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## THE IMPACT OF TRANSPORT INFRASTRUCTURE PROVISION ON THE LEVEL OF ECONOMIC DEVELOPMENT

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**Key words:** *transport, economic development, infrastructure, ASEAN.*

**Abstract:** *Historically, transport has played a Central role in the development of the economic sector of States. At most stages of economic development, it meets the needs of each sector as well as the population. The development of sea routes, the construction of highways and Railways, as well as the creation of air routes provided an extensive logistics network. All world States differ in the level of provision of transport infrastructure, which is influence by many factors, both internal and external. This article analyzes the two countries of South-East Asia, which are radically different in terms of transport security. The region is one of the most populous in the world, and the ten countries United in the international organization of ASEAN represent the seventh largest economy in the world. Now, South-East Asia is ahead of most countries of the world in terms of development. In such circumstances, a high level of development of communication routes is necessary. In addition, a decisive factor for the development of transport infrastructure is the location of the region at one of the most important crossroads of trade routes. The study based on data from the following sources: OICA, World Bank, ASEAN Statistical Yearbook. Studies show that the infrastructure should include all modes of transport with all components, as well as conditioning parts of the mechanism of the national economy, working in the field of movement of products or goods from suppliers to consumers.*

Transport is a branch of the national economy related to the transportation of goods and passengers. It is important and plays a Central role in the development of States. Since ancient times, transport has provided economic and social interaction between countries, districts, cities, etc. The development of transport infrastructure for a more detailed study, should be considered both positive and negative side. The positive aspects of the development are: the creation of new jobs, attracting investment capital, the development of tourist destinations, simplification and efficiency of logistics routes. In the presence of domestic production of cars, railway, shipbuilding and aircraft industry increases not only the demand for products for both domestic and foreign markets, but also develops the production of detailed, component products for the produced transport. Undoubtedly, the above has a positive impact on the economic climate, but the most tangible and urgent problem in the development of transport infrastructure is environmental pollution, the destruction of a huge number of flora and fauna.

Investment is an essential element in the development of the modern economy, generating productivity growth, increasing the competitiveness of markets, competently distributing the products created, which is directly reflected in the cost, expressed in the decline, as well as the growth of purchasing power. Improving transport accessibility has a direct impact on the economic well-being of the regions. This position is supported by the French economist Bershman, pointing out that the improvement of transport infrastructure provokes a decrease in the cost of trade supplies, increases the availability of passenger tickets, favorably affecting the development of the tourism sector, as well as the growth of the volume of traffic.

Material flows, moving from the original source of raw materials through the production and transport network to the final subject, are steadily becoming more expensive. The total cost of goods, as shown by studies conducted by British economists, includes more than 75% of transport costs, which are expressed in storage, transportation and packaging. To solve this problem, reducing the cost of manufactured products, increasing purchasing power is important not only to determine the role of transport infrastructure, but also to increase the number and quality of transport routes, observing environmental standards.

Transport has its own specifics:

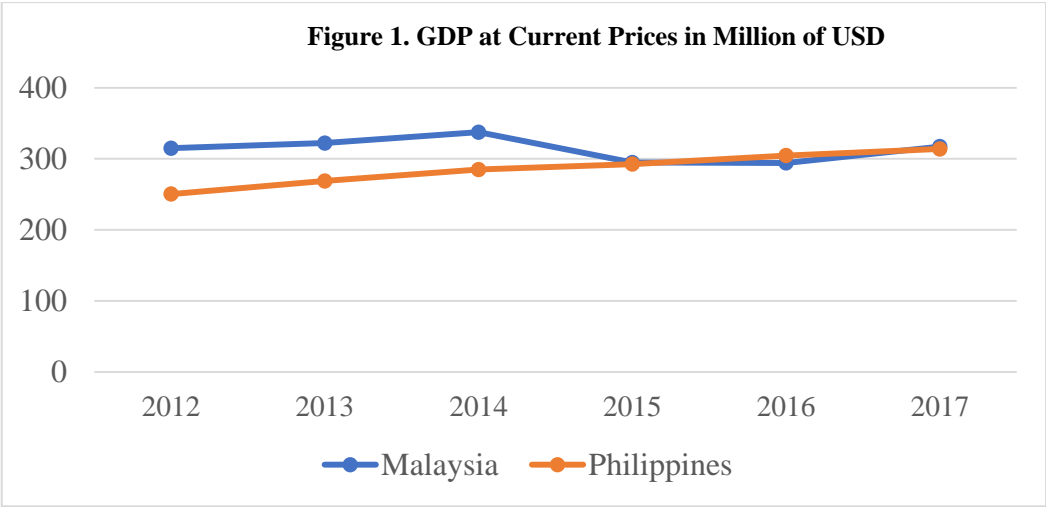
- This branch of the economy does not produce new products, but only participates in its creation, providing production with everything necessary, transporting it, and delivering the finished product to the consumer;
- Transport increases the cost of production by the amount of transport costs, which are included in the cost of production;
- The transport factor has an impact on the location of production. Without taking it into account, it is impossible to achieve a rational distribution of productive forces. When placing production takes into account the need for transportation, weight of raw materials and finished products, their transportability, availability of transport routes, their capacity, etc.;
- The development of transport creates conditions for the formation of both local and national markets;
- Transport products do not contain raw materials. The share of wages in its cost is twice as high as in industry. Depreciation, fuel and electricity costs account for almost half of all transport operating costs;
- Transport requires large long-term investments for its development;
- An important feature of the transport system is its close relationship with production.

