Socio-economic impacts of Chinese government financed infrastructural development projects in Nigeria.

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Abstract

Nigeria is a West African country, often referred to as the "Giant of Africa" due to its population of over 177 million and an estimated GDP of over US$587 billion; abundant natural resources including one of the largest natural gas and crude oil reserves. Despite these strong fundamentals, Nigeria has found it difficult to convert her unique advantages into economic and social benefits for the country. This necessitates diversification of the economy which will require huge investments in infrastructure. In China, Nigeria has found a partner and financier. Despite the importance of Chinese finance for African infrastructure, relatively little is known and or ascertain about its socio-economic value and impacts. The aim of this research work is to identify and discuss the socio-economic impacts of Chinese Government Finances in Infrastructural Development Projects in Nigeria. Secondary sources of data were used to review literature. The result shows that Infrastructural Development Projects in the long run have direct influence on socio-economic development, and the majority of economic activities depend one way or the other on road networks, airports, railway transportation systems and power generation projects.

Key words: *African, China, Finance infrastructure, Nigeria, projects, socio-economic impacts*

1 Introduction

1.1 Background and rationale for the study

Nigeria is a country located in the Western part of Africa with a coastal boundary delimited by the Gulf of Guinea of the Atlantic Ocean in the south. It is often referred to as the "Giant of Africa", because it is the most populous country in Africa and the seventh most populous country in the world. Nigeria has an aspiration to be among the top 20 economies in the world by the year 2020 (Vision 20:2020). With a population of about 200 million and an estimated

GDP of over US$587 billion; abundant natural resources including one of the largest natural gas, crude oil reserves, significant deposits of largely untapped minerals; 300,000 square kilometres of arable land; Strong demographic growth and fast urbanisation makes Nigeria at the centre of Sub Saharan Africa's growth story.1,2,3 This implies that Nigeria has both strengths and opportunities to realize its aspirations with its abundant natural and human resources endowments. However, these lofty objectives can only be achieved through sustainable infrastructural development projects that can carter for the needs of the country's present and future generations.

Infrastructural development project (IDP) is the key to continuous development for both the developed and the developing countries. IDP refers to structures, systems, and facilities serving the economy of a business, industry, country, including the services and facilities necessary for its economy to function. It is typically a term to characterize the existence or condition of costly 'technical structures' such as roads, railway lines, bridges, tunnels, or other constructed facilities such as loading docks, components of water supplies, sewers, electrical grids, telecommunications, and so forth.[4,5,6]

Despite these strong fundamentals, Nigeria has found it difficult to convert her unique advantages into economic and social benefits for the country and the majority of her citizens. Whilst the political environment is improving with successful handovers within its democratic system, the crash in oil prices from a high of US$115/barrel in August 2014 to current levels of US$30 - $50/barrel, has drastically reduced the federal government's revenues, of which oil revenues used to be about 75%.[3] This makes diversification of the economy a top priority; this will require huge investments in infrastructure and the Nigerian government has identified this as a major priority by increasing the capital expenditure to 30% of the total 2016 and 2017 annual budgets compared with 11% in the 2015 budget.[3,7]

In the past, public investment in infrastructure has been no more than 9.1 percent of GDP a level of investment that failed to keep pace with capital replacement costs and that therefore contributed to deterioration of the country's infrastructure.[8] Given the current economic realities of Nigeria, developing its IDPs will require huge funding from the annual budgets; the deficit will require other sources of funding such as the private sector, international financial institutions (IMF, World bank) and other International project financiers etc.; with a medium to long term views on the socio-economic benefits. In China, Nigeria has found a partner and financier to its IDPs by signing pacts, memoranda of understandings through its bilateral ties.

For the next half decade, Nigeria is reported to require US$166 billion to provide energy and infrastructure for its growing inhabitant. The country has long suffered as a result of inadequate investment in infrastructure, constraining the movement of people, goods, and investment. Currently, various Chinese companies were awarded contracts, while also carrying out various project operations ranging from mega road networks, high-speed rail lines, new terminals at four international airports, hydro-power projects and solar power plants.[9] The financing or the funding is shared between the Nigerian government and its Chinese partners; with the significant portion coming from the Chinese partners. The petroleum and natural gas sector, and to a lesser extent other solid and natural mineral resources which Nigeria has all in abundance; is the major focus for Chinese investment in Nigeria; and African at large. Most often, natural resources are being used to secure some of the financing.[10]

However, despite the importance of Chinese finance for African infrastructure, relatively little is known and or ascertain about its socio-economic value and impacts. These raises deeper questions about the economic, social, and environmental impacts of the projects concerned. These are undoubtedly important and merit attention.[10] A lot of studies were conducted on IDPs, Project financing, Project Performances and Impacts but almost none focused precisely on the socio-economic impacts of IDPs financed through a partnership with the Chinese in Nigeria.

1.2 Research aim

The aim of this research work is to identify and discuss the socio-economic impacts of Chinese Government Financed Infrastructural Development Projects in Nigeria with a view to examine such impacts on Nigeria's socio-economic development.

