall be stored where there is a potential for flooding;</li> <li>• No storage at less than 25m from river/streams, subject to the site-specific topography;</li> </ul> <ul style="list-style-type: none"> <li>– Topsoil stripping during heavy rains will not be allowed;</li> <li>– Stored topsoil shall be used for reinstatement and landscaping of the SP area immediately after completion of construction works. As appropriate, this may include leveling of ground surface, reinstatement of topsoil and measures to facilitate natural recovery of vegetation; Topsoil from the sites, which will not be reinstated to the initial conditions shall be distributed carefully on the surrounding area;</li> <li>– In the event that the stockpiles experience significant erosion the contractor will be required to implement corrective action, such as installing erosion matting over the stockpiles if further surface compaction and/or topsoil seeding fails. The Contractor shall protect the stockpiles from flooding and run-off by placing berms or equivalent around the outside where necessary;</li> <li>– subsoil shall be stored in stockpiles, no more than 3m high with side slopes at a maximum angle of 60°; dedicated storage locations shall be used that prevents the stockpiles being compacted by vehicle movements or contaminated by other materials; subsoil shall be segregated from topsoil stockpiles.</li> </ul>	



Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
	Water and soil pollution	<ul style="list-style-type: none"> <li>– Provision of staff with toilets and bathrooms, and centralized discharge of generated wastewater in the sewer systems if possible or install temporary structures;</li> <li>– Ensuring that machinery is well maintained;</li> <li>– Refueling of machinery using respectively equipped refueling trucks, and using of drip trays during refueling operations;</li> <li>– Refueling and maintenance of machinery only at a specially devoted site, where topsoil is tripped and gravel layer is arranged; lubricants, fuel and solvents shall be stored exclusively in the designated sites; No fuel, lubricants and solvents storage or refueling of vehicles or equipment will be allowed near the cultural heritage site;</li> <li>– Ensuring that construction materials are appropriately stockpiled and stored in the specially designated and temporarily constructed storage facilities;</li> <li>– Temporarily storage on site of all hazardous or toxic substances shall be in safe containers labeled with details of composition, properties and handling information; Spill containment materials (sorbents, sand, sawing, chips etc.) should be available on construction site;</li> <li>– Ensuring that all spills are cleaned up immediately, and contaminated soil is respectively disposed off;</li> <li>– Wet cement and/or concrete will not be allowed to enter any watercourse, pond or ditch;</li> <li>– Cleaning up of the entire SP territory from construction waste as soon as the construction works are finalized.</li> </ul>	Construction contractor

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
	Pollution of environment by solid and liquid wastes	<ul style="list-style-type: none"> <li>– Prohibition of waste burning in the open space;</li> <li>– No use of paints with toxic ingredients or solvents or lead-based paints;</li> <li>– Different types of waste (construction, hazardous, household) shall be collected separately; special sites shall be designated for waste accumulation and pollution prevention measures shall be applied there;</li> <li>– Construction inert waste and excess soil should be disposed on territory allocated by the Dmanisi Municipality;</li> <li>– Temporarily storage of all hazardous or toxic substances shall be in safe containers labelled with details of composition, properties and handling information; Uncontrolled storage of hazardous wastes on the construction area is prohibited; the containers of hazardous substances shall be placed in a leak-proof container to prevent spillage and leaching; shall be handed over to a permitted waste management company, on a contractual basis;</li> <li>– Any construction or municipal wastes produced during construction stage should remove from the site area frequently;</li> <li>– Agreements on the disposal of waste shall be obtained prior disposal is undertaken;</li> <li>– Upon completion of washing and disinfection of pipes and reservoirs the disinfection solution will be neutralized by the contractor prior to release to the environment – to avoid damage to terrestrial or aquatic organisms. In the case of disinfection via chlorination this is achieved by application of a reducing agent, such as sodium bisulfate to achieve de-chlorination. The reducing agent, in turn, must be applied by the contractor at the precise</li> </ul>	Construction contractor

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
		dosage to neutralize the disinfectant – but no more, since reducing agent residuals are also detrimental to aquatic ecosystems.	
	Impact on traffic flow	<ul style="list-style-type: none"> <li>– Impose speed limitation to the SP machinery;</li> <li>– Ensure that SP machinery move using only pre-determined routes;</li> <li>– The frequency of machinery movement shall be restricted.</li> </ul>	Construction contractor
	Health and safety risks for local community	<p>Construction site shall be properly secured, and construction related traffic regulated. This includes but is not limited to:</p> <ul style="list-style-type: none"> <li>- Installation of the signposting, warning signs, barriers and traffic diversions: signs shall be clearly visible, and the public warned of all potential hazards;</li> <li>- Construction site and all trenches shall be fenced and properly secured to prevent unauthorized access (especially of children);</li> <li>- Appropriate lighting should be provided;</li> <li>- Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement;</li> <li>- Imposing of speed limitation to SP machinery</li> <li>- Ensuring that SP machinery move using only pre-determined routes</li> <li>- Ensuring safe access to homes, businesses, public service and other properties.</li> </ul>	Construction contractor
	Impact on cultural heritage	<ul style="list-style-type: none"> <li>– Discontinuing construction operations if a chance find is encountered and promptly notifying supervision engineer and/or employer;</li> </ul>	Construction Contractor

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
		<ul style="list-style-type: none"> <li>– Keeping of all physical activities on hold until formal notice from employer.</li> </ul>	
		<ul style="list-style-type: none"> <li>– Formal suspension of works upon encountering of chance finds and prompt notification of the National Agency for Cultural Heritage Preservation (NACHP);</li> <li>– Cooperation with NACHP towards facilitation of archaeological works on site, removal of finds from the site and/or <i>in situ</i> conservation;</li> <li>– Formal notification to supervision engineer and contractor on the resumption of works upon consent of NACHP.</li> </ul>	<p style="text-align: center;">RD NACHP</p>
	Affected forests, wetlands and/or protected areas	<ul style="list-style-type: none"> <li>– Do not damage or exploit any recognized natural habitats, wetlands and protected areas in the immediate vicinity of the activity; strictly prohibited hunting, foraging, logging or other damaging activities by staff and personnel.</li> <li>– Carry out an inventory of large trees in the vicinity of the construction activity; mark large trees and cordon them off with fencing, their root system protected, and any damage to the trees avoided</li> <li>– Protect adjacent wetlands and streams from construction site run-off with appropriate erosion and sediment control feature to include by not limited to hay bales and silt fences</li> <li>– There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.</li> </ul>	<p style="text-align: center;">Construction Contractor</p>
	Damage to private property	<ul style="list-style-type: none"> <li>– Ensuring that sub-project machinery moves using only pre-determined routes;</li> <li>– Imposing of speed limitation to the sub-project machinery;</li> </ul>	<p style="text-align: center;">Construction contractor</p>

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
		<ul style="list-style-type: none"> <li>- Incurred losses shall be fully compensated by the contractor.</li> </ul>	
	Conflicts with local population or other affected people	<ul style="list-style-type: none"> <li>- Meeting with local population as need be;</li> <li>- Reception and addressing of complaints/grievances: Grievance Redress committee will be established at the municipal level with the following composition: authorized representative of Dmanisi Municipality Sakrebulo and city hall, Head of the Social Service, person in charge of relations with the water supply company, representative of the local NGO;</li> <li>- If the grievance is not unsolved at the local level, it will be lodged to the MDF;</li> <li>- MDF registers all received compliances, comments and how the compliance was addressed;</li> <li>- During public consultations, the local population will be informed about the grievance redress issues and received information about contact persons.</li> </ul>	Construction contractor, MDF, Dmanisi Municipality
	Trauma, other health damage and death at work site	<ul style="list-style-type: none"> <li>- Informing of the SP labor about potential health and safety risks, and instructing them regarding safety measures to be adhered (before launching construction works and during civil works);</li> <li>- Ensuring that required personal protection equipment (e.g. helmets, gloves, etc.) is supplied and used by workers as appropriate;</li> <li>- Ensure safety of machinery operations;</li> <li>- Provision of safety signs for high risk zones;</li> <li>- Implementation of measures recommended for air protection and noise abatement.</li> </ul>	Construction contractor

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
Handling of toxic materials	Damage to public and environmental health from toxic / hazardous materials and waste	<ul style="list-style-type: none"> <li>– Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information;</li> <li>– The containers of hazardous substances shall be placed in a leak-proof container to prevent spillage and leaching;</li> <li>– The wastes shall be transported by specially licensed carriers and disposed in a licensed facility.</li> </ul>	Construction Company
Social Risk Management	Nuisance of local communities; Conflict between construction contractor and local communities.	<ul style="list-style-type: none"> <li>– Assign local liaison person who is in charge of communication with and receiving requests/ complaints from local population;</li> <li>– Consulted local communities to identify and pro-proactively manage potential conflicts between an external workforce and local people.</li> <li>– Inform population about construction and work schedules; interruption of the services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate;</li> <li>– Limit construction activities at night. When necessary, carefully schedule night-time works and inform affected community so they can take necessary measures;</li> <li>– At least five days in advance of any service interruption (including water, electricity, telephone, bus routes), advise affected community through postings at the project site, at bus stops, and in affected homes/businesses.</li> </ul>	Construction Company
	Violation of workers' rights and freedoms	<ul style="list-style-type: none"> <li>– To the extent possible, locate work camps away from local communities.</li> <li>– Undertake siting and operation of worker camps in consultation with neighboring communities.</li> </ul>	Construction Company

Activity	Expected Negative Impact	Mitigation Measure	Responsible for implementation
		<ul style="list-style-type: none"> <li>– Recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, provide worker skills training to enhance participation of local people.</li> <li>– Provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices. Establish temporary septic tanks for any residential labor camp and without causing pollution of nearby watercourses.</li> <li>– Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale.</li> </ul>	
<b>Operation Phase</b>			
Operation of water supply system	Water loss due to leakage, waterlogging, disruption in water supply	<ul style="list-style-type: none"> <li>– Deliver Operations &amp; Maintenance training to UWSCG staff deployed at the Dmanisi water supply system based on the Operations Manual and Training Program produced by works contractor.</li> <li>– Maintain good technical condition of pipes and hydraulic structures of water supply scheme to ensure its smooth operation and exclude leaking, waterlogging and disruption of water supply.</li> </ul>	<p style="text-align: center;">MDF Dmanisi Municipality, United Water Supply Company of Georgia</p>

## **6. Monitoring**

MDF carries overall responsibility for monitoring of the implementation of the environmental mitigation measures. A consulting company hired for supervision of works will supplement MDF's in-house capacity for tracking environmental and social compliance of works undertaken under this SP. Field monitoring checklist will be filled out and photo material attached on monthly basis. Environmental monitoring of the SP shall be implemented according with plan given below.

