

STAGES OF DEVELOPMENT OF LOGISTICS SYSTEMS IN UZBEKISTAN

Eshboyeva Gulsevar Bekmurod qizi

Jizzakh Polytechnic Institute

Student of the Faculty of Transport Engineering

Mirzabekov Mirkomil Saidakhmadovich.

Jizzakh Polytechnic Institute

Associate Professor of "Vehicle Engineering".

E-mail: mirkomil84@inbox.ru

Тел: (95) 330-48-88



Abstract: This article is devoted to the stages of development of the logistics system in Uzbekistan and its current state, existing problems and reforms being carried out on it. The reforms implemented since the first years of independence to modernize the transport and communication infrastructure, integrate into international transport corridors, expand the activities of logistics centers and free economic zones are covered.

Keywords: Logistics, logistics system, Uzbekistan logistics, globalization, transport, cargo, roads, logistics infrastructure, transport and logistics centers, automobiles, railways, air transport, pipeline transport, ports, transit, customs, electronic logistics, modes of transport, economic transformation, export-import, cargo terminals, logistics centers

Аннотация: Данная статья посвящена этапам развития логистической системы Узбекистана и ее текущему состоянию, существующим проблемам и проводимым реформам. Рассмотрены реформы, реализованные с первых лет независимости для модернизации транспортно-коммуникационной инфраструктуры, интеграции в международные транспортные коридоры, расширения деятельности логистических центров и свободных экономических зон.

Ключевые слова: Логистика, логистическая система, логистика Узбекистана, глобализация, транспорт, грузы, дороги, логистическая инфраструктура, транспортно-логистические центры, автомобили,

железные дороги, воздушный транспорт, трубопроводный транспорт, порты, транзит, таможня, электронная логистика, виды транспорта, экономическая трансформация, экспорт-импорт, грузовые терминалы, логистические центры

Today, the international division of labor in the world is one of the distinctive features of the processes of changing the structure of the world economy, understood as a set of national economies interconnected by a system of economic and political relations. On this basis, a single global network, market economy, geoeconomy and its infrastructure are being formed. As a result of globalization, the world is becoming economically interconnected with all its subjects.

In turn, in the conditions of rapid integration of the global economy, the efficiency of the logistics system is becoming one of the important factors of the competitiveness of countries. Uzbekistan is located in the strategic center of Central Asia and has great transit potential as a crossroads of international transport corridors. In recent years, large-scale reforms have been carried out in the republic to modernize the transport and communication infrastructure, develop an electronic logistics system, simplify customs procedures, and establish logistics centers in free economic zones. This article analyzes the current state of development of the logistics system in Uzbekistan, existing problems and future opportunities.

First, let's look at the history of logistics. "Logistics as a tool of business in the field of science and civil society first began to take shape in the United States in the early 1950s. Its evolution is closely related to the history and evolution of market relations in industrialized countries, moreover, the term "logistics" itself only entered business in the late 1970s and began to be used in all countries of the world.

Since the early years of independence, the logistics system in Uzbekistan has been one of the fastest developing sectors and has a significant impact on our national economy. Logistics means managing the processes of delivering products,

raw materials, and cargo from one place to another in the fastest, cheapest, and most convenient way.



Figure 1. Cargo delivery system turlari used for cargo transportation: road transport, rail transport, and air transport. Table 1.1 provides information on the advantages and disadvantages of using these types of transport.

