IMPACT OF ROADS INFRASTRUCTURE ON ECONOMIC GROWTH IN ZARIA METROPOLIS, KADUNA STATE, NIGERIA

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ABSTRACT

Road infrastructure is one of the most important and critical infrastructure because it shapes the spatial structure of socio-economic activities and well-being of the people. This study aims to bring out the correlation of the impact of road infrastructure on people and economic growth in Zaria metropolis. Qualitative method using thematic approach was used to collect data and analyze them. Two school of thoughts emerged in connection with road infrastructure and population and economic growth. The first school of thought opines that road infrastructure is directly correlated with positive population and economic growth. This group is dominated by government officials. The second school of thought dominated by traders and consumers of goods did not see any positive correlation with road infrastructure and economic growth owing to displacement of small businesses by roadside and increase journey to access or purchase goods. However, irrespective of individual and/or collective views, government of Kaduna State is trying to meet up with the sustainable development goals. (SDGs eight, nine and eleven) which are directly connected to decent work and economic growth; industry, innovation and infrastructure and sustainable cities and communities respectively. Thus, more findings reveal many roads either rehabilitated or constructed including bridges/cloverleaf across the metropolis. It is recommended that government should be cautious when implementing this noble idea so that less injury is/will be inflicted on small scale business owners and consumers.

Key words: Economic growth, Zaria metropolis, population, road infrastructure

1. Introduction

The world population continues to be urbanized, and the urbanization rate can simply be described as “rapid”. Only 30% of people lived in urban areas in 1950s, and by 2000s, the population of people living in urban areas had reached 47%. Europe and North America have been urbanized with more than 75% living in urban areas (UN-Habitat, 2009). However, Africa is the fastest urbanizing continent at present. On average, African urbanization rate was estimated at 47% in 2020; and in Nigeria, the population of people living in urban areas is about 53% (statista.com, 2023).

Zaria is one of the most populous urban centers in Nigeria. According to statista.com (2022), Zaria is the ninth most populous city in Nigeria. With the increased population in Zaria metropolis, infrastructure most increased or improved. This is what the Kaduna State Government envisaged and developed urban renewal program that include Zaria metropolis. In
the program, the road infrastructure takes center stage which is the focus of this study.

Miller (2013), stresses the importance of infrastructure and describes it, as a leading factor for prosperity and economic development across the world. There must be roads, railways, ports, water supply sewerage systems, energy, telecommunications and many more to facilitate economic convergence and divergence (Agyefi-Mensah, 2012).

Myres (2013) posits that, there is a significant correlation between economic growth and provision of infrastructure. That fact makes infrastructural development highly resource and capital intensive (Agyefi-Mensah, 2012). Additionally, environmental quality, ecological and social impacts of infrastructure cannot be overemphasized. Thus, Fay et al., (2011) posits that investment in infrastructure in a developing country like Nigeria is essential in reduction of poverty. Unsurprisingly, Botric, et al., (2006) sees provision of infrastructure as the most important factor for local and regional development. This underscores the need for sustainable infrastructural development.

In line with the above, the United Nations Sustainable Development Goals (SDGs) goals eight (decent work and economic growth), nine (industry, innovation and infrastructure) and eleven (sustainable cities and communities) are directly linked to infrastructure and economic growth of which Zaria metropolis, can be a beneficiary.

According to Sarte (2010), many different but interconnected phases come together in infrastructural provision. That calls for precautions because decisions made at the initial stage significantly affect the subsequent applications and utilizations of the infrastructure. There are many studies conducted to analyze the impacts of infrastructure on economic growth and development. Asoka, et al., (2013), divide the impacts into two: that, provision of infrastructure results to socio-economic development and that, the development potential leads to demand for infrastructure. Little or nothing on correlation between road infrastructure and economic growth in Zaria metropolis was written. In addition, the urban renewal program of Kaduna State Government in Zaria metropolis is only reported by media and in government documents. These two sources of information can be biased, and an independent report is required which necessitate the need for academic coverage and discourse of this type of project, hence the gap this study intends to fill.

2. Literature Review

2.1 Theoretical framework

According to Malthus (1798), population increase will outclass the world’s ability to produce sufficient food, leading to the impoverishment of humanity. Developing the Malthus’s argument, Solow (1956) posits that a country with higher population growth rates will have lower earnings and salaries per worker in the long run. In disagreeing with his predecessors, Kremer (1993) argues that population growth leads to economic growth. Simply put, more people in the country translate into more geniuses, more scientists and more engineers, leading to faster technological advancement.