Narrative reporting on the implementation of ESMP will be provided on monthly and quarterly basis as part of the general progress reporting of MDF. MDF will also be expected to obtain from contractors and keep on file all permits, licenses, and agreement letters which contractors are required have according to the Georgian law for extracting material, operating asphalt/concrete plants, disposing various types of waste, etc.

## **7. Remedies for ESMP Violation**

MDF, as a client of construction works, will be responsible for enforcing compliance of contractor with the terms of the contract, including adherence to the ESMP.

The contractor is obliged to carry out any of its activities pursuant to the Georgian Environmental Legislation in force, and in case if any noncompliance is revealed, the contractor shall be liable to cover at its own expense all damage liquidation costs.

## **8. Costs of Implementation**

Costs of implementing the proposed mitigation measures are small and difficult to single out from the costs of construction operations. Nonetheless, it is recommended that Bill of Quantities presented in the tender documentation carry a line item for the disposal of waste and excess materials. Other costs of adherence to good environmental practice and compliance with this ESMP are expected to be integrated into the pricing of various construction activities.

## **9. Grievance Redress Mechanism**

Appropriate grievance redress mechanism was established to solve grievances of Project-Affected People, as required. Dmanisi Municipality has assigned a responsible person – Viktor Kristesiashvili, Head of Infrastructure Unit, to receive, review and react to the APs grievances (Tel: 599 45 90 85; email: [viqtorikristesiashvili26@gmail.com](mailto:viqtorikristesiashvili26@gmail.com) )

The contact person from the MDF is Nutsa Gumberidze (Tel: +995 598 88 20 19, [feedback@mdf.org.ge](mailto:feedback@mdf.org.ge), 150 Davit Aghmashenebeli ave., 4th floor, 0112 Tbilisi, Georgia)

If the grievance will not be unsolved at the local level, it will be lodged to the MDF. As for grievance monitoring MDF registers all received compliances, comments and how the compliance was addressed. During public consultations, the local population were informed about the grievance redress process and receive information about contact persons.



## MONITORING MANAGEMENT PLAN

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
<b>CONSTRUCTION PHASE</b>						
Supply with construction materials	Purchase of construction materials from the officially registered suppliers	In the supplier's office or warehouse	Verification of documents	During conclusion of the supply contracts	To ensure technical reliability and safety of infrastructure	MDF, Construction supervisor
Transportation of construction materials and waste  Movement of construction machinery	Technical condition of vehicles and machinery  Confinement and protection of truck loads with lining  Respect of the established hours and routes of transportation	Construction site	Inspection	Unannounced inspections during work hours and beyond	Limit pollution of soil and air from emissions;  Limit nuisance to local communities from noise and vibration;  Minimize traffic disruption.	MDF, Construction supervisor, Traffic Police
Earthworks	Temporary storage of excavated material in the pre-defined and agreed upon locations;  Backfilling of the excavated material and/or its disposal to the formally designated locations;	Construction site	Inspection	In the course of earth works	Prevent pollution of the construction site and its surroundings with construction waste;  Prevent damage and loss of physical cultural resources	MDF, Construction supervisor
Handling of chance finds	Immediate halt of all physical activity by contractor in the vicinity of area where a chance find is encountered;  Prompt notification of technical supervisor of works and employer	Sites where earth works are in progress	Inspection	In the course of earth works	Prevent damage of archaeological artifacts and loss of physical cultural heritage	Construction supervisor  MDF  NACHP

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
	<p>on the chance find made by contractor;</p> <p>Notification of NACHP on the chance find by MDF;</p> <p>Cooperation with NACHP towards safe and timely conduct of archaeological works required for removal of artifacts and/or <i>their in situ</i> conservation by MDF;</p> <p>Notification of works supervisor and contractor on resumption of works by MDF once cleared by NACHP;</p> <p>Resumption of works by contractor after a formal notice has been received from technical supervisor of work/employer</p>					
Sourcing of natural construction material	<p>Purchase of material from the existing suppliers if feasible;</p> <p>Obtaining of extraction license by the works contract and strict compliance with the license conditions;</p> <p>Terracing of the borrow area, backfilling to the exploited areas of</p>	Borrowing areas	<p>Inspection of documents</p> <p>Inspection of works</p>	In the course of material extraction	<p>Limiting erosion of slopes and degradation of ecosystems and landscapes;</p> <p>Limiting erosion of river banks, water pollution with suspended particles and disruption of aquatic life.</p>	MDF, Construction supervisor

<b>Activity</b>	<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Who</b> (Is responsible for monitoring?)
	the borrow site, and landscape harmonization;  Excavation of river gravel and sand from outside of the water stream, arrangement of protective barriers of gravel between excavation area and the water stream, and no entry of machinery into the water stream.					
Generation of construction waste	Temporary storage of construction waste in especially allocated areas;  Timely disposal of waste to the formally designated locations	Construction site;  Waste disposal site	Inspection	Periodically during construction and upon complaints	Prevent pollution of the construction site and nearby area with solid waste	MDF,  Construction supervisor
Toxic / hazardous materials and waste management	Chemicals located on the SP site, appropriately contained and marked clearly as hazardous material;  Security measures are taken against unauthorized removal from the site.	At SP site	Inspection of documents Inspection of works	In the course of rehabilitation works	Prevent pollution by toxic materials  Protect workers' health	MDF,  Construction supervisor

<b>Activity</b>	<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Who</b> (Is responsible for monitoring?)
Disinfection of laid pipelines	Laid pipelines are chlorinated for disinfection prior to commissioning;  Disinfection solution is dissolved/deactivated prior to the release to natural environment.	Alignment of pipelines	Inspection	After completion of pipelines' construction and prior to their commissioning	Prevent contamination of water delivered through the constructed pipelines;  Prevent pollution of surface water, ground water and soil	MDF,  Construction supervisor
Traffic disruption and limitation of pedestrian access	Installation of traffic limitation/diversion signage;  Storage of construction materials and temporary placement of construction waste in a way preventing congestion of access roads	At and around the construction site	Inspection	In the course of construction works	Prevent traffic accidents;  Limit nuisance to local residents	MDF,  Construction supervisor
Workers' health and safety	Provision of uniforms and safety gear to workers;  Informing of workers and personnel on the personal safety rules and instructions for operating machinery/equipment, and strict compliance with these rules/instructions	Construction site	Inspection	Unannounced inspections in the course of work	Limit occurrence of on-the-job accidents and emergencies	MDF,  Construction supervisor
Information sharing and grievance redress	Local population (especially owners of land adjacent to construction site) are informed about the start of construction works. Grievance redress contact	Construction site and/or nearby settlement and buildings Construction site Nearby settlement	In person, by mail, phone or other means (with records) Evidence of GRM information	Prior to beginning of construction works (min 2 weeks) Throughout the duration of	Minimize nuisance to local population, give opportunity for questions and feedback Ensure that questions and grievances are addressed in a	MDF  local authorities

<b>Activity</b>	<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Who</b> (Is responsible for monitoring?)
	information is announced; Grievance log is maintained	and buildings	available on accessible place Evidence of grievance log and timely response/resolution of feedback and complaints	the sub-project	timely manner	
Restoration and compensation for accidental damage	Owners who experience loss or damage of crops, structures, or other assets as a result of construction are duly compensated or their damages restored	Construction site	MDF ascertains presence of damages and evidence of compensation/restoration via Supervisor reports and site visits	Throughout the duration of the sub-project	Assets and livelihoods of population in the project area are improved, or at minimum restored to pre-project level.	Contractor (under monitoring from MDF and Supervision Consultant)
<b>OPERATION PHASE</b>						
Delivery of training to UWSCG staff	UWSCG staff deployed for operation and maintenance of Dmanisi water supply scheme receive periodic training based on the Operation Manual and training program developed by constructor of the infrastructure	UWSCG office	Inspection	Training log	Ensure high quality and safe servicing of the water supply scheme	UWSCG administration
Servicing of water supply scheme	Water supply scheme do not leak, and water supply uninterrupted	Arranged facilities	Inspection	During operation of facilities	Prevent water loss and water logging of the site	Dmanisi Municipality, UWSCG

Attachment 1. Photomaterial of the existing situation




Pictures of the Pantiani headwork and Dmanisi reservoir







# Cadastral Information of Land plots intended for reservoirs and water intake



საჯარო რეგისტრის ელექტრონული სააგენტო N 82.18.41.479

**ამონაწერი საჯარო რეგისტრაციიდან**

განცხადების რეგისტრაცია: N 882019574374 - 17/07/2019 10:01:03  
 მომწოდებლის თარიღი: 19/07/2019 14:51:27

---

**საკუთრების განყოფილება**

შიდა დანახა	სექტორი	კვადრული ნაკვეთი	ნაკვეთის საკუთრების განიხილვა
82	ს. დანახის საკრებულის მიწა	41 479	ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო დამუშავებელი ფართობი: 128679.00 კვ.მ. ნაკვეთის წინა ნომერი:

მასმართავ: დანახა, სოფელი იაღველი

---

**შესაკუთრის განყოფილება**

განცხადების რეგისტრაცია : ნომერი 882019574374 , თარიღი 17/07/2019 10:01:03  
 უფლების რეგისტრაცია თარიღი 19/07/2019

უფლების დამამსკრებელი ოპერატორი:

- პრინციპი N1/1-2395 , დამომუშავის თარიღი: 6/07/2019. ქს.სა სახელმწიფო ქონების ეროვნული სააგენტო

