

## **RURAL INFRASTRUCTURE DEFICIT IN NIGERIA: BRIDGING THE GAP FOR SUSTAINABLE DEVELOPMENT**

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### **Abstract**

It is unarguable that the rural area carries about 70% of the country's untapped natural resources and the bulk of her landmass, however rural communities are still subsisting under poor conditions devoid of opportunities and options, emerging from decades of callous neglect of Rural Infrastructure Investment in rural areas.

Available records show that Rural Infrastructure is disproportionately low or even non-existent in many rural areas of Nigeria and several efforts at improving the records have not achieved the desired results. Two major approaches to Infrastructure investment are; self-help among rural dwellers and external assistance as offered by planners and implementers of policies to this effect. This paper addresses the second approach focusing on attainment of SDG goal 11. Area specific Rural Infrastructure provisions are canvassed for to boost the rate of impact by capitalizing on the people's participatory approach which entrenches the sustainable development indicators. Recommendations made include a call on governments to pursue Rural Infrastructure provision as an impetus for achieving the SDG goal of making our communities safe, resilient and sustainable.

Key words: Rural, Infrastructure, sustainable development

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### **1. Introduction**

Africa's infrastructure performance ranks bellow all other developing regions as documented by Africa's Pulse (2021). The report also indicates that closing the

infrastructure quantity and quality gap could lead to increased growth of GDP by 2.6% per year. At the moment Africas infrastructural development is only about 24%, whereas it about 71% in Latin America, 56% in Korea and 48% in East Asia (AFDB, 2021) and this requires double commitment if the continent of

Africa must progress to attain sustainable development. Nigeria like many other developing countries have a deluge of widening infrastructure gap including in rural areas and regions of relatively low income, where needed infrastructure is non-existent or at best unreliable in several communities.

A major characteristic of rural areas is that they have large amounts of undeveloped land. The rural areas of Nigeria are the opposite of the urban areas mostly devoid of basic infrastructure such as good medical centers, accessible roads, good electricity network, good hygiene and sanitary conditions, communication facilities among others. Rural infrastructure (RI) may be seen as the complex of physical structures or networks within which social and economic activities are carried out (Robert, 2019) but in spite of the importance attached to rural infrastructure, the rural areas have long been deprived and neglected of them. The Nigerian rural sector performs far below the urban sector. Specifically, the rural unemployment rate, