



Dariali Hydropower Plant Project

***Analysis of Cultural Heritage Related Activities and Study
Performed in Dariali Hydropower Plant Designed Corridor***

***Analyses based on the Conclusion of National Agency for Cultural Heritage Preservation
of Georgia and Archeological Report of Georgian National Museum***

JSC Dariali Energy

Tbilisi 2014

With the purpose of the analysis of risk for and impact on the cultural heritage, at the early stage of the environmental and social assessment, Dariali Energy applied to the Georgia National Museum and the National Agency for Cultural Heritage Preservation of Georgia for detection of any probability of impact on the cultural heritage in the context of the project implementation and assessment of such probability if any, by the field study.

In this process Dariali Energy had consulting with the respective ministries, experts and local communities. The intensity of the carried out research of the cultural resources was quite adequate for the full description of risks and various impacts, subject to the Performance Requirement 8: cultural heritage (Section 10) of the European Bank for Reconstruction and Development. Noteworthy is the fact that in process of those activities the consulting was also provided with the respective national regulatory authorities which are responsible for protection of the cultural heritage subject to the recommendation referred to in the EBRD Performance Requirement 8: cultural heritage (Section 17).

Based on the foregoing, in 2011 the employees of the National Agency for Cultural Heritage Preservation of Georgia carried out the field and reconnaissance operations which implied the visual survey of the designed area. As a result of the survey it was established that no objects of cultural heritage are available in the right-of-way. (See Annex N 1: the report of the National Agency for Cultural Heritage Preservation of Georgia).

In frames of the contract executed between the Georgian National Museum and JSC Dariali Energy on April 11, 2013, in Kazbegi Region, the National Museum fellow G. Gogochuri was sent for the archeological studies to the site. See the detailed report prepared by the Georgian National Museum in Annex 2 “Archeological Report of Georgian National Museum/Archeological Center”.

According to the survey, Headwork and sand basin shall be built in the bed of the river Tergi in 1.5-2.0 km from the regional center (GPS coordinates of the site: N-42.666 14; E-044.643 10, absolute elevation – 1726 m). Water from the sand basin will pass through the pipe about two kilometers along the right slope of the river Tergi until it attains the beginning of the underground headrace tunnel. The area where the pipe shall pass is the western slope of the mountain Kuro and the gravel and hard rock conglomerate originated from the inert mass

descending from this slope, which is covered with small grass and shrub layer (GPS coordinates: N-42.675 17; E-044.648 66; absolute elevation – 1718 m). As a result of the visual survey of those sites it was found out that no objects of cultural heritage are available in this territory.

Headrace tunnel takes its beginning from the rocky slope (GPS coordinates: N-42.675 26; E-044.648 66; absolute elevation – 1715 m) and it passes under the rocky mass parallel the river Tergi. Tunnel rises in the section between the village Gveleti and Khdis Gorge and connects to the hydropower plant under construction there.

Below the tunnel head, in about one hundred meters, were fixed the ruins of several structures on the place covered with shrub. Their walls are built by dry masonry. In our opinion, these structures should be a seasonal camp of Kazbegi population. Indeed, this site is not included in the construction area but it faces the risk to be filled with earth dumped from above (GPS coordinates: N-42.684 47; E-044.645 66; absolute elevation – 1615 m). According to National Museum, no archeological studies are required for their insignificant function.

On the surface tunnel divides in two and rises up in such a kind. Both flows direct separately to the hydropower plant and merge at the plant. At the tunnel exits the rocky slopes are cut and construction sites are arranged there (GPS coordinates: N-42.727 56; E-044.631 19; absolute elevation – 1304 m).

As a result of the study of the designed areas by the representatives of the Georgian National Museum it has been found out that no objects of cultural heritage (including archeological) are available in the Dariali hydropower plant construction site. Therefore, according to the conclusion of abovementioned survey, Dariali Energy can start the excavations related to the construction of Dariali hydropower plant on the designed areas allocated for construction.

Thus, based on the research carried out by the respective national regulatory authorities and scientific organizations (National Agency for Cultural Heritage Preservation of Georgia, Georgian National Museum) responsible for the protection of cultural heritage we can conclude that the project construction is designed on the place where any damage to the cultural heritage is excluded, hence Dariali Energy has met the recommendation referred to in the EBRD Performance Requirement 8: cultural heritage (Section 12). At that the assessment of impact on the cultural heritage was performed according to the national laws and standards, and policies and practices recognized worldwide by the international law that fully complies

with the recommendation referred to in the EBRD Performance Requirement 8: cultural heritage (Section 14).

**NATIONAL AGENCY FOR CULTURAL HERITAGE PRESERVATION OF
GEORGIA**

N 10/10/957

October 18, 2011

To JSC Dariali Energy Director Mr. L. Iordanishvili

Dear Mr. Iordanashvili,

Based on your Letter N10 of 10.10.2011 to the Agency, regarding construction of hydropower plant at the right slope of the river Tergi, in the parcel of land between the river Kuro and river Khde in Kazbegi Municipality, the Agency employees visited the said area and after the visual survey they concluded that no objects of cultural heritage are available there.

Please also be informed that in accordance with Article 10 of the Law of Georgia On Cultural Heritage, in case of detection of any objects of cultural heritage in the territory of Georgia, the contractor shall stop operations and inform the Ministry of Culture and Monument Protection of Georgia about the found object.

Sincerely,

NikolozVacheishvili(*signed*)

GEORGIAN NATIONAL MUSEUM

3 Rustaveliavenue, Tbilisi 0105 Tel: 998022, Fax: 982129, Email: info@museum.ge

ARCHEOLOGICAL REPORT

Acting head of the Archeological Center Davit Gogelia(*signed & sealed*)

N09/a

Date: 16.04.2013

REPORT:

Contractor: LEPLGeorgian National Museum

Customer: JSC Dariali Energy

Project: 2 km section connecting the hydropower plant desilt basin and heading with the penstock, at the right bank of the river Tergi, in Kazbegi Region,

In frames of the Contract N09/a made between the Contractor and the Customer on April 11, 2013, from April 13 to April 14 inclusive of this year the Georgian National Museum research officer G. Gogochuri was sent to the said project in Kazbegi Region for execution of the archeological survey.

The heading and the so called desilt basin shall be built in the bed of the river Tergi in 1.5-2.0 km from the regional center (GPS coordinates of the site: N-42.666 14; E-044.643 10, absolute elevation – 1726 m, Figs NN1, 2). Water from the sand basin will pass through the pipe about two kilometers along the right slope of the river Tergi until it attains the beginning of the underground headrace tunnel. The area where the pipe shall pass is the western slope of the mountain Kuro and the gravel and hard rock conglomerate originated from the inert mass descending from this slope, which is covered with small grass and shrub layer (GPS coordinates: N-42.675 17; E-044.648 66; absolute elevation – 1718 m, Figs NN 3,4). As a result of the visual survey of those sites it was found out that no objects of cultural heritage are available in this territory.

Headrace tunnel takes its beginning from the rocky slope (GPS coordinates: N-42.675 26; E-044.648 66; absolute elevation – 1715 m, Figs NN 5,6) and it passes under the rocky mass parallel the river Tergi. Tunnel rises in the section between the village Gveleti and Khdis Gorge and connects to the hydropower plant under construction there.

Below the tunnel head, in about one hundred meters, were fixed the ruins of several structures on the place covered with shrub. Their walls are built by dry masonry. In our opinion, these structures should be a seasonal camp of Kazbegi population. Indeed, this site is not included in the construction area but it faces the risk to be filled with earth dumped from above (GPS coordinates: N-42.684 47; E-044.645 66; absolute elevation – 1615 m, Figs NN 7,8). In our opinion, no archeological studies are required for their insignificant function.

On the surface tunnel divides in two and rises up in such a kind. Both flows direct separately to the hydropower plant and merge at the plant. At the tunnel exits the rocky slopes are cut and construction sites are arranged there (GPS coordinates: N-42.727 56; E-044.631 19; absolute elevation – 1304 m, Figs NN9,10).

Findings

As a result of the study of the areas allocated for construction it has been found out that no archeological objects are available in those sites. Therefore, the construction company can start the excavations related to the construction of Dariali hydropower plant on the specified sites.

Research officer G. Gogochuri(*signed*)



Figs N 1, 2. Area of Headworks



Figs NN 3, 4. Area between the Headworks and Headrace tunnel.



Figs NN 5,6. Place where the Headrace tunnel takes its beginning.



Figs N 7,8. Ruins of structures existing near the Headrace tunnel.



Figs NN 9, 10. Places of Headrace tunnel exits