შესაკუთრები: სახელმწიფო  
 შესაკუთრე: იაღველი  
 სახელმწიფო

---

**აპოთეკა**

საჯიდის სახლი გარეგნობა:  
 რეგისტრირებული არ არის

---

**ვადიანობა**

ვადიანობა:  
 რეგისტრირებული არ არის

მოვალეობა რეგისტრაცია:  
 რეგისტრირებული არ არის

---

საჯარო რეგისტრის ეროვნული სააგენტო. <http://public.reestr.gov.ge> გვერდი: 1(2)

**საკადასტრო გეგმა**

საჯარო რეგისტრის ეროვნული სააგენტო

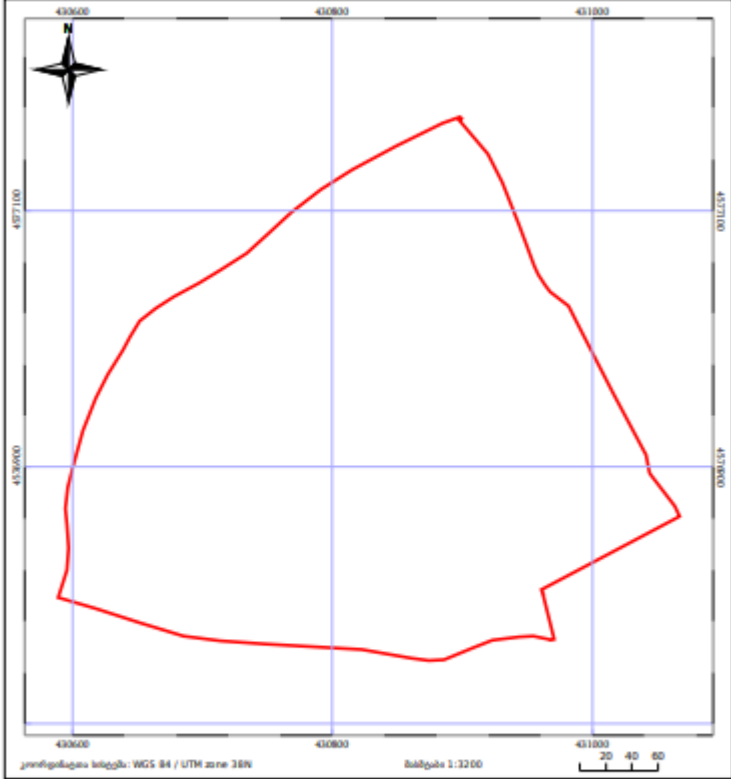
საკადასტრო კოდი: **82.18.41.479**

განცხადების ნომერი: **882019574374**

მომწოდებლის თარიღი: **19/07/2019**

ნაკვეთის განიშელება: **სასოფლო-სამეურნეო**

ფართობი: **128679 კვ.მ (WGS 84 / UTM zone 38N)**



კოორდინატის სისტემა: WGS 84 / UTM zone 38N  
 შაბტა 1:3200

მხედველად ნაკვეთი	ნაკვეთის საკადასტრო საზღვარი	ადგილი
მკვიდრი ნაკვეთი	სასოფლო-სამეურნეო ნაკვეთი	ვადიანობა

საჯარო რეგისტრის ეროვნული სააგენტო-ქვეყნის მართვის, სამართის ტან, N2, ტელი: (995 32) 2 25 15 28. <http://www.reestr.gov.ge>





საჯარო რეგისტრის სააგენტო N 82.14.42.269

ამონაწერი საჯარო რეგისტრაციდან

განცხადების რეგისტრაცია N 882019871281 - 23/10/2019 09:34:46  
შინაშლის თარიღი 25/10/2019 18:37:15

საკუთრების განყოფილება

ზონა ღმნისი	სეგმონი თარაშისი	კვარტალი	ნაკვეთი	ნაკვეთის საკუთრების გობსაკუთრება ნაკვეთის დანიშნულება: არასასაიდლო სამკურნეო დამუსკებელი ფართობი: 32811.00 კვ.მ. ნაკვეთის წინა ნომერი: 82.14.42.259; შენიშვნა-ნაგებობის ჩამონათვალი: N1 (ნაწიერი)
82	14	42	269	

მესაკუთრის განყოფილება

განცხადების რეგისტრაცია : ნომერი 882019871281 , თარიღი 23/10/2019 09:34:46  
უფლების რეგისტრაცია: თარიღი 25/10/2019

უფლების დამადასტურებელი დოკუმენტი:  
• პრინციპი N1/1-5092 , დამაწესების თარიღი: 10/10/2019 , სსიპ სახელმწიფო ქონების ეროვნული სააგენტო

მესაკუთრეები:  
სსიპ ღმნისის მუნიციპალიტეტი, ID ნომერი: 228928391

მესაკუთრე: \_\_\_\_\_ აღწერა: \_\_\_\_\_  
სსიპ ღმნისის მუნიციპალიტეტი

იპოთეკა

საგადასახლო გრაფიკი:

- საგადასახლო გრაფიკის/იპოთეკა: 102019221821 12/06/2019 12:34:20  
სახელმწიფო თვითმმართველობის მუნიციპალიტეტი ს/ნ 228928391  
საჯარო არსებული მიწის ქონება, საგადასახლო გრაფიკის/იპოთეკის უფლება ვრცელდება მიწის ქონებაზე,  
გარდა შემდეგი საკადასტრო კოდეხის მქონე უბრაღ ნივთზე: 82.01.42.353; 82.12.41.002; 82.01.46.676;  
82.05.45.808; 82.01.43.251  
საუკუველი: შეგუბინება, N044399, 29.07.2011, შემოსილების სანსაფერი

ვაღებულებები

ვაღები/კრძალვა:  
რეგისტრირებული არ არის  
შედეგია რეგისტრაცია:

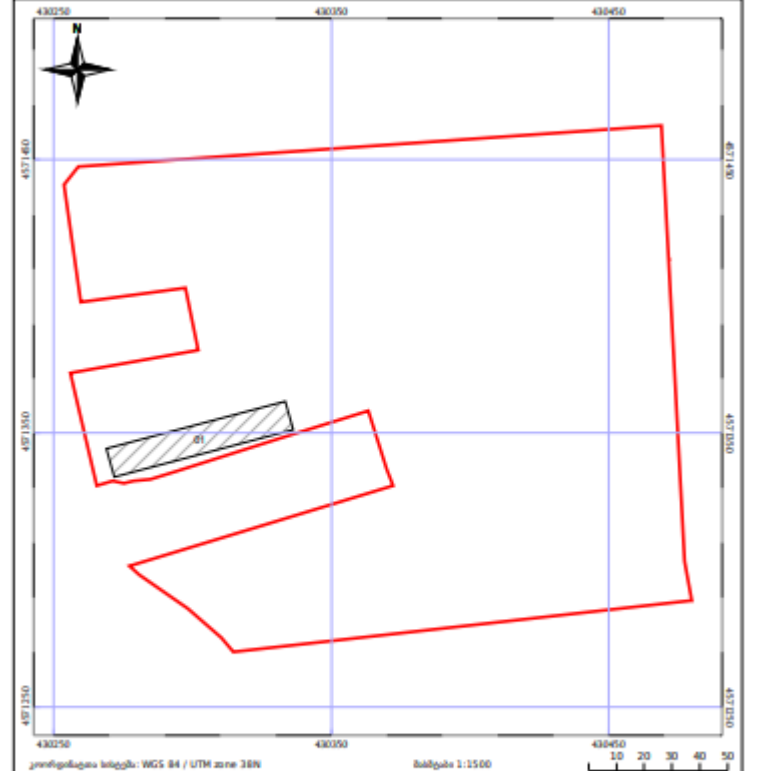


საადასტრო გეგმა

საჯარო რეგისტრის ეროვნული სააგენტო

საკადასტრო კოდი: **82.14.42.269**  
განცხადების ნომერი: **892018700187**  
ნომრების თარიღი: **11/09/2018**

ნაკვეთის დანიშნულება: **არასასაიდლო სამკურნეო**  
ფართობი: **32811 კვ.მ (WGS 84 / UTM zone 38N)**



შექმნილი საზღვარი	შემოსილება	მისი ფარე
ნაკვეთის საკადასტრო საზღვარი	საზღვარი საზღვარი	კოორდინატების



საჯარო რეგისტრაციის საბუღალთრო კოდი N 82.14.43.547

ამონაწერი საჯარო რეგისტრაციიდან

განცხადების რეგისტრაცია N 882019064454 - 31/01/2019 10:22:09 მომწოდების თარიღი 05/02/2019 14:47:45

საკუთრების განყოფილება

ზონის აღმნიშვნა	სექტორის აღმნიშვნა	კვარტილი	ნაკვეთი	ნაკვეთის საკუთრების კატეგორია	ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო (საბაზა)
82	14	43	547	ფაქტობრივი ფართობი: 135000.00 კვ.მ.	ნაკვეთის წინა ნომერი

შემაშობია: მუნიციპალიტეტი აღმნიშვნა, აღმნიშვნა/ფაქტობრივი ფართობი აღმნიშვნა, სოფელი ფილიალი

შესაკუთრების განყოფილება

განცხადების რეგისტრაცია : ნომერი 882019064454 , თარიღი 31/01/2019 10:22:09 უფლების რეგისტრაცია: თარიღი 05/02/2019

უფლების დამადასტურებელი დოკუმენტი:

- არბიტრაჟი N170 , დამოწმების თარიღი:30.01/2019 , აღმნიშვნის მუნიციპალიტეტის მერია

შესაკუთრებს:

სსიპ აღმნიშვნის მუნიციპალიტეტი ID ნომერი:228928391

შესაკუთრე:

აღწერა:

სსიპ აღმნიშვნის მუნიციპალიტეტი

აბოთეკა

საჯარო რეგისტრაციის გარეგნობა:

- საჯარო რეგისტრაციის/აბოთეკის: 102018187794 22/05/2018 11:06:59 სახელმწიფო ორგანოები აღმნიშვნის მუნიციპალიტეტი ს/ნ 228928391 საჯარო რეგისტრაციის მართვის ქონება, საჯარო რეგისტრაციის/აბოთეკის უფლება ვრცელდება მთელ ქონებაზე. გარდა: უძრავი ნივთებისა საჯარო რეგისტრაციის კოდი 82.01.42.353; 82.12.41.002 ; საუკუცელი: შეფუთვების, N044399, 29.07.2011, შემოსავლების სამსახური