Transport network – availability of various types of transport on the territory. The configuration of the transport network depends on the location of productive forces, topography, natural and climatic conditions of a territory.

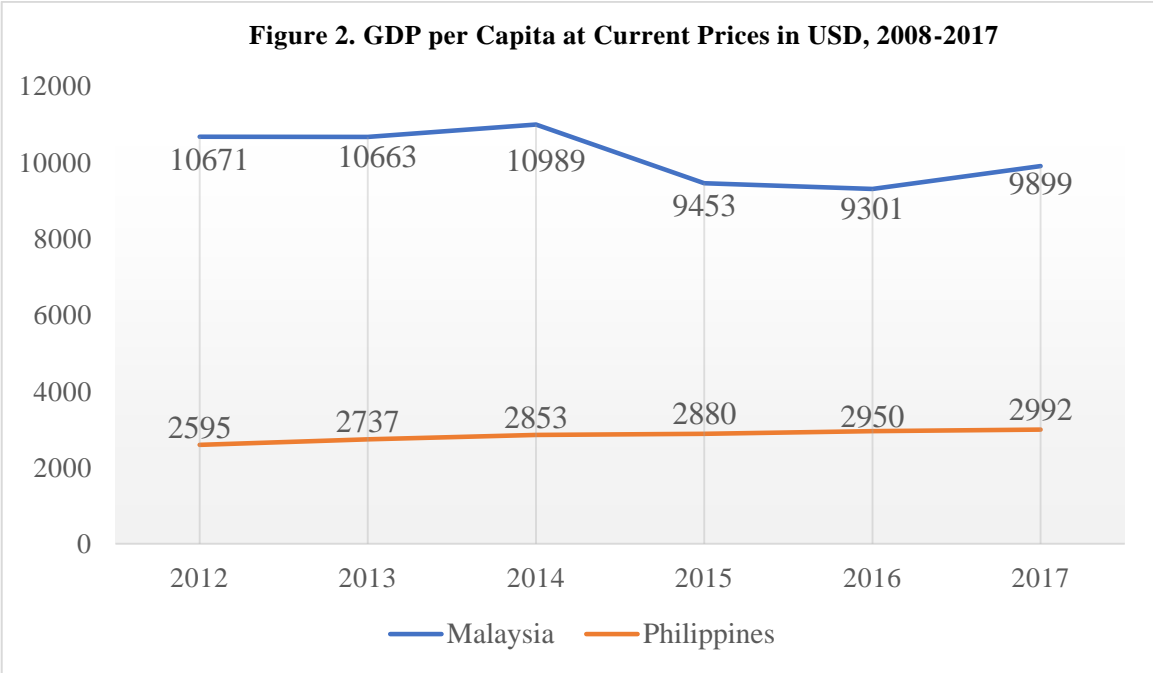
Considering the above, the special relevance of the topic for the countries of South-East Asia, as for the rapidly developing countries, is determined. This region is one of the most densely populated in the world. The population for 2017 was 642,079 thousand people [1], which is more than in the European Union or North America. Every year its number grows. As for the countries considered in the article, namely Malaysia and the Philippines, 32,050 thousand and 104,921 thousand people lived there for 2017[1].

