HIGHWAY IMPROVEMENT PROJECTS IN GEORGIA

Ph.D. Giorgi Chubinidze

Georgian American University ORCID NO: 0009-0007-9363-4027

Ph.D. Manuchar Shishinashvili

Georgian American University ORCID NO: 0009-0007-4432-4428

Ph.D. Mikheil Kechakmadze

Institute IGH d.d

Abstract

The geographical location, political situation in the region, and increased transit traffic in Georgia determine the rapid and effective development of the country's road infrastructure. Developed road infrastructure will increase the number of tourists in Georgia, cargo turnover, and the interest of various investors, all of which will translate into an improvement in the country's economic and political situation.

Keywords: Silk Road, Rikoti Pass, Highway, Kvesheti-Kobi section.

Georgia, with its geopolitical and geographical location, is located at the crossroads of Europe and Asia, on the main section of the ancient Silk Road.

Based on these factors and current events in the region, it can be said that Georgia is currently the only safe land route for transporting cargo from Europe to Asia and vice versa.

In addition to the current situation in the region (meaning the ongoing hostilities on the territory of Ukraine), it is also worth noting that the route through Georgia is the shortest and, accordingly, financially advantageous for the countries using this corridor. It should be noted here that not only the land corridor can be used for fast and cheap transit through Georgia, but also pipelines, above-ground and underground communication networks, airspace, etc.

Increased cargo turnover is positively reflected in the country's economic development, foreign investments are increasing, new jobs are emerging, and the standard of living of the Georgian population is improving. The country has acquired an additional political role in the region. Reliability and demand for the country's infrastructure are increasing.

The rapid construction and rehabilitation of Georgia's expressways has become important and necessary.

The most difficult section of the East-West Highway is the Rikoti Pass, and the most difficult section of the South-North Highway is the Kvesheti-Kobi section.

Both sections are in a difficult geographical location. The project envisages the construction of bridges, tunnels, overpasses, recreational zones and road infrastructure.

Currently, construction work is actively underway on both sections. Despite the difficulties, the construction process is proceeding steadily, with certain sections already in operation and certain sections being prepared for opening. Accordingly, in the near future, Georgia will have well-equipped expressways in both directions (with all neighboring countries).

The significant financial costs, which are inaccessible to the country's budget at these stages, are being financed and covered by various international donors, which is certainly appreciated and gratefully acknowledged.



Pic.1 - East-West and South-North Connecting Highway

The difficulties of construction and design can be considered positive factors, as after the completion of construction, the country will have a number of successful construction companies and engineers from various fields.

In sum, construction of up to 52 km road is planned on Rikoti Pass, including 97 bridges and 51 tunnels. Construction of Rikoti Pass section is divided into four sections: Chumateleti-Khevi section (section I) 11.7 km, Khevi-Ubisa section (section II) 12.2 km, Ubisa-Shorapani section (section III) 13 km and Shorapani-Argveta section (section IV) 14.7 km.

Chumateleti-Argveta section is constituent part of E60 highway and represents one of the most difficult sections. Modernization of Rikoti Pass section is very important in terms of development of road network and compliance with modern standards. Modernization of Rikoti will promote an increase in highway capacity and transit turnover as well as traffic safety level and reducing the travel time.

Construction of Rikoti pass section is divided into four sections: Chumateleti-Khevi section (section I) 11.7 km, Khevi-Ubisa section (section II) 12.2 km, Ubisa-Shorapani section (section III) 13 km and Shorapani-Argveta section (section IV) 14.7 km.

Within the framework of the Kvesheti-Kobi road project, the construction of 12.7 km long, two-lane asphalt-concrete road, 5 bridges and 4 tunnels, as well as the rehabilitation of 1 bridge is planned. The dimensions of the tunnels are 1541 m, 194 m, 388 m and 299 m.

The total length of the bridges is 1.6 km. One of them will be a 426 m long and 166 m high arched bridge, which is the most difficult engineering construction. The length of its arch is 285

meters and, at this stage, it has no analogues in Georgia. The project also envisages the construction of 435 m long and relatively small (322 m, 218 m, 148 m and 42 m) bridges.

In addition to the main road infrastructure components, the project includes setting up a visitor center. This facility will serve as a potential center for agribusiness, conservation, ecotourism development and community sustainable development in the project area. The visitor center is a part of the project and it will directly benefit the local population of Khadi valley.

The development of road infrastructure will increase the amount of tourism and transit in the country, the country's economy and the level of strength of the population living in the country will increase.

References

- 1. Shishinashvili, Manuchar Tamazovich. "Safety, tourism and economic development of Georgia by road network modernization." *Theoretical & Applied Science* 5 (2018): 32-34.
- 2. Forkenbrock, David J., and Norman SJ Foster. "Economic benefits of a corridor highway investment." *Transportation Research Part A: General* 24.4 (1990): 303-312.
- 3. Percoco, Marco. "Highways, local economic structure and urban development." *Journal of Economic Geography* 16.5 (2016): 1035-1054.
- 4. Shishinashvili, Manuchar Tamazovich. "Motor roads and geographic information system." *ISJ* Theoretical & Applied Science 10.54 (2017): 59.
- 5. Watkiss, Paul, et al. "The socio-economic benefits of the HIGHWAY project." Report 89 (2020).
- 6. https://gzebi.ge/en/road/e117-saerthashoriso-gzis-shemadgeneli-qveshethi-kobi/