ვალიდების განყოფილება

ვალიდების განყოფილება:

რეგისტრაციის მართვის ორგანო

მოვალეობის რეგისტრაცია:

საჯარო რეგისტრაციის ეროვნული სააგენტო: <http://public.reestr.gov.ge>

გვერდი: 1(2)



საჯარო რეგისტრაციის გეგმა

საჯარო რეგისტრაციის ეროვნული სააგენტო

საჯარო რეგისტრაციის კოდი: 82.14.43.547

ნაკვეთის დანიშნულება:

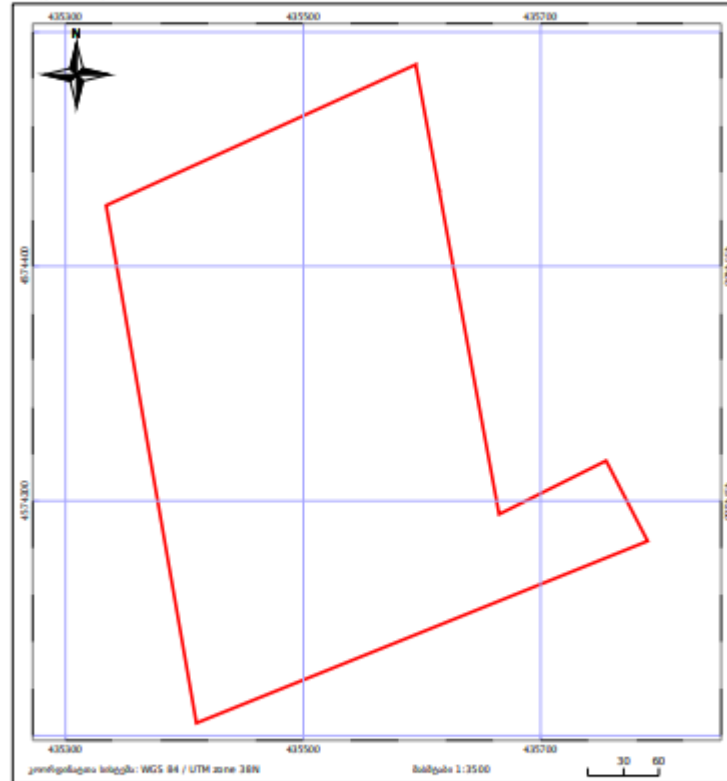
სასოფლო-სამეურნეო(საბაზა)

განცხადების ნომერი: 882019064454

ფართობი:

135000 კვ.მ (WGS 84 / UTM zone 38N)

მომწოდების თარიღი: 05/02/2019



საჯარო რეგისტრაციის ეროვნული სააგენტო ქალაქი თბილისი, ხანძარის ქუჩა, №2 | ტელ: (995 32) 2 25 15 20

[www.reestr.gov.ge](http://www.reestr.gov.ge)



საქართველოს რეესტრის კოდი N 82.13.45.517

ამონაწერი საჯარო რეესტრიდან

განცხადების რეგისტრაცია N 882019578907 - 18/07/2019 11:04:00 მომწოდებლის თარიღი 18/07/2019 16:08:08

საკუთრების განყოფილება

წინა დანია	სტერტი განაილი	კვარტილი ნაკვეთი	ნაკვეთის საკუთრების განაცხადი
82	13	45	517

ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო დამუშავებადი ფართობი: 2168.00 კვ.მ.  
ნაკვეთის წინა ნომერი

შესამართა: მუნიციპალიტეტი დანია, სოფელი განაილი

მესაკუთრის განყოფილება

განცხადების რეგისტრაცია : ნომერი 882019578907 , თარიღი 18/07/2019 11:04:00  
უფლების რეგისტრაცია თარიღი 18/07/2019

უფლების დამადასტურებელი დოკუმენტი:

- პრანქისა N11-2503 , დამოწმების თარიღი: 18/07/2019 , სსაპ სახელმწიფო ქონების ეროვნული სააგენტო

მესაკუთრე: სახელმწიფო

მესაკუთრე: იაჭვარც

აპოთეკა

საიდენტიფიკაციო გარანტიის:

რეგისტრირებული არ არის

ვალებულება

ვალდებულება:

რეგისტრირებული არ არის

შიდავლი რეგისტრაცია:

რეგისტრირებული არ არის

საჯარო რეესტრის ეროვნული სააგენტო, <http://public.reestr.gov.ge>

გვერდი: 1(2)



საადასტრო გეგმა

საჯარო რეესტრის ეროვნული სააგენტო

საკუთრების კოდი: 82.13.45.517

ნაკვეთის დანიშნულება:

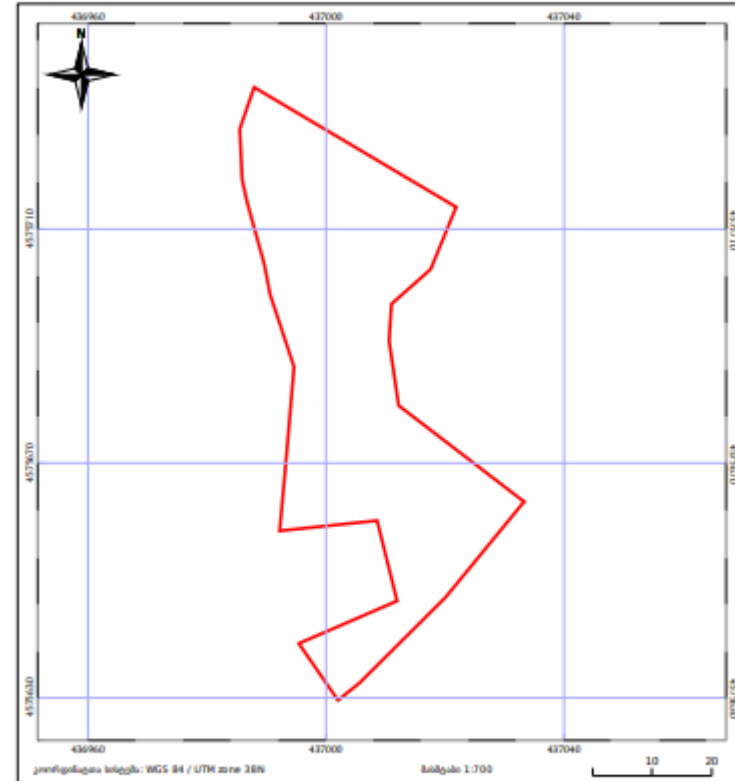
სასოფლო-სამეურნეო

განცხადების ნომერი: 882019578907

ფართობი:

2168 კვ.მ (WGS 84 / UTM zone 38N)

მომწოდებლის თარიღი: 18/07/2019



საჯარო რეესტრის ეროვნული სააგენტოს ტექნიკური ინსტრუქცია, საბაზისო ტექსტი, გვერდი: 196 (2) 2 25 15 28.

[www.reestr.gov.ge](http://www.reestr.gov.ge)



საჯარო რეგისტრაციის კოდი N 82.12.41.016

ამონაწერი საჯარო რეგისტრაციიდან

განცხადების რეგისტრაცია N 882011628561 - 23/12/2011 19:33:59 მიმწოდებლის თარიღი 29/12/2011 13:10:22

საკუთრების განყოფილება

ზონა	სექტორი	კვარტალი	ნაკვეთი	ნაკვეთის საკუთრების განცხადებელი
დზნანია	დიდი დზნანია	41	016	ნაკვეთის ფუნქცია: არსისაგან სანუკრეო დამატებული ფართობი 1101,60 კვმ. ნაკვეთის წარმომადგენელი: შერობა-წყებობის ჩამონადგობი   განსაზღვრის ფართობი 81 კვმ N2 განსაზღვრის ფართობი 81 კვმ

მესაკუთრის განყოფილება

განცხადების რეგისტრაცია : ნომერი 882011628561 , თარიღი 23/12/2011 19:33:59 უფლების რეგისტრაცია: თარიღი 29/12/2011

უფლების დამატებითი დოკუმენტი: არსებულ ქონების კატაგორია წილების შესახებ N04/თ , დამსწრის თარიღი: 23/12/2011 , საქართველოს რეგისტრაციის განყოფილება და ინფრასტრუქტურის სამსახური

მესაკუთრე: შპს საქართველოს გეროთანებული წილმომხრები კომპანია ID ნომერი: 412670097

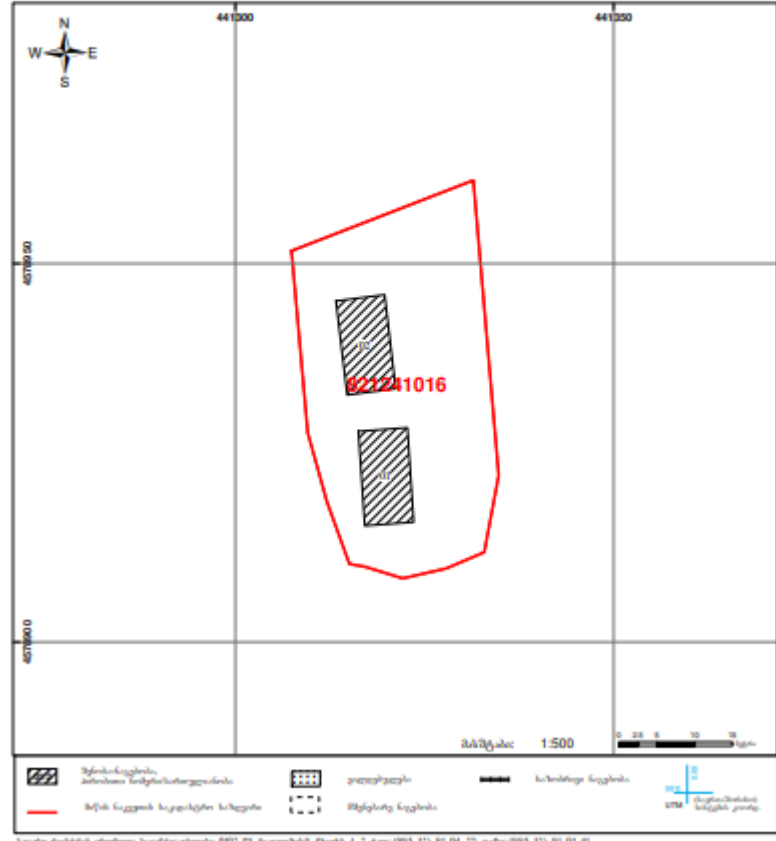
მესაკუთრე: შპს საქართველოს გეროთანებული წილმომხრები კომპანია იაწერ