It is important to indicate the level of economic development of countries, which is greatly influenced by transport. Both States under consideration are currently agro-industrial,

despite this, they are improving their position in the world every year. Since 2012, their GDP has grown, as can be seen in figure 1.



The indicators show that the GDP of both countries is almost the same despite the fact that Malaysia is more developed. This is due to the fact that this figure is more dependent on the size of the territory and population. Significantly reflects the level of economic development of countries per capita GDP, which remains relatively stable since 2012 in both countries, as shown in figure 2. It is also important to note the significant difference between this indicator in Malaysia and the Philippines.



In order to more clearly show the level of development of the countries under consideration, the rating of global competitiveness was analyzed. The global competitiveness index assesses the microeconomic and macroeconomic foundations of national competitiveness, which are defined as a set of policy institutions and factors that determine the level of productivity in a country. Malaysia in 2018 took the 25th place in the world on this index and 32 on the level of transport infrastructure. In the Philippines, the country is ranked 56th and 92nd in terms of transport availability [4].

Directly, moving to the analysis of the level of security of transport infrastructure, the priority is to bring the data displayed in the ASEAN Statistical Yearbook 2018. As for the total length of the roads, it is 237,022 km in Malaysia and 32,868 km in the Philippines, of which 181,518 km and 31,035 km are paved, indicating a priority for the construction of better-paved roads in both countries. But the percentage of paved roads in the Philippines is higher. Also in Malaysia for 2017 there were 28,738 thousand registered vehicles, and in the Philippines only 10,411 thousand, which is due to the level of industrial development of the countries in question: one of the specializations of Malaysia is the automotive industry, the country also has its own national brand of cars – Proton, while the Philippines mainly specialize in light industry. As for the number of public transports, in Malaysia in 2017 it is 40 thousand, and in the Philippines 19 thousand, which is also due to the specialization of the countries [1].

Peninsular Malaysia has an extensive road network, while in East Malaysia proper communication is not as developed, which is directly reflected in the economic development of the territory. Due to the lack and small number of transport routes to this part of the country are expensive and unattractive for investors, as a result there is no dynamic industry and as a result the standard of living in East Malaysia is quite low, which affects the number of residents. This region covers about 61% of the country, but it is home to about 21% of the population, which is three times lower than the average population density in the country. The low level of economic life due to the lack of transport infrastructure is directly reflected in the situation in Eastern Malaysia [2].

Road communication in the Philippines is not the most common, because of the island parts of the use of air and sea routes is faster, easier and more cost-effective. The main percentage of paved roads is in Manila. It is important to note that various road and bridge projects are being implemented throughout the country, which are either at the stage of conceptualization, procurement, evaluation or pre-construction. DPWH and LCA are developing an updated Master plan for the construction of a new road network in the Philippines. The projects are financed from the budget by the Government of the Philippines, as the importance of building and expanding road networks is one of the Central tasks not only for the capital city, but also for the rest of the state. Thanks to the new road connections, it is planned to relieve the air and sea traffic, while increasing the tourist attractiveness of the region for tourists, which has a favorable reflection on the economic situation within the region [2].

Turning to rail transport, it is important to note that this type is very versatile, which is why it occupies a leading place in many countries. It carries out transportation of passengers or goods on rail tracks in cars by means of locomotive or motor-car traction. This type of transport is able to serve all sectors of the economy and meet the needs of the population in transportation in almost all climatic zones and at any time of the year. The length of the Railways of Malaysia is 1,833 km, and the Philippines – 529 km [1]. The Data are relatively small due to the fact that both States have Islands in their composition. While Malaysia has only a few, the Philippines includes more than 7 thousand, which makes it very difficult to build Railways. Assessing the level of development of railway transport, it is important to note such indicators as freight and passenger turnover. As for the first – it is the main indicator of the work of rail transport in freight transport. Turnover of goods is defined as the product of the quantity of goods transported over a distance of carriage; it is measured in ton-kilometers. In Malaysia, this figure for 2017 is 1,234-million-ton kilometer, which is noted mainly only in the Peninsula part, as the Railways connect it with neighboring States. As for the Philippines, this mode of transport in the state is developed only for the transport of

passengers. Passenger traffic is an indicator of the volume of passenger traffic, measured in passenger-kilometers and calculated as the product of the number of passengers per distance of traffic. This term is intended to assess the effectiveness of a particular transport. It is more indicative than the number of passengers carried. But it does not give an understanding of the speed of transportation and its profitability. Passenger transport in Malaysia is 180 million passenger-kilometer, and in the Philippines 31,164 million passenger-kilometer, which again suggests that for the second country this type of transport is important for the transportation of passengers, and also shows that a high number of people do not have a large number of vehicles for a more high-tech form of transport [1].