1.3 Research methodology

The main sources of data were from published journals, conference / seminar / workshop papers, text books, newspapers, magazines and the internet sources etc., which were used to review literatures on the IDPs, Nigeria's infrastructural outlook, Project financing, Chinese government Financing of Projects in Africa and Nigeria. These help in identifying, examining, and narrowing some of its socio-economic impacts in Nigeria.

2 Nigeria's infrastructural landscape and the Chinese government finances in IDPs

Despite its abundant natural and human resources, Nigeria will not be able to sustain her current levels of population and economic growth without enhancing her infrastructure. This indicates an opportunity-filled future for infrastructure development in Nigeria with infrastructure spend estimated to grow from $23 billion in 2013 to $77 billion in 2025.[11] Investing in infrastructure will drive economic growth, provide jobs, and deliver vital services to the country and the majority of its citizens. The World Economic Forum estimates that every dollar spent on capital projects (in utilities, energy, transport, waste management, flood, defense, and telecommunications) generates an economic return of 5% to 25%. This readily translates to opportunities for sponsors or investors that are keen on developing infrastructure projects in Nigeria.[3]

Stable and cost-efficient power availability has been widely acknowledged as pivotal to the successful economic development of any country. Yet, the power sector remains one of Nigeria's greatest infrastructure challenges, despite an abundant availability of energy resources in the form of coal, oil, gas, hydro and other renewable sources. Other infrastructure sectors such as transportation (roads, rail, seaports and airports) have equally significant gaps and similar challenges. For example, road transportation and accounts for 80% of goods' traffic in Nigeria, but only less than halve of the road network in the country is paved.[3] It is in this context of weak infrastructure provision in the region, that the Chinese engagement with Nigeria’s infrastructure is needed most, in financing and in offering the institutional and human capacities needed to build, Nigeria’s infrastructural sectors, with respect to both social and economic infrastructures.[9]

The growing ties between China and Africa, including China’s emerging role as a major financier of infrastructure in the region, can be understood in terms of the economic complementarities that exist between the two parties. On one hand, Africa has huge amount of untapped natural resources, but counts among its development challenges a major infrastructure deficit, with large investment needs and an associated funding gap. On the other hand, China’s fast-growing manufacturing economy is generating major demands for oil and mineral inputs that are rapidly outstripping the country’s domestic resources. Chinese finance often goes to large-scale infrastructure projects, with a particular focus on hydropower generation and railways. At least 35 African countries are engaging with China on infrastructure finance deals, with the biggest recipients being Nigeria, Angola, Ethiopia, and Sudan. The finance is channeled primarily through the China Export-Import (Ex-Im) Bank on terms that are marginally concessional, though significantly less so than those associated with official development assistance (ODA) from Organisation for Economic Co-operation and Development (OECD) countries or to capital from private investors. African leadership has typically welcomed China’s fresh approach to development assistance, which eschews any interference in domestic affairs, emphasizes partnership and solidarity among developing nations, and offers an alternative development model based on a more central role for the state. [10]

China's involvement in Nigeria, dating back to 2002, began relatively modestly with a number of projects in the telecom and power sectors. A substantial scale-up took place in 2006, when US$5 billion of infrastructure projects were agreed upon, including the 2,600 MW Mambilla hydropower scheme and two major projects to upgrade and modernize the country's railway system. [10] To address the infrastructure financing gap, a US$6 billion loan commitment from China was obtained to fund infrastructure projects in Nigeria. The loan commitment coincided with a currency swap deal agreement between the Industrial Commercial Bank of China LTD (ICBC), which is China and the world's largest bank, and the Central Bank of Nigeria (CBN). It is anticipated that this would lessen the demand for dollars on the Central Bank of Nigeria.[9]

Summarily, Chinese prominent involvement in Nigeria's IDPs were mainly on Rail lines, Roads and Bridges, Airport Terminals Expansion, Hydro-Power projects and Solar Power Projects etc. These projects impact the host communities, areas beyond their locations and the country at large. The magnitude of such impacts cannot be easily quantified presently. However, they include social, economic and environmental impacts.

3 Socio-economic impacts of IDPs in Nigeria's built environment

Social and economic impact is briefly defined according to *Bello, 2017* as "The effects of an activity, action, business operations, market trend, programme, policy or project on the economic and social well-being of individuals and families in a society which may be positive or negative". The particular area of interest here is the IDPs financed by the Chinese in Nigeria.[12, 13]

IDPs, especially Construction projects in developing countries like Nigeria are labour intensive. This leads to the employment of millions of workers directly and indirectly within the industry.[14] Others may be affected or engagement indirectly due such projects. These includes construction material vendors, restaurant / food vendors, hotels and other buyers and sellers of day-to-day life consumable commodities etc.

