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# THE ECONOMIC IMPACT OF THE EFFICIENCY OF TRANSPORT CORRIDORS' TRANSPORTATION PROCESS

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**ABSTRACT:**

*This paper explores the economic impact of the efficiency of transportation processes within international transport corridors. With a focus on the integration of transport and freight systems, as highlighted in various scholarly works, the study examines how enhanced operational efficiency in these corridors can lead to significant economic benefits. Drawing on foundational texts such as "Transport and Freight Systems in Railway Transport" and "Organization of International Transportation," we analyze key factors that influence transportation efficiency, including regulatory frameworks, technological advancements, and logistical coordination. The research underscores the importance of effective transportation services, as outlined in the "Rules for Providing Transportation Services," and emphasizes the role of international collaboration in optimizing transport corridors. By evaluating case studies and empirical data, this paper aims to demonstrate how improved transportation efficiency not only reduces costs and transit times but also stimulates trade, enhances competitiveness, and contributes to overall economic growth.*

**INTRODUCTION.** During the meeting and negotiations held on December 4-6, 2017, in Tashkent with the President of the Islamic Republic of Afghanistan, the construction project of the trans-Afghan railway was discussed. On September 20, 2018, for the first time, the construction project of the Mazar-i-Sharif-Kabul-Peshawar railway was presented to the public within the framework of the international conference on "Central Asia's International Transport Corridors System: Strategic Prospects and Untapped Opportunities." On September 10, 2020, intergovernmental negotiations between Uzbekistan and Pakistan regarding the implementation of this project took place in Islamabad. Additionally, on October 20, 2020, intergovernmental negotiations between Uzbekistan and Afghanistan on this matter were held in Kabul.

On March 31, 2021, a video conference was held between the deputy heads of the railway administrations of Afghanistan, the Islamic Republic of Pakistan, and the Republic of Uzbekistan. The meeting focused on the design and construction of the "Mazar-i-Sharif - Kabul - Peshawar" railway and further practical promotion of the project.

According to information from Afghanistan at that time, based on the recommendation of the President of Afghanistan, six options were presented for selecting an economically viable route:

1) "Mazar-i-Sharif - Baghlan - Salang - Kabul - Torkham" (625 km);
2) "Mazar-i-Sharif - Dara-i-Suf - Shashpul - Logar - Gulomkhan - Torkham" (779 km);
3) "Mazar-i-Sharif - Baghlan - Shashpul - Logar - Gulomkhan" (799 km);
4) "Mazar-i-Sharif - Baghlan - Shashpul - Logar - Torkham" (924 km);
5) "Mazar-i-Sharif - Dara-i-Suf - Shashpul - Logar - Torkham" (904 km);
6) "Mazar-i-Sharif - Baghlan - Shashpul - Kabul - Torkham" (775 km).

It is known that the construction cost, payback period, operating costs, construction timelines, and the route itself are all factors that need to be thoroughly studied for selection.

After prolonged discussions, in order to expedite the research and take into account the recommendations of the President of Afghanistan, the parties agreed to carefully study the following routes as soon as possible:

- "Mazar-i-Sharif - Baghlan - Salang - Kabul - Torkham";
- "Mazar-i-Sharif - Baghlan - Shashpul - Logar - Torkham";
- "Mazar-i-Sharif - Baghlan - Shashpul - Kabul - Torkham";
- "Mazar-i-Sharif - Dara-i-Suf - Shashpul - Logar - Torkham."


1.1-figure. Initial 4 options for the construction project of the Mazar-i-Sharif - Kabul - Peshawar railway

On August 10, 2021, a working meeting of specialists from relevant ministries and agencies took place at the Ministry of Transport of the Republic of Uzbekistan to discuss a trilateral intergovernmental agreement on the financing, design, and implementation of the "Mazar-i-Sharif - Kabul - Peshawar" construction project between the government of Uzbekistan, the government of Afghanistan, and the government of the Islamic Republic of Pakistan.

In order to expedite the implementation of the construction of the electrified railway "Mazar-i-Sharif - Kabul - Peshawar," the Uzbekistan project office proposed to reduce the number of potential routes being considered from four to two during a field expedition on the Afghan side, and to consider a route through Logar due to the high cost of land in the Kabul city area:


"Figure 1.2. Principal scheme of Afghanistan's future railways.

- "Mazar-i-Sharif - Baghlan - Shashpul - Logar - Torkham" (760 km);
- "Mazar-i-Sharif - Dara-i-Suf - Shashpul - Logar - Torkham" (797 km).

Additionally, the route through Baghlan is 37 km shorter, and an electric network runs along this route, which further integrates with the CASA-1000 project (the electricity network connecting Kyrgyzstan - Tajikistan - Afghanistan - Pakistan - India).


Figure 1.3. The construction of the China-Kyrgyzstan-Uzbekistan railway

Moreover, if the "Mazar-i-Sharif - Baghlan - Shashpul - Logar - Torkham" route is implemented, it may result in two fewer tunnels, as well as a reduction in 31 bridges and crossings. The total length of tunnels along this route could be reduced by $569.339 million compared to the Dara-i-Suf route, and overall construction costs could decrease by $1.088248 billion.

The construction project of the Mazar-i-Sharif - Kabul - Peshawar railway has the following characteristics:

- Direct access to Pakistan's ports of Karachi, Qasim, and Gwadar;
- Provision of cargo transit from India and Pakistan to the CIS and European countries through Uzbekistan (4-5 million tons per year, with cargo service volumes exceeding 120-150 million dollars);
- While the cost of container transportation on the "Tashkent - Bandar Abbas" route is between 2600 to 3000 dollars, it is expected to reduce transport costs on the Tashkent - Karachi route to approximately 1400 to 1600 dollars;
- The existing international highway between Mazar-i-Sharif and Peshawar significantly facilitates railway construction;
- The construction along the "Surkhan - Pul-i-Khumri" power transmission line and the electrification of the CASA-1000 railway will help reduce costs during the construction phase and also facilitate the protection of three parallel communication projects during the operational process.

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The implementation of this project creates unique opportunities for Afghanistan. The large deposits of copper, tin, zinc, iron ore, marble, granite, travertine, and other minerals located along the railway will be brought into economic circulation, creating tens of thousands of new jobs. It will also provide additional opportunities for increasing the export of transport services related to growing transit cargo transportation with South and Southeast Asian countries.

If the construction of this railway is carried out simultaneously with the "China-Kyrgyzstan-Uzbekistan" railway construction project, the efficiency of this trans-regional project could significantly increase. It will substantially enhance transit volumes from China to Central and South Asian countries.

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