About international shipping, Malaysia has only 15 international seaports, while the Philippines has 189, due to the high number and dispersion of Islands. At the same time, Malaysia (2,100 thousand people) transports much longer people using this type of transport than the Philippines (145 thousand people), due to the financial condition of citizens. International port capacity of Malaysia (544,711 thousand tons) is also higher than that of the Philippines (152,063 thousand tons), as they are more high-tech [1].

It is also important to note air transport in the level of development of countries. Speaking about it, it is worth noting the ability of the air transport sector to connect States with developing countries and fast-growing cities, which can contribute to economic growth. 50 direct destinations connect Malaysia with the ten fastest growing countries. The state has 6 international airports, which served 49,783 thousand people in 2017 [5]. As for the Philippines, being a very popular tourist destination in Asia, the country is not far behind Malaysia. 53 direct directions connect it with the ten most developed countries of the world. At its disposal, the Philippines has 11 international airports and in 2017 they served 26,812 thousand people [6]. Air transport brings both the countries in question both tourists and investments, as well as helps business by distributing goods and services around the world. For 2017, Cargo Loaded in Malaysia was 367 thousand tons, and in the Philippines 14 tons, which indicates the disadvantage of the second to use air transport for cargo transportation [1].

Summing up, it is necessary to say about the importance of transport infrastructure for the modern market and economic development of the countries. First, thanks to the extensive air and sea transport routes, the external attractiveness of the regions is increasing, tourist demand is increasing, investment attractiveness is increasing, the number of cargo transportation is expanding, which directly affects economic development. Secondly, having an expanded railway and highway network, the internal attractiveness of the territories increases, logistics works more effectively, deliveries to different points of the regions are more stable and quickly carried out, which allows developing evenly not only the capital cities, but also most of the territory of the state. Summing up the analysis of the level of transport security in Malaysia and the Philippines, it should be noted that the second country is currently less developed. Due to the large number of Islands, it is very difficult for the state to provide all kinds of transport infrastructure well. For the Philippines, the most convenient is the sea and air transport, which is quite expensive, and the Railways and paved roads are difficult to lay there, which affects their number. As for Malaysia, its Peninsula part is more developed than the island, as it is much easier to provide all modes of transport.

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## ВЛИЯНИЕ НА НИВОТО НА ИЗГРАЖДАНЕ НА ТРАНСПОРТНАТА ИНФРАСТРУКТУРА ВЪРХУ ИКОНОМИЧЕСКОТО РАЗВИТИЕ

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РУСИЯ

**Ключови думи:** транспорт, икономическо развитие, инфраструктура, Асоциация на страните от Югоизточна Азия (ASEAN).

**Резюме:** Исторически, транспортът е изиграл важна роля при икономическото развитие на държавите. При повечето етапи на икономическо развитие, то отговаря на нуждите на всеки сектор и на населението. Развитието на морските пътища, изграждането на автомагистралите и железните пътища, както и създаването на въздушни линии осигуряват обширна логистична мрежа. Всички държави по света се различават помежду си в зависимост от нивото на изграждане на транспортната инфраструктура, което се определя от редица външни и вътрешни фактори. В настоящия доклад са изследвани две държави от Югоизточна Азия, които са коренно различни по отношение на транспортна осигуреност. Този регион е един от най-силно заселените в света, и десетте държави, обединени в Асоциацията на страните от Югоизточна Азия (ASEAN) представляват седемте най-големи икономики в света. В настоящия момент, Югоизточна Азия е на една от челните позиции по икономическо развитие в света. При подобни обстоятелства, високо равнище на развитие на транспортните комуникации е необходимо. В допълнение, решаващ фактор за развитието на транспортната инфраструктура е и местоположението на региона, което е кръстопът на важни търговски потоци. В изследването са използвани данни от следните източници: Международна организация на автомобилните конструктори (OICA), Световна Банка, Статистически годишник на ASEAN. Изследването показва, че инфраструктурата трябва да обхваща всички видове транспорт, както и да отговаря на националните икономически механизми по отношение на движението на стоки от изпращач до получател.