აპოთეკა საჯარო რეგისტრაციიდან არ არის

ვალებულება ვიდეორეგისტრაცია: რეგისტრაციიდან არ არის  
მოქალაქის რეგისტრაცია: რეგისტრაციიდან არ არის

საქართველოს იუსტიციის სამინისტრო  
საჯარო რეგისტრაციის ეროვნული სააგენტო  
საკადასტრო გეგმა

მომხსენებლის საკადასტრო კოდი: 82 12 41 016  
ბანკის რეგისტრაციის ნომერი: 882011480720  
მომხსენებლის მართვის: 1001 კვმ  
რეგისტრაციის თარიღი: არასასაქონლო-სახსრები  
მომხსენებლის თარიღი: 03.10.11



საჯარო რეგისტრაციის ეროვნული სააგენტო: 882 ქ. საქართველოს რეგისტრაციის ეროვნული სააგენტო (999 32) 94 04 25 ფაქსი (999 32) 94 04 40  
დანიის საჯარო რეგისტრაციის სამსახური ქ. დანიის ქუჩა, 10 სსიპი, თბილისი, საქართველო



საქართველოს საგარეო საზღვრების დაცვის ეროვნული სამსახური N 82.13.41.340

### ამონაწერი საჯარო რეესტრიდან

განცხადების რეესტრაცია  
N 882016440144 - 13/07/2016 12:00:21

შომწიფების თარიღი  
15/07/2016 09:59:40

### საკუთრების განყოფილება

შრი ფანსია	სეგმონი კანონიად	კვარტალი	ნაკვეთი	ნაკვეთის საკუთრების კადასტრაცია ნაკვეთის დანიშნულება: არასასოფლო-სამეურნეო დაზღვევული ფართობი: 1438.00 კვ.მ. ნაკვეთის წინა ნაბიჯი: მენობა-ნადგობის ჩამონათვიდან N1 და N2 (წელის რეტრუკონსტრუქცია)
82	13	41	340	

მასშტაბი: რაიონი ფანსია , სოფელი კანონიად

### მესაკუთრის განყოფილება

განცხადების რეესტრაცია : ნომერი 882016440144 , თარიღი 13/07/2016 12:00:21  
უფლების რეესტრაცია: თარიღი 15/07/2016

უფლების დამადასტურებელი დოკუმენტი:

- პრისიფიკაცია N47/ს. , დამოწმების თარიღი: 27/05/2016 , საქართველოს რეგიონული განვითარებისა და ინფრასტრუქტურის მინისტრი

მესაკუთრე:

შპს საქართველოს გაერთიანებული წყალმომარაგების კომპანია ID ნომერი: 412670097

მესაკუთრე:

შპს საქართველოს გაერთიანებული წყალმომარაგების კომპანია

დაწვრილ

### იპოთეკა

საგადასახლო გარანტია:

რეესტრირებული არ არის

### ვაღლებულება

ვაღდასაკრებელი:

რეესტრირებული არ არის

შოფილელი რეესტრაცია:

რეესტრირებული არ არის

საჯარო რეესტრის ეროვნული საიტის მისამართი: <http://public.reestr.gov.ge>

გვერდი: 1(2)



### საკადასტრო გეგმა

საჯარო რეესტრის ეროვნული  
საიტის მისამართი

საკუთრების კოდი: **82.13.41.340**

საკუთრების დანიშნულება:

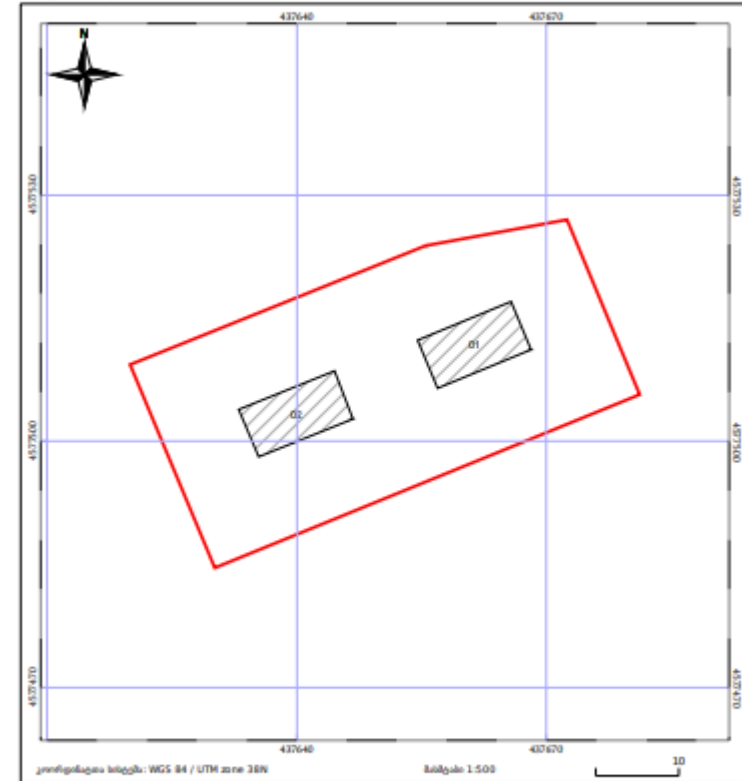
არასასოფლო-სამეურნეო

განცხადების ნომერი: **882015758977**

ფართობი:

**1438 კვ.მ (WGS 84 / UTM zone 38N)**

შომწიფების თარიღი: **05/01/2016**



	საკუთრების საზღვარი		საზღვარი საზღვარი		ფერ დონე
	მომარაგების		შესასრული საზღვარი		ვაღდასაკრება

საჯარო რეესტრის ეროვნული საიტის მისამართი: <http://public.reestr.gov.ge>

<http://public.reestr.gov.ge>



საქართველოს რეესტრის ეროვნული სააგენტო N 82.11.43.248

**ამონაწერი საჯარო რეესტრიდან**

განცხადების რეგისტრაცია: N 882019548010 - 08/07/2019 17:49:30  
წამყვანის თარიღი: 09/07/2019 15:05:17

**საკუთრების განყოფილება**

წინა აღნიშვნა	საკუთრო ქართული კანონმდებლობის მიხედვით	კვანძის ნომერი	ნაკვეთის საკუთრების განმარტების ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო დამატებული ფართობი: 77702.00 კვ.მ. ნაკვეთის წინა ნომერი:
82	11	43	248

მისამართი: მუნიციპალიტეტი აღმანთა, სოფელი კახიკალასა

**შესაკუთრის განყოფილება**

განცხადების რეგისტრაცია: ნომერი 882019548010, თარიღი 08/07/2019 17:49:30  
უფლების რეგისტრაცია: თარიღი 09/07/2019

უფლების დამატებითი დოკუმენტი:  
• ბრძანება NN1 / 1 - 198 I, დამოწმების თარიღი: 08/07/2019, ქსნაპ "სამედიკალეო ქიმიკატების ეროვნული სააგენტო"

შესაკუთრების სახელწოდება:  
შესაკუთრების სახელწოდება: იმწერა

**იპოთეკა**

საგადასახადო გარანტია:  
რეესტრირებული არ არის

**ვებ-გვერდი**

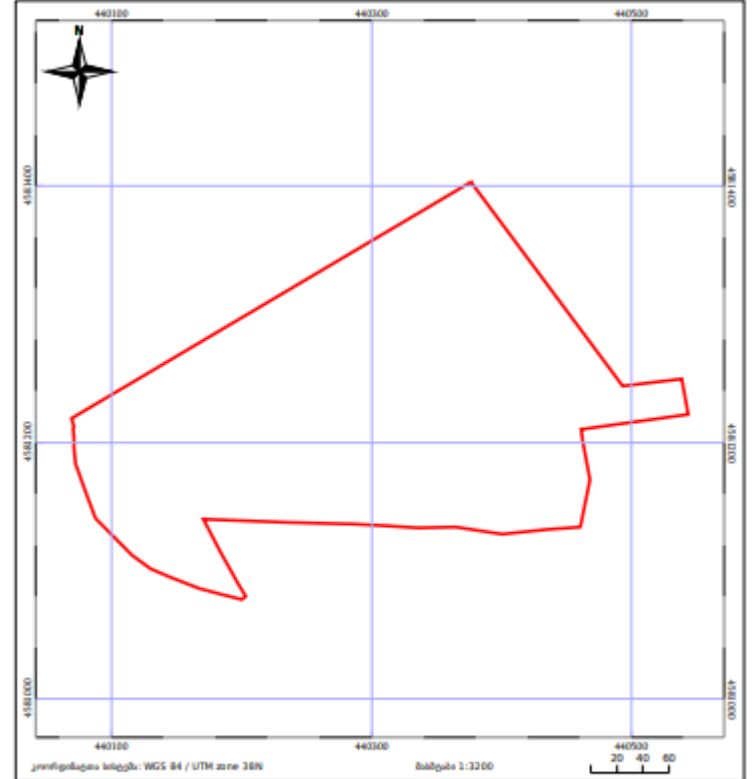
ვებ-გვერდის სახელი:  
რეესტრირებული არ არის  
შეფასების რეესტრი:  
რეესტრირებული არ არის



**საკადასტრო გეგმა**

საჯარო რეესტრის ეროვნული სააგენტო

საკადასტრო კოდი: 82.11.43.248  
განცხადების ნომერი: 882019548010  
წამყვანის თარიღი: 09/07/2019  
ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო  
ფართობი: 77702 კვ.მ (WGS 84 / UTM zone 38N)



0.05/0.1	მეტეოროლოგიის სააგენტო	გეგმის სახელი	ფურცლის ნომერი
საკუთრების საზღვარი	სამომხრე საზღვარი	საგადასახადო გარანტია	საგადასახადო გარანტია