2.2 Empirical literature

Kodongo and Ojah (2016) used Generalized Method of Moments (GMM) to estimate economic growth enhanced by infrastructure for 45 Sub-Saharan African countries from 2000 to 2011. The study discovered that infrastructure spending and
increases in access to infrastructure had impacts on economic growth in the study area. In their study entitled, mobile telecommunications service and economic growth: evidence from China, Ward and Zheng (2016) found that telecommunications infrastructure or services contributed to economic growth. The study devised a way to determine the influence of telecommunications in terms of growth. The study revealed that mobile services contribute substantially to growth, but that the benefit reduces as the regional economy increases.

Similarly, in his contribution entitled, the relationship between road infrastructure investment and economic growth in South Africa, Moeketsi (2017) used the vector autoregressive model and found that the influence of road infrastructure investment, ICT stock, and labor input will continue to have a favorable relationship with economic growth. Saidi et al., (2018) on the other hand, examined the influence of transportation energy consumption and transportation infrastructure on economic development using panel data from MENA nations (the Middle East and North Africa Area) from 2000 to 2016. GMM was the method used and the study found that transportation and energy use contributes considerably to economic growth among the MENA and other nations. In their contribution/study entitled, road infrastructure development and economic growth, Ng et al., (2019) examined the relationship between infrastructural development and economic growth. Using fixed effects model for analysis, and annual panel data from 1980 to 2010, the study revealed that the growth in road length per thousand population, per capita exports, per capita education expenditure, and physical capital stock per worker contributed positively to economic growth.

Additionally, Banerjee et al. (2020) examined the influence of access to transportation networks on regional economic outcomes in China. The study found that proximity to transportation networks has a somewhat large positive causal influence on per capita GDP levels across sectors although it might not have effect on per capita GDP growth. All these are positive relationships.

In contrast, there are some scholars who think investment on road infrastructure has nothing positive, but negative relationship. For instance, Fedderke et al., (2006) in their study of the relationship between investment in economic infrastructure and long run economic growth in South Africa, revealed that investment in infrastructure does not lead to economic growth in South Africa. There was a weak evidence of payback from investment or expenditure on infrastructure.

3. Materials and Methods
3.1 Study area

Zaria metropolis is a city in Northern Nigeria. It is located between latitudes 11°03’ - 11°10’ North and longitudes 7°30’ - 7°42’ East of the Greenwich Meridian. The town is almost centrally located in Northern Nigeria. It is also located in the central plain of the Northern Nigeria highlands standing at an average height of 670 meters above sea level. The study area is accessible from Jos, Sokoto, Katsina and Kaduna by road. This means the study area has access to the northern and southern parts of the country. Intercity transport is conducive with commercial buses, tricycles and motor cycles available (Abdulkadir, 2014). Zaria is also a major city and the headquarters of Zazzau Emirate, one of the original seven Hausa city-states and it covers an area of 563 km². Fig 3.1.
3.2 Methodology

3.2.1 Data collection and analysis

The study adopted a qualitative approach for data collection using a semi-structured interview. Twenty-two (22) participants were, purposely, selected from different sectors. Klein (2013) suggests that purposive sampling is to be applied when a researcher has a good understanding about the population and the study. More so, purposive sampling is used where a researcher thinks the respondents have adequate knowledge or idea on the subject matter (Glen, 2015). Hence the selection of the following twelve groups: Kaduna State Urban Planning Development Authority (KASUPDA), Kaduna Geographic Information System (KADGIS) Kaduna State Internal Revenue Service (KADIRS), Kaduna State Traffic Law Enforcement Agency (KASTLEA), Federal Road Safety Corps (FRSC), National Union of Road Transport Workers (NURTW), National Association of Transport Owners (NARTO), Kaduna State Internal Revenue Service (KADIRS), Tricycle Union Association, traders, estate developers, and commuters. Additionally, covert observation was used to complement the data collection. The advantage of covert observation according to US Department of Health and Human Services (2018) is that, people behave naturally if they do not know they are being observed. The data were collected using a voice recorder, which was then transcribed verbatim.
Thematic coding was employed for data analysis. Thematic analysis involves six stages of analysis: familiarization with the data (i.e. after transcription), coding, theme generation, theme review, theme definition, labeling and report (write up). Thematic analysis can be used to assess different worldviews, or different theoretical frameworks (Braun & Clarke, 2006).

4. Results and Discussion

There are two major views found in the study, that; there was a strong or direct correlation between road infrastructure and economic growth; and that the economic growth, influences population increase. The other view was that, infrastructure does not directly influence economic growth and population. The first view above corroborates the view of Saidi, et al., (2018) in MENA countries where transportation energy use helps significantly to economic growth. And transportation infrastructure increases economic growth in all locations (multiple positive economic growths). A government participant had this to say:

“There is relative increase in the number of registered tricycles in Zaria metropolis; this can be attributed to the ban of motorcycle commercial operation on one hand, and increase motor-able roads and unfortunately, insecurity in parts of the state like Birnin Gwari and Igabi local governments and neighbouring states security challenges like Katsina. With the development, there has been increased rural to urban migration. Many roads in the old walled city, Tudun wada and Sabongari have been rehabilitated or reconstructed. A cloverleaf at Kofan doka round about is under construction and an underpass bridge is also under construction at Agoro roundabout.” (A government stakeholder 07).