1.1- table

Type of transport	Main advantages	Disadvantages	Speed	Suitability for distance
Car (road)	Flexible door-to-door transportation, convenient for short distances	Long distance is expensive, traffic jams, weather effects	Average	Short-medium distance
Railway	Affordable, convenient, reliable table for large loads	"Door-to-door" transportation is limited, infrastructure is needed	Average	Medium-long distance
Sea transport	Cheapest, carries very large loads, perfect for containers	Very slow, limited by ports	Low	Long haul
Air transport	Suitable for the fastest, most valuable and urgent shipments	Too expensive, low cargo capacity	Very high	Long haul
River (inland waterway)	Cheap, convenient for large loads	Seasonal, limited waterways	Low	Middle distance

Type of transport	Main advantages	Disadvantages	Speed	Suitability for distance
Pipeline transport	Continuous, safe, low-cost operation	Only suitable for liquid/gas products, very expensive to build	Permanent	



2- Fig. American freight transport

We also use pipeline transport, but this transport infrastructure is not yet well developed. We also cannot directly use sea routes, but we can use river ports, and this is due to our geographical location. In recent years, many reforms have been carried out to develop the logistics system in Uzbekistan. Due to the

lack of access to the open sea in Uzbekistan, the path of developing transport and logistics systems based on railway, air and road systems for the import and export of domestic and foreign cargo has been chosen. As a result, “in 2017-2024, stable growth rates of cargo transportation indicators were shown. The volume of international cargo transportation increased by 1.8 times and in 2024 amounted to 59.6 million tons (of which 16.6 million tons in road transport, 43.0 million tons in rail transport, and 83 thousand tons in air transport.” We can see this in the example of the USA, the country with the highest level of development. The freight transport indicators in the USA for 2023 were as follows.

In the USA, 12.015 million tons of freight were transported by road, 2 million tons by air, 1.113 million tons by rail, and 633 million tons by water. Of course, we can see that the logistics infrastructure in the USA is well developed (Figure 2). As a result, the economic transformation in the USA is well developed and it remains an

advanced country. Uzbekistan is not left behind in this area, as we emphasized above, in order to develop the logistics system, it has set itself the goal of developing

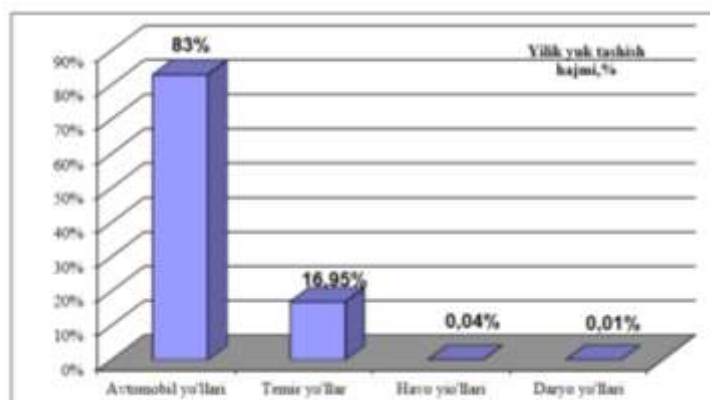


Figure 3. Distribution of cargo transported in our country by type of transport

the infrastructure of each freight transport route. New reforms are being carried out on highways, railways, and airports in Uzbekistan. The annual volume of freight transportation is increasing (Figure 3). New infrastructure is also being introduced on

highways. This infrastructure ensures that the cargo arrives on time without compromising the quality level.



Figure 4. Types of freight transport in our country

“From June 1 of this year, an electronic vehicle queuing system has been introduced at vehicle crossing points across the state border. It is planned to establish a regional training center for training and improving the skills of personnel in the field of international road transport in

cooperation with the International Road Transport Union.” As additional information, it is worth noting that more than 6,000 km of highways were repaired in 2020-2024 or to be rebuilt and used was handed over. In order to develop logistics in Uzbekistan, several international highways are being built. One of these is the Tashkent-Andijan-Osh highway project. This will allow for fast, safe and affordable

export-import processes. As of July 1, 2025, the number of trucks among cars owned by individuals in the country was recorded at ≈ 302.6 thousand units (Figure4).

Reforms are also being carried out at airports to develop the logistics system. For example, modern cargo terminals are being built or reconstructed at Tashkent, Samarkand, Bukhara and Navoi airports, the inspection of which through these terminals will ensure that cargo arrives before the specified time. The terminals will also improve the ability to quickly load, unload, store and sort cargo. In addition, digital system reforms are being implemented in Uzbekistan to improve the logistics system. That is, a digital system means electronic customs declarations, online tracking of cargo, monitoring of cargo status and arrival status, and reverse transport control through air logistics programs. Major reforms are also being carried out in railway transport. In order to deliver cargo to its owners faster, more railways are being built.