საქართველოს რეესტრის ცენტრი N 82.11.41.178

### ამონაწერი საჯარო რეესტრიდან

განცხადების რეგისტრაცია  
N 882019546929 - 08/07/2019 15:51:33

შომწოდების თარიღი  
16/07/2019 18:35:28

### საკუთრების განყოფილება

შინა ღმნისა	სექტორი ქმარაღმნისა	კვარტალი	ნაკვეთი	ნაკვეთის საკუთრების გეგმის საკუთრება
82	11	41	178	ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო დამუშავებელი ფართობი: 210451,00 კვ.მ. ნაკვეთის წინა ნომერი:

შესამართ: მუნიციპალიტეტი ღმნისი , სოფელი  
კახელქალასა

### შესაკუთრის განყოფილება

განცხადების რეგისტრაცია : ნომერი 882019546929 , თარიღი 08/07/2019 15:51:33  
უფლების რეგისტრაცია: თარიღი 16/07/2019

უფლების დამადასტურებელი დოკუმენტი:

- პრისინგა NI/1-1975, დამოწმების თარიღი: 08.07.2019, სახელმწიფო ქონების ეროვნული სააგენტო
- პრისინგა NI/1-2378, დამოწმების თარიღი: 16.07.2019, სახელმწიფო ქონების ეროვნული სააგენტო

შესაკუთრება:  
სახელმწიფო

შესაკუთრე:  
სახელმწიფო

ილქერა

### იპოთეკა

საიდენტიფიკაციო გარანტიის:

რეგისტრირებული არ არის

### ვალებულები

ვალიდასტურება:

რეგისტრირებული არ არის

შეიღვეთ რეესტრი:

რეგისტრირებული არ არის

საჯარო რეესტრის ეროვნული სააგენტო <http://public.reestr.gov.ge>

გვერდი: 1(2)



### საკადასტრო გეგმა

საჯარო რეესტრის ეროვნული  
სააგენტო

საკადასტრო კოდი: 82.11.41.178

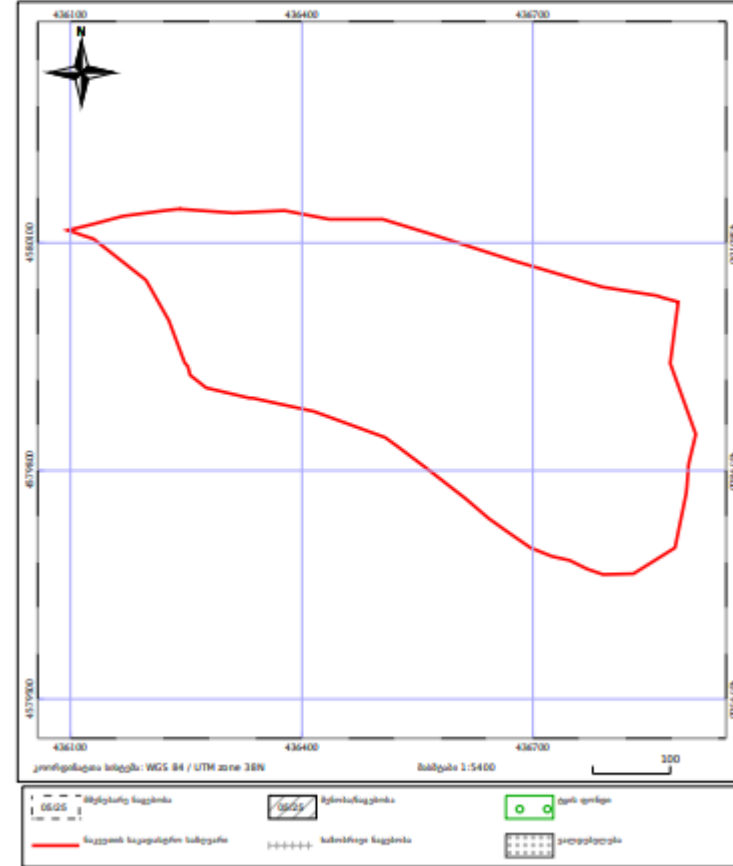
ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო

განცხადების ნომერი: 882019546929

ფართობი:

210451 კვ.მ (WGS 84 / UTM zone 38N)

შომწოდების თარიღი: 16/07/2019



საჯარო რეესტრის ეროვნული სააგენტოს ტექნიკური ინფორმაცია, საქართველო, გ.გ. ციცი (1995-20) 2 25 15 28)

<http://www.reestr.gov.ge>



საკუთრების რეგისტრის საჯარო რეგისტრის კოდი: N 82.15.41.535

ამონაწერი საჯარო რეგისტრისგან

განცხადების რეგისტრაცია: N 882019561348 - 12/07/2019 11:20:56  
მოწოდების თარიღი: 16/07/2019 14:34:12

საკუთრების განყოფილება

ზონა	სეგმონი	კვარტალი	ნაკვეთი	ნაკვეთის საკუთრების ტიპი/საკუთრების განაწილება
82	15	41	535	ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო დამუშავებელი ფართობი: 84100.00 კვ.მ. ნაკვეთის წარწერა

მასშტაბით: რაიონი დმანისი, სოფელი საფარდლო

შესაკუთრის განყოფილება

განცხადების რეგისტრაცია: ნომერი 882019561348, თარიღი 12/07/2019 11:20:56  
უფლების რეგისტრაცია: თარიღი 16/07/2019

უფლების დამადასტურებელი დოკუმენტი:  
• პრისტივი N1/1-2232, დანიშნულების თარიღი: 12/08/2019, ქსიპი სახელმწიფო ქონების ეროვნული სააგენტო

შესაკუთრების სახელმწიფო

ილქრა

შესაკუთრების სახელმწიფო

იპოთეკა

საგადასახადო გარანტიის რეგისტრირებული არ არის

ვალდებულება

ვალდებულების რეგისტრირებული არ არის

მოვალეობის რეგისტრირებული არ არის

საჯარო რეგისტრის ეროვნული სააგენტო: <http://public.reestr.gov.ge>

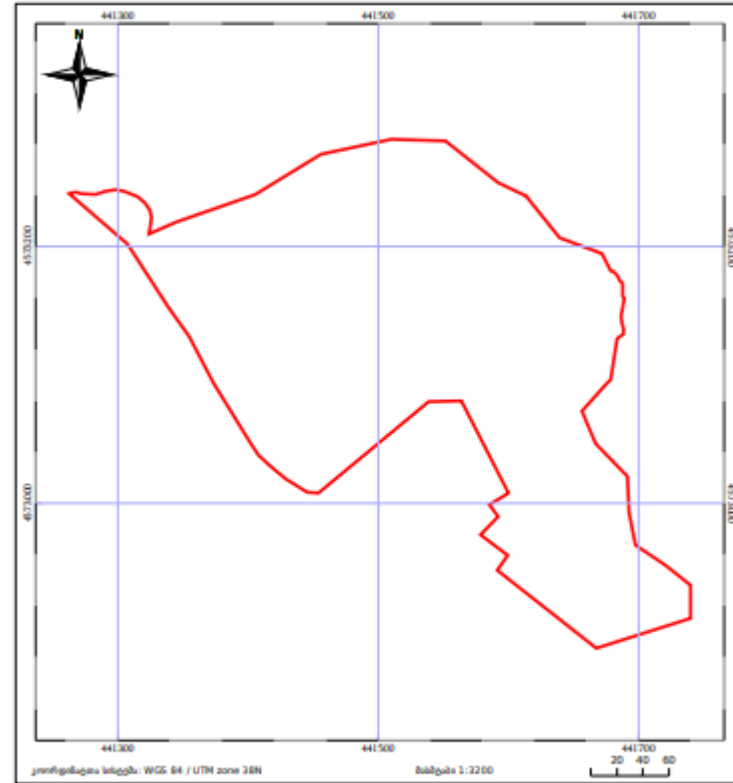
გვერდი: 1(2)



საკუთრების რეგისტრის საჯარო რეგისტრის კოდი

საკუთრების რეგისტრის ეროვნული სააგენტო

საკუთრების კოდი: 82.15.41.535  
განცხადების ნომერი: 882019561348  
მოწოდების თარიღი: 16/07/2019  
ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო  
ფართობი: 84100 კვ.მ (WGS 84 / UTM zone 38N)



	საკუთრების საზღვარი		საკუთრების საზღვარი		საკუთრების საზღვარი
	საკუთრების საზღვარი		საკუთრების საზღვარი		საკუთრების საზღვარი

საკუთრების რეგისტრის ეროვნული სააგენტო: ქ. თბილისი, სასაბურთო რაიონი, N2, ფული: (995 32) 2 25 15 28.

[www.reestr.gov.ge](http://www.reestr.gov.ge)



საჯარო რეგისტრის საიტის მისამართი: **N 82.12.43.010**

### ამონაწერი საჯარო რეგისტრაციის

განცხადების რეგისტრაცია: **N 882011628558** - 23/12/2011 19:28:07  
მომწოდების თარიღი: **29/12/2011 13:06:27**

### საკუთრების განყოფილება

ზონის დანიშნულება	სექტორის დადი დანიშნულება	კვარტალის კოდი	ნაკვეთის კოდი	ნაკვეთის საკუთრების გაცხადი კვარტალის ნაკვეთის ფუნქციის არასასაქონლო სასაქონლო დამფუძვლები ფართობი 1422.80 კვ.მ. ნაკვეთის წინა ნაწილი შენიშვნა-ნაგებობის ჩამონათრევი N1 განაშენიანების ფართობი-78 კვ.მ N2 განაშენიანების ფართობი-25 კვ.მ
<b>82</b>	<b>12</b>	<b>43</b>	<b>010</b>	

მასშტაბით: რაიონი დანიშნულება, სოფელი დადი დანიშნულება

### შესაკუთრების განყოფილება

განცხადების რეგისტრაცია : ნომერი **882011628558** , თარიღი **23/12/2011 19:28:07**  
უფლების რეგისტრაცია თარიღი **29/12/2011**

#### უფლების დამადასტურებელი დოკუმენტი:

- პროსტენა ქონების კატაგორიის მიღების შესახებ №04/თ , დამადასტურებლის თარიღი: 23/12/2011 , საქართველოს რეგისტრაციის განყოფილებისა და ინფრასტრუქტურის სამსახური