There is a sharp increase in the number of shopping malls in the city especially around the popular PZ area. This is related to the UN SDGs eight (decent work and economic growth), nine (industry, innovation and infrastructure) and eleven (sustainable cities and communities). A trader lamented:

“We sell commodities on the street as corner or street shops. But government is promoting shopping malls and is planning to ban street shops and promoting malls to our disadvantage. This will not help us, the sellers and many common buyers because shopping malls sell commodities expensively unlike us that sell at moderate price. (A trader stakeholder 08).

A consumer supported the trader’s argument and had this to say:

“It is true that we purchase goods in the neighborhood prior to urban renewal program, but after the relocation and revocation of right of occupancy of some shop owners especially along the major roads, our journeys to purchase household goods increase”. (A consumer stakeholder, 16)

Government report indicates that the Kaduna State Government’s internal revenue has increased over the years owing to some changes in the civil service. According to one of the reports, KADIRS, KADGIS and KASUPDA are the leading state governments’ agencies with the highest contributions/generations respectively (Kaduna State Budget, 2021). A government agent had this to say:

“The numbers of jobs on the streets have reduced which may translate to increase unemployment especially rural urban migrants, but government revenue has grown up owing to civil service reform, taxes and businesses reform among others.” (A government stakeholder, 14).
The multiplier impact of road infrastructure is what government considers as economic growth. For instance, there is a large state government building at PZ area to be used for more decent jobs. The reconstruction of Samaru market, the Sabon gari market, the Tudun wada market, and the Danmagaji markets are all wearing new looks. These projects might not be possible without improved road infrastructure. This is in agreement with Botric et al., (2006) where they opine that improved infrastructure is a catalyst for economic growth of many regions. This perception supports SDGs goal eight.

“It is true that the presence of roads attract economic development or investments. People take advantage of road accessibility and people movements to buy or build shops”. (A government stakeholder, 23).

Botric, et al., (2006) however, argue that there is no direct economic advantage generated from road infrastructure in some regions. In fact, some road infrastructural developments are even harmful to people. Thus, there are three perceptions to road infrastructure and economic growth: economic growth through a surplus of road infrastructure, economic growth through a deficit of road infrastructure and a balanced economic growth (Padjen, 1996). At the beginning, road may influence economic growth especially where there are none. But with time, the influence stops. A consumer perceived that these roads infrastructure are having negative impact on them:

“We used to buy goods in the neighborhood at street shops or corner shops, but with the so called urban renewal program, price of commodities and goods have increased and our short journeys to get them have also increased. It is difficult to find all you need in the neighborhood now” (Consumer stakeholder, 19).

There are many who see economic growth through increase number of materials or vehicles ownership. Others see it in the increase safety and aesthetics of towns and regions. One of the participants opines this way:

“When you look at the increased number of vehicles on roads especially tricycles, you have to agree with me that, presence of good road infrastructure influences economic growth. We used to see fewer vehicles on the road and even the internal revenue generations was not this huge, the number of people coming for vehicle registrations and driving license have increased. If roads are not in good shape, safety of users cannot be guaranteed. This is what is obtainable especially in the old walled Zaria city and parts of Sabon-go-ri” (A government stakeholder, 17).

In the same vein, vehicle owners especially tricycles have also added them on roads. A transport owner has this to say:

“I used to have fewer vehicles, but with the increased number of commuters and number of road linkages across the metropolis, more people asked for a hire vehicle and we buy and issue them if we are satisfied with their honesty. I must agree that increased road linkages which is substantial across the metropolis, might have improved economy. (A government participants 07).

5. Conclusion and Recommendations

There are two schools of thought in connection with the impact of road infrastructure on population increase and economic growth in Kaduna metropolis. Many people believe that there is a multiplier effects of road infrastructure although it might not easily be measured or translated in GDP term. However, government agencies often go with the first argument that economic growth is
correlated with increase and improve road infrastructure. On the other hand, many traders and consumers see this as negative impact given that road expansion and rehabilitations come with relocation and closure of roadside businesses. In summary, the economic advantage of road expansions, rehabilitations and constructions in Zaria metropolis depends on the user or responder.

It is recommended that, while road expansion and rehabilitation is a welcome development, government should implement with utmost care, mercy and caution because small businesses help in promotion of security of lives and properties without the necessary presence of security agencies or functionaries. Many criminals are into crimes because they are jobless. When roadside trading or shops are relocated, many traders find it difficult to afford decent locations and often close down their businesses.

REFERENCES