As part of the program planned for 2026-2030, 1,000 km of railway tracks are expected to be reconstructed, that is, obsolete railways will be replaced with new ones. It is also expected that 182 km of roads will be electrified. 6 high-speed electric trains are being purchased from South Korea, and the Urgench-Khiva road will be fully electrified.

Another main transport in the logistics sector is sea transport. Sea transport is the cheapest transport. Uzbekistan, since it is located in Central Asia, cannot directly use sea transport. This does not mean that we do not use water transport at all. There is a port in Surkhandarya in Uzbekistan. Through this route, we can import cargo from Afghanistan, or vice versa. "There are 6 closed warehouses in the port area, which can store up to 30 thousand tons of cargo at a time. In addition, there is an open area where about 3 thousand 20 and 40-foot containers can be placed. The annual cargo handling capacity of the port is 600 thousand tons, and the loading and unloading capacity is 900 thousand tons."

We also need to expand and improve the infrastructure of logistics centers to improve the logistics system. “A logistics center is a center in a certain area where all activities related to transport, logistics and distribution of goods - both for national and international transit - are carried out on a commercial basis by various operators.” Above, we got acquainted with the freight transport indicators of the US state, from which we can see that logistics centers and their infrastructure are well developed in the US. Table 1.2 provides information about the largest logistics centers in the US.

1.2- table

№	Logistics center	Key strengths	For the ideal
1	Los Angeles/Inland Empire, CA	The largest port complex, a large warehouse, a powerful railway	Importers, retailers, electronics
2	Chicago, IL	Central Railway / Freight Center, National Entrance	Manufacturers, national distributors
3	Dallas-Fort-Uort, TX	Central location, low cost, rapid growth	E-commerce, 3PL, cross-border trade
4	Atlanta, GA	Southeastern gateway, highway network	Consumer goods, retail
5	Nyu-York-Nyu-Jersi port mintaqasi	Large port on the east coast, access to dense markets	Import, fashion, home goods
6	Savannah, GA	A rapidly growing East Coast port, accessible by rail	Large retailers, importers
7	Memfis, TN	FedEx SuperHub, the best air cargo airport	Express logistics, medical supplies
8	Louisville, KY	UPS Worldport, fast parcel delivery	E-commerce brands, next day delivery
9	Kolumb / Rikkenbeker, OH	Central location, air + rail connections	Industrial supply chains, importers

10	Feniks, AZ	Low price, West/Southwest entrance	Retailers, regional distribution
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In order to further develop the logistics system in Uzbekistan, we should also think about increasing its theoretical organizational efficiency. Theoretical, methodological and organizational issues of the development of the transport and logistics sector, problems of increasing efficiency have been studied by foreign scientists such as G. Dantzig [2], J. Ramser [3], Y.V. Lun [4], S.B. Levin [5]. If we study and implement the research of scientists to develop our logistics system, our development indicators can be significantly accelerated.

Also, like any system, there are some obstacles not only in the logistics of Uzbekistan, but also in other countries. For example, the high cost of logistics services, the poor state of infrastructure in some regions, that is, the infrastructure is not well developed everywhere, as well as the slow process of adaptation to international standards and the poor functioning of the customs process are also considered among the shortcomings of the logistics system. Of course, our state is not just ignoring these shortcomings, to get rid of these problems, the reforms mentioned above are being carried out, which will take some time. In conclusion, the logistics sector in Uzbekistan has been growing significantly in recent years, and sufficient measures are being taken to bring it to a peak. The development of the logistics system in Uzbekistan serves not only the domestic economy, but also the growth of foreign trade and transit flows. Modernization, digitalization, and the creation of new logistics centers will help strengthen the country's position in the global economic arena.

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