#### შესაკუთრების:

შპს საქართველოს გაერთიანებული წყალმომარაგების კომპანია, ID ნომერი: 412670097

#### შესაკუთრე:

შპს საქართველოს გაერთიანებული წყალმომარაგების კომპანია

იღწერა

### იპოთეკა

#### საგადასახლო გარანტირება:

რეგისტრირებული არ არის

### უბილიკაციები

#### უბილიკაცია:

რეგისტრირებული არ არის

#### შეფუთვით რეგისტრაცია:

რეგისტრირებული არ არის

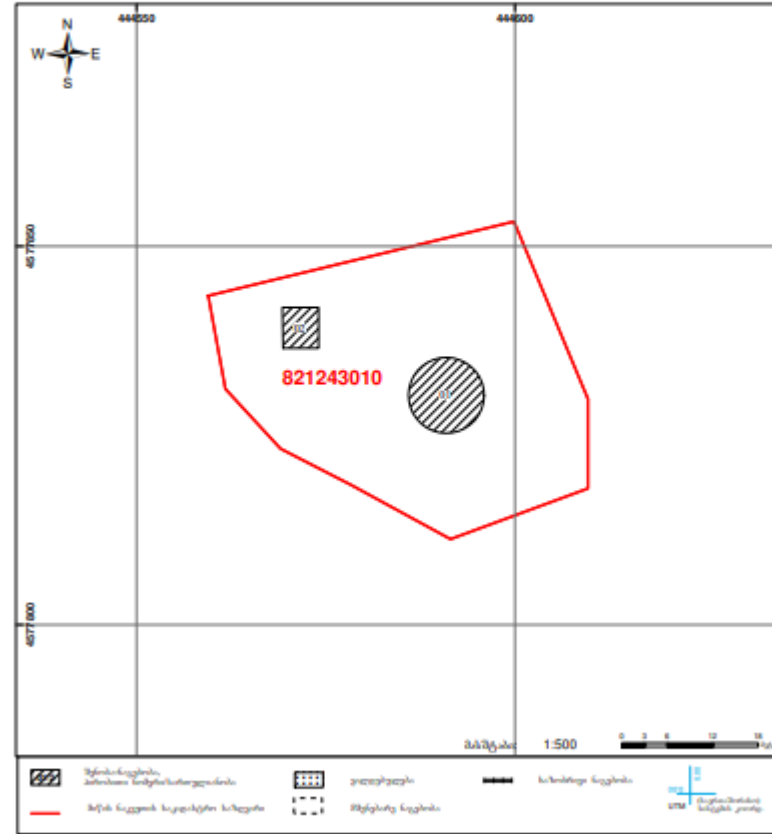
საჯარო რეგისტრის ვებ-გვერდი: <http://public.recstr.gov.ge>

გვერდი: 1(2)



საქართველოს იუსტიციის საბინაო რეგისტრაციის  
სახელმწიფო აგენტობის  
საქართველო გეგმა

მომწოდების საბინაო რეგისტრაციის კოდი: **82 12 43 010**  
საბინაო რეგისტრაციის ნომერი: **882011480755**  
მომწოდების შესაბამისი: **1422 კვ.მ.**  
საბინაო რეგისტრაცია: არასასაქონლო-საბინაო რეგისტრაცია  
მომწოდების თარიღი: **03.10.11**



საჯარო რეგისტრის ვებ-გვერდი: <http://public.recstr.gov.ge>  
საბინაო რეგისტრაციის საბინაო რეგისტრაციის კოდი: 82 12 43 010  
საბინაო რეგისტრაციის ნომერი: 882011480755  
საბინაო რეგისტრაციის შესაბამისი: 1422 კვ.მ.  
საბინაო რეგისტრაცია: არასასაქონლო-საბინაო რეგისტრაცია  
მომწოდების თარიღი: 03.10.11

Water Intake



საქართველოს რეგისტრაციის სამსახური N 82.01.42.070

**ამონაწერი საჯარო რეგისტრაციის**

განცხადების რეგისტრაცია: N 882011441395 - 09/09/2011 18:45:34  
 მიმწოდებლის თარიღი: 15/09/2011 17:55:37

**საკუთრების განყოფილება**

მონაღმნის აღმნიშვნელი ნიშნის	საკუთრობის სახეობა	კვადრატული მეტრი	ნაკვეთი	ნაკვეთის საკუთრების გაცხადი
82	01	42	070	ნაკვეთის ფუნქციონირების ანგარიშით დასახლებული სასახლე

*ნაკვეთის წინა ნაწილი*

**შენიშვნა-ნივთების ჩამონათვალი:** 1 განაშენიანების ფართობი - 66 კვ.მ., N 2 განაშენიანების ფართობი - 7 კვ.მ., N 3 განაშენიანების ფართობი - 6 კვ.მ., N 4 განაშენიანების ფართობი - 79 კვ.მ., N 5 განაშენიანების ფართობი - 6 კვ.მ., N 6 განაშენიანების ფართობი - 244 კვ.მ., N 7 განაშენიანების ფართობი - 244 კვ.მ., N 8 განაშენიანების ფართობი - 270 კვ.მ., N 9 განაშენიანების ფართობი - 132 კვ.მ.

**შესაკუთრის განყოფილება**

განცხადების რეგისტრაცია : ნომერი 882011441395 , თარიღი 09/09/2011 18:45:34  
 უფლების რეგისტრაცია თარიღი 15/09/2011

უფლების დამატებითი აღიარება:

- პრეტენზია N71/ს . აღნიშვნის თარიღი: 05/09/2011 , საქართველოს რეგისტრაციის განყოფილების და ინფორმაციის განყოფილების მიმართ.

შესაკუთრების მფლობელი: შპს "საქართველოს გეოინჟინერული წყალმომარაგების კომპანია", ID ნომერი: 412070097

შესაკუთრების მფლობელი: იდეალი

**იპოთეკა**

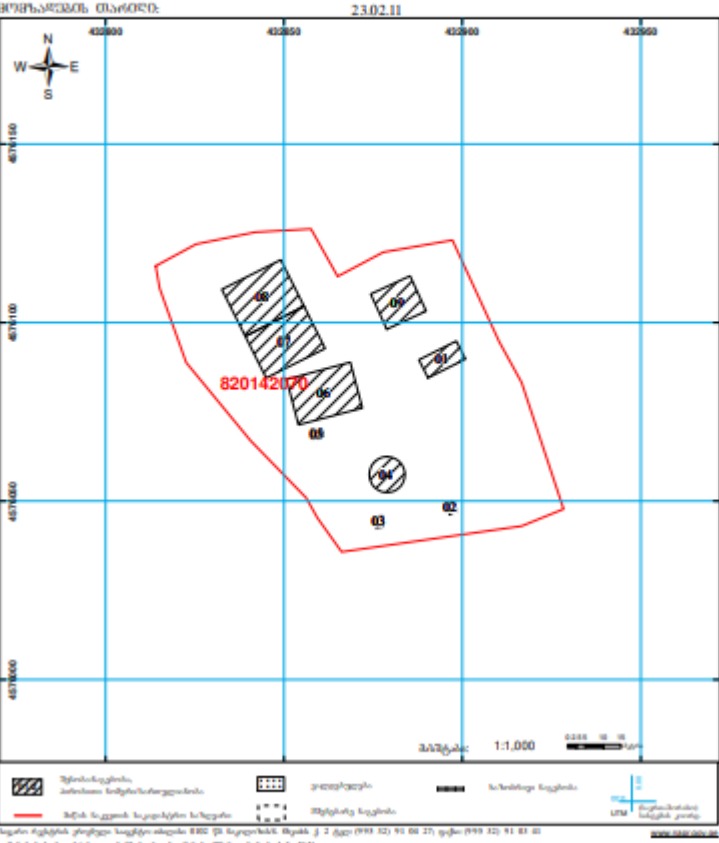
საფინანსო გარანტიის რეგისტრაციის თარიღი არ არის

**ვალებულები**

ვალდებულების რეგისტრაციის თარიღი არ არის

საქართველოს რეგისტრაციის სამსახური  
 საქართველოს რეგისტრაციის სამსახური  
 საქართველოს რეგისტრაციის სამსახური

მოქმედების სასაზღვრო რეგისტრაცია: N 82.01.42.070  
 განცხადების რეგისტრაციის თარიღი: 09/09/2011 18:45:34  
 მოქმედების რეგისტრაციის თარიღი: 15/09/2011 17:55:37





საჯარო რეგისტრის სააგენტო, კოდი N 82.18.42.038

ამონაწერი საჯარო რეგისტრისგან

განცხადების რეგისტრაცია N 882019909063 - 01/11/2019 18:01:57 მომზადების თარიღი 04/11/2019 10:17:09

საკუთრების განყოფილება

შირი	სეგმონი	კვარტალი	ნაკვეთი	ნაკვეთის საკუთრების გამოსაკუთრება
დანიშნულება	ს. დანიშნულების მიწები			ნაკვეთის დანიშნულება: სასოფლო-სამეურნეო (საბაზა) დამუშავებული ფართობი: 730000.00 კვ.მ. ნაკვეთის წარწერა
82	18	42	038	

მასშტაბი: რაიონი დანიშნულება, სოფელი პანგოანი

შესაკუთრის განყოფილება

განცხადების რეგისტრაცია: ნომერი 882011152573, თარიღი 01/04/2011 13:14:15 უფლების რეგისტრაცია: თარიღი 07/04/2011

უფლების დამადასტურებელი დოკუმენტი:
• მიწის საჯარო ხელშეკრულება N379, დამოწმების თარიღი: 21.05/2002, დანიშნულების რაიონის გამგეობა

