The Impact of Transport Infrastructure Development in Africa on the Development of Regional Integration in Africa

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Abstract. This paper, combined with scholars' current discussions on the importance of regional integration for national economic development, this paper focuses on showing that poor transportation hinders the import and export trade and the introduction of integration-specific talents in Africa, and that high-quality transportation infrastructure can improve trade facilitation and promote cross-regional trade, investment and the formation of a unified market on the African continent. It shows that good transportation can facilitate the development of regional economic integration in Africa and is an enabler of regional economic integration.

Keywords: Africa, regional economic integration, transportation construction, foreign trade.

1. Introduction

In today's globalized economy, regional integration has become an important channel to reduce trade barriers between countries, expand production systems and improve competitiveness, and infrastructure is an important driving force for the regional integration process. Relevant scholars have shown that infrastructure, human resources, as well as productivity and technology are important factors in regional economic integration, and the combination of each factor can make the development of the economy to be promoted [1-2]. At present, the development of regional economic integration in Africa is still slow, and it is necessary to study the impact of Africa's transportation infrastructure on regional integration.

2. Africa's integration process and the current situation of transportation infrastructer

The integration process in Africa has three main stages. The first stage was after the African national independence movement in the 1960s when African countries further implemented the integration strategy to alleviate the problems of small economies and dependence on imports and to achieve intra-regional economic exchanges. The second phase was in the 1980s and 1990s when international relations between East and West gradually eased and the African region gave rise to the economic integration of international organizations. The third stage is the 21st century, with the development of economic globalization, developing countries represented by China gradually play an increasingly important role.

At present, the overall infrastructure of the African continent lags behind the rest of the world. Most of the African railroads were built during the colonial period, and 15 African countries have no railroads or railroads that have long been out of service. Moreover, ports are poorly configured, poorly managed, small in capacity, and are not yet fully connected to land transport to form a transportation network. At the same time, there are problems in transportation construction such as large investment scale, large capital gap, long construction cycle, slow fund recovery, and poor follow-up governance capacity. African governments lack the ability to effectively manage infrastructure construction projects, lack scientific planning and support at the national level, and do not have infrastructure projects of sufficient scale to attract the interest of international investment capital [3].

3. Backword transportation hinders the development of african intevration

3.1. High-cost transportation limits import and export trade flows

In Africa, landlocked countries are more dependent on land transport, such as the landlocked countries Chad and Central African Republic. More than 50 years after independence, there are still no paved roads between Cameroon and the capitals of Chad and the Central African Republic. These two countries use Cameroon as a transit country for their goods traffic. However, transport costs can reach 40% or 70% of the consumer price due to the problem of inadequate transport infrastructure [4]. Currently, Cameroon and Chad, and Central African Republic do not have good transport links to this port, and the transport of goods from Douala to the Chadian capital N'Djamena (1818 km), and from Douala to Bangui (1570 km) still takes 7 to 10 days [5], in addition to the very slow release of goods from the port of Douala, the Seven documents are required for transit cargoes and the consequences of long-term parking of cargoes are also increased costs, port congestion, reduced port storage capacity and increased system logistics costs. Cargo is less profitable. Therefore, there is a greater need for a convenient, efficient, and low-cost transportation network.

3.2. Inconvenience of transportation makes it difficult to introduce special talents for regional integration

The improvement of the level of regional integration requires the contribution of professionals, but because of the limitations of the level of development, the success rate of local talent training is small and costly. The Deputy Director General of the International Organization for Migration (IOM), Ndioro Ndiaye, at the International Symposium on Migration, Development and Poverty Reduction, identified poverty and war, lack of professional expertise, low pay, and poor research conditions as the main reasons for Africa's massive brain drain through migration [6]. External talents in turn often find it difficult to exchange and learn due to transportation. The loss of local talent coupled with the difficulty of bringing in foreign talent for exchange has greatly limited the development of regional integration in African countries.

4. Good transportation can pormote the development of regional economic integration in africa

4.1. High-quality transportation infrastructure can improve trade facilitation and promote cross-regional trade and investment

The development of transportation infrastructure will simplify the trade process. For example, the Tanzanian Railway was opened in the 1970s and became the main transportation artery linking Tanzania and Zambia, allowing a continuous flow of copper ore products from Zambia to the port of Dar es Salaam in Tanzania, providing brand new access to the sea for exports. With the improvement of railroad operations, Zambian copper exports have increased and the homogeneity of the sales market has been changed, allowing the Zambian economy to develop further [7].

The new Benguela railroad now connects not only to the Democratic Republic of Congo but will also connect to the planned Angola-Zambia railroad at Luacano station, greatly reducing the cost of exporting copper and other resources from these countries. And by connecting with the railroad networks of neighboring countries such as Mozambique, it will realize the interconnection of railroads in the southern African region, thus forming a major international railroad corridor between the Atlantic Ocean and the Indian Ocean. The completion of the transportation corridor has accelerated cross-regional trade and investment between the coast and the interior and has also accelerated the pace of foreign exchanges and cooperation between inland provinces and cities.

4.2. Convenient transportation promotes the formation of a unified market in the African continent.

African regional unified market is an important requirement for regional economic integration, but an efficient infrastructure system is needed in the formation of a regional unified market [8]. On the one hand, the deployment of infrastructure networks can bring opportunities for industrial clustering and enable regional specialized division of labor and cooperation. On the other hand, the transportation infrastructure system can enable enhanced communication among economies and also improve the exchange and communication of people, goods, and services [9]. Therefore, strengthening intra-regional transportation infrastructure construction can generate endogenous impetus for intra-regional economic restructuring, establish a network of relationships affecting regional economic interdependence, enable the gradual expansion of market size, drive economic development, and establish a corresponding foundation for integrated regional economic development.

5. Conclusion

Africa has half of the world's landlocked developing countries and needs to rely on a huge transportation network to connect to and from them, but Africa's transportation development as a whole lags behind. The low efficiency and high cost of transportation restrict import and export trade flows and hinder the development of regional integration. At the same time, the transportation blockage makes it difficult to bring in excellent integration-specific talents, which limits the level of regional integration development. Meanwhile, through the examples of the Tanzanian Railway and Benguela Railway, it can be seen that the development of transportation infrastructure can promote cross-regional trade and investment and facilitate the formation of a unified market on the African continent. To sum up, strengthening Africa's infrastructure and transportation facilities can promote the development of African integration. Africa can increase its investment in transportation infrastructure, link various independent road routes to form three-dimensional integrated trade corridors, and at the same time introduce foreign investment to improve its road construction through cooperation with other countries.

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