The construction sector is characterized by fierce price competition, by high labour intensity (with short-term labour contracts, seasonal work and wage dumping), by the outstanding role of public procurement, and by the long lifetime of the end product (with the respective effects on energy consumption, health of residents, etc.).[15] During the construction phase, some project elements affect the amenity and lifestyle such as air quality, noise, visual pollution or increase in traffic levels. These affects community safety and comfort due to traffic disruption and or delay.[16]

Some IDPs like Airports do limit certain kinds of developments in surrounding areas such as land use and building heights or by dissuading residential development directly under newly created light paths, or in close proximity to new surface access infrastructure or emerging industrial areas.[17] This is similar to Hydropower projects, but it also leads to resettlement of communities and other facilities.[18] However, the energy generated by such projects boost industrial activities with profound socio-economic effects such urban water supply, tourism, flood control, agricultural irrigation, and food production.[19, 20]

Table 1 - IDPs and their Socio-Economic impacts

	Socio- Economic Impacts	Infrastructural Development Projects			
		Road Projects	**Railway Projects**	**Airport Projects**	**Dams and Hydro Power Projects**
1	Employment of people directly and indirectly	*	*	*	*
2	Engages other sectors of the economy	*	*	*	*
3	Reduces friction of distance; Multitude movement of people	*	*	*	
4	On-time deliveries of Goods and Services to the population	*	*	*	
5	Improve standard of living; Ease of social cohesion and integration	*	*	*	*
6	Increase in the ease and use of public transportation	*	*	*	
8	Energy Generation, urban water supply, tourism, flood control, and food production				*
9	Resettlement of communities	*	*	*	*
10	Affects community safety and comfort such as air quality, noise and disruption of traffic.	*	*	*	
11	Affect social amenities and lifestyles	*	*	*	*
12	Affects or limit certain kinds of developments in the surrounding areas			*	*
13	Greater access to markets, education and health centers	*	*	*	
14	Wealth creation and more revenue generation	*	*	*	*
15	Influx of Chinese workers limiting indigenous expert jobs	*	*	*	*

Source: Authors, 2017.

The development of transport sector, such as road transport reduces friction of distance; facilitate trade; allowed an improve movement of people and goods; overall better standard of living and ease of social cohesion and integration; finances other public spending which can be of importance for a society, such as the social security system and the education system, etc. Thus, roads, as a flexible and rapid mode of transport, allow other economic sectors to face structural changes. By permitting time savings, road transport allows the industry to adapt to technological developments; the use of new production processes; on-time deliveries; change in the customers' expectations.[21] Rail transport is another transport infrastructure that

is vital to development of any country. Railways are central to the formation of modernity and ideas of progress because they contribute to social vibrancy and economic competitiveness by transporting multitudes of customers and workers to city centers and inner suburbs.[22, 23] *Cascarjo (2004)* identified “Reduction of travel time, economic efficiency, employment generation and economic growth; Social equity, increase in the use of public transportation, urban regeneration, noise and safety” as the socio-economic impacts of rail projects.[24] The Nigeria’s Minister of Transport stated that “The consequent effect of the implementation of Rail IDPs is to guarantee mass employment opportunities for Nigerians and to ensure wealth creation, more revenue generation and less pressure on the Nigerian roads”.[25, 26]
Efficient infrastructure attracts centers of production and consumption, gives greater access to markets and education centers and that timely access to health care, facilitated by transport can prevent maternal deaths and lower infant mortality rates.[27] It is worthy to note that IDPs affects social amenities, services, including liveability of residential areas, recreational facilities, education and health.[16] Such Projects were accompanied by a major influx of Chinese enterprises and workers into the African region. The natural resource sector, principally petroleum and to some lesser extent minerals, has been the major focus for both Chinese FDI to Africa and African exports to China.[10] The Table 1 summarizes the socio-economic impacts of various IDPs in Nigeria.

4 Discussion and conclusions

The planning, construction, operation and maintenance of Infrastructural Development Projects creates jobs with direct and indirect implications on the economic prosperity of people in a given region or country. Dams and Hydro power projects leads to Energy and power generation, urban water supply, tourism, flood control, irrigation and food production. These will boost the industrial capacities, more jobs creation, poverty reduction and food security to Nigeria. Transportation IDPs like Roads, Railways and even Airports reduces friction of distance; leads to Multitude movement of people; Improve standard of living; Ease of social cohesion and integration; On-time deliveries of Goods and Services to the population; facilitate trade thereby creating Wealth to the people and generates revenue to the government. In the long run, they have direct influence on basic production parameters which in turn, will foster economic growth and development. The majority of economic activities depend one way or the other on power projects, also airports, road, railway transportation systems.

However, most of these IDPs may sometimes leads to Resettlement of communities; Affects or limit certain kinds of developments in the surrounding areas (e.g. Airport and Dams); Affects community safety and comfort such as air quality, noise and disruption of traffic; Affect social amenities and lifestyles etc., during and or after the construction phase. The completion of such projects do leads to termination of jobs which were mostly on contract basis thereby affecting the social and economic livelihoods of employees and other related businesses. Chinese construction companies always emphasize and insist on bringing their fellow Chinese workers to carry out most of the project operations. These affects the Nigerian construction experts in terms of employment and experience. In retrospect, Chinese government loans for IDPs, allows the Nigerian government to re-focus its annual budget on other priorities such as Education, Health, Agriculture, Safety and Security of the country.

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