შესაკუთრების სახელწოდება

ბაჭყალი

შესაკუთრების სახელწოდება

იპოთეკა

სატაძის სახელი გარანტირებული არ არის რეგისტრირებული არ არის

ვალდებულება

ვალდებულება: რეგისტრირებული არ არის

მოვალეობა რეგისტრირებული არ არის

საჯარო რეგისტრის ეროვნული სააგენტო, http://public.reestr.gov.ge

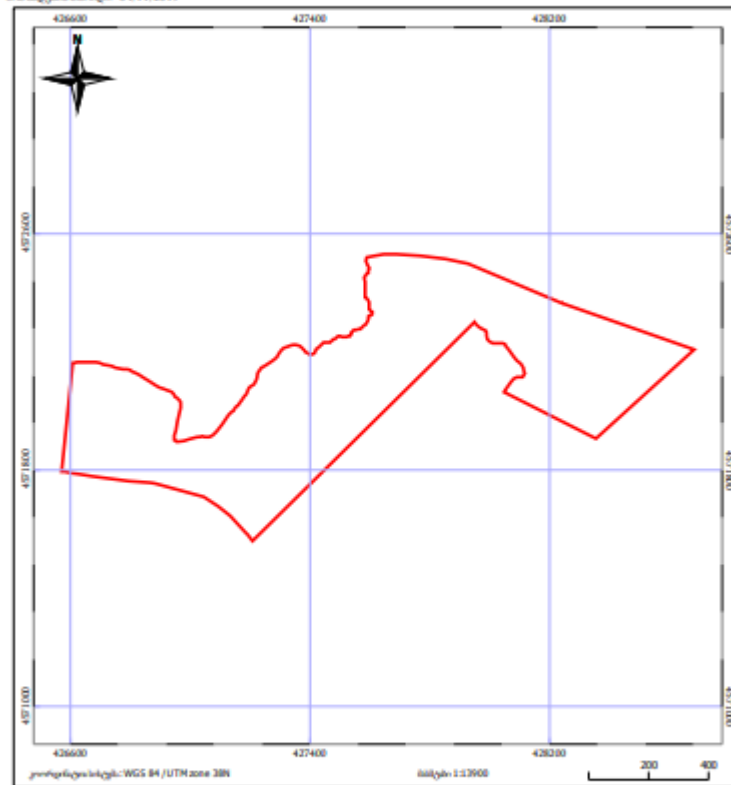
გვერდი: 1(2)



საკადასტრო გეგმა

საჯარო რეგისტრის ეროვნული სააგენტო

საკადასტრო კოდი: 82.18.42.038 ნაკვეთის დანიშნულება: ფართობი: სასოფლო-სამეურნეო(საბაზა) 730000 კვ.მ (WGS 84 / UTM zone 38N) მომზადების თარიღი: 04/11/2019



საჯარო რეგისტრის ეროვნული სააგენტოს ტექნიკური დოკუმენტი. საბაზისის კოდი: 82.18.42.038 (04/11/2019) 2:21:11:26

საჯარო რეგისტრის ეროვნული სააგენტო

**October 22, 2020  
Dmanisi Municipality**

**Minutes of Meeting  
The Second Regional and Municipal Infrastructure Development Project (SRMIDP) Additional  
Financing (AF)**

**Rehabilitation of Water Supply System in Dmanisi Town and 19 villages**

**Public Consultation meeting on Environmental and Social Screening Report and  
Environmental and Social Review**

On October 22, 2020 a public consultation meeting was conducted online through Zoom application due to the pandemic situation in the country in order to discuss Environmental and Social Screening Report and Environmental and Social Review (ESR) prepared for the sub-project “Rehabilitation of Water Supply System in Dmanisi Town and 19 villages”.

Before conducting the online public consultation meeting, MDF with LSG went through several options and arranged the most optimal online consultation schedule. Zoom Application was chosen as the most convenient online form, as it is easy to access meeting with a provided link and representatives from the various villages of Dmanisi organized the online meeting from their villages in full compliance with the Covid-19 recommendations. Information regarding date/time and location (online) was published at MDF Official website, announcement papers were posted at Dmanisi town and 19 villages. In addition, MDF prepared information booklets for the rest of Dmanisi population,

The meeting aimed to inform local population regarding the works scheduled under the SP and anticipated negative/positive impacts on natural and social environment as well as ways and means for their prevention.

**Those present at the meeting:**

**Locals:**

1. Abeli Okriashvili
2. Giorgi Zurabishvili
3. Zurabi Girgvliani
4. Aikhan Samedovi
5. Tarkhan Kurbanovi
6. Ragip Iusubovi
7. Elvar Sharipovi
8. Gamandar Ibragimovi
9. Akip Sharipovi

10. Namik Pakhradovi
11. Abulpa Pakhratovi
12. Aziz Ramazanovi
13. Pakhrat Muradovi
14. Iagup Mamedovi
15. Gumbat Mamedovi
16. Bapadar Musaevi
17. Nazi muradovi
18. Musaiat Asadovi
19. Topig Iusubovi
20. Makharat Akhmedovi
21. Shirvan Tagizade
22. Gadji Mansurovi
23. Anar Suleimanovi
24. Ramaz Aslanisvhili
25. Temuri Gambarasvhili
26. Besiki Mosesvhili
27. Giorgi Selimanishvili
28. Tamazi Ognadze
29. Temuri Tatulashvili
30. Giorgi Tatuashvili
31. Nodari Guramishvili
32. Fironi Mosesvhili
33. Nodari Magradze
34. Gia Okriashvili
35. Nato Okruashvili
36. Merabi Foladishvili
37. Aza Poladishvili
38. Kakha Grigalashvili
39. Bailar Suleimanovi
40. Natik Mamedovi
41. Emil Ibragimovi
42. Osman mamedovi
43. ElCin Isaevi
44. Rapael Iskandarovi
45. Levani Mantashashvili
46. Kukuri Kavlelashvili
47. Ramaz Devnozashvili
48. Alei Aliebi
49. Jumshud Gasanova
50. Iusuf Usufovi
51. Shorena Okriashvili
52. Jondo Aduashvili
53. Otar Aduashvili
54. Saiat Alievi
55. Shakir Alievi
56. Avtandil Musaevi
57. Dunimali Nabaevi

58. Vugar Sadigovi

59. Zakir Omarovi

**Representatives of Dmanisi Municipality:**

Viktor Kristesiashvili (Contact Person from LSG).

Emzari Petriashvili – representative for Dmanisi town.

Gusein Guseinovi - Deputy Chairman of the City Council.

Bakhram Muradovi – Representative of Mayor at administrative unit of Orozmani.

Hamleti Aslanishvili - Representative of Mayor at administrative unit of Mashavera.

Kakha Tatuashvili - Representative of Mayor at administrative unit of Didi Dmanisi.

Fasha Fashaevi - Representative of Mayor at administrative unit of Amamlo.

Tamazi Charashvili - Representative of Mayor at administrative unit of Gantiadi.

Vakil Namazovi - Representative of Mayor at administrative unit of Kizilkilisa.

**Representatives of the Municipal Development Fund of Georgia:**

Project Manager – Mariam Gvazava

Project Manager - Shalva Kokochashvili

Environmental Specialist – Niniko Isakadze

Social and Gender Specialist – Nona Chichinadze

Beneficiary Relations Specialist (GRM Contact Person) – Nutsa Gumberidze

Engineer – Zviad Tchurtchelauri

The Meeting was opened by Mariam Gvazava, who provided meeting participants information on Municipal Development Fund and objectives of the meeting. She introduced the subproject and discussed in details all the works planned under the SP. She also informed the participants that the works under the SP only envisage to cover the area up to the private properties, any private connections is the responsibility of the property owner.

Niniko Isakadze talked in details concerning works scheduled under sub-project – Rehabilitation of Water Supply System in Dmanisi Town and 19 villages along with respective environmental and social risks. She reviewed also ESR elaborated for the sub-project. N. Isakadze shortly explained to the public about the social and environmental screening procedures applied for the WB and environmental and social requirements of the presented SP. The mitigation measures were also discussed in order to minimize the potential negative impacts, which may arise during the SP implementation process. N. Isakadze mentioned that according to the Georgian law on Environmental Impact Assessment the SP does not require any kind of permits and agreements with the Ministry of Environmental Protection and Agriculture and/or obtaining of Environmental Decision. Due to the above-mentioned fact, and to ensure environmental and social safety of the SP, MDF is responsible for implementation of all environmental and social procedures in accordance with the WB safeguard policies.

N. Isakadze discussed the structure and content of ESR and briefly discussed public relationship and labor management measures. She noted that ESR forms an integral part of the contract made with the civil works contractor. The last one is obliged thoroughly implementation of the measure specified in the ESR to protect social and natural environment. She also discussed the environmental monitoring criteria, responsible parties for the environmental supervision and reporting procedures during the sub-project implementation.

Nona Chichinadze presented to the audience information on social accountability of the Municipality, on public engagement and gender related issues. She talked to the population and asked questions related to involvement and awareness. The population received information about the project from the



municipality. Representatives of the municipality informed that they had always been conducting the meetings with residents and providing information about the subproject. Population is satisfied with the project and they noted that rehabilitation of the water supply system is most important for the Dmanisi region.

Zviad Churchelauri explained in details the rehabilitation works planned to be carried out by the project. How many reservoirs will be made or rehabilitated, from which point will the water be taken and bring water until private ownership.

Nutsa Gumberidze informed the participants about procedures and importance of Grievance Redress Mechanism established at MDF. Shared information about Contact persons for communication, in case of existence of any complaints concerning environmental or social issues and/or expressing the comments and suggestions. She provided information regarding billboards where they can find GRM contact information (phone numbers and e-mails), complaint boxes that will be available at every construction site and grievance forms.

After the presentation, the audience was given a possibility to express their opinions and/or participate in Q&A session concerning presented issues, they posed the following questions:

<b>Questions and Remarks:</b>	<b>Answers and Comments:</b>
When will the tender be announced?	The tender is planned to be announced in October 2020. However, due to the fact that the project has a large budget, an international tender will be announced for the project, which lasts a little longer than the national bidding... The duration of the project is 36 months.
Does the SP envisage arrangement of reservoirs?	The project envisages building new pressure-regulating reservoirs in 14 villages, and rehabilitation of existing reservoirs in three settlements: Dmanisi town, Gantiadi village and Boslebi village are planned.
How much will the water supply tariffs be?	MDF is only executing agency of civil works, United Water Supply Company LTD will be responsible for determining the tariffs after completion of the SP.

The participants expressed their positive attitude towards the project and gratitude.

Photo materials and registration list of meeting attendances are hereby enclosed.

MoM was prepared by Nutsa Gumberidze on October 23, 2020

**Photo Materials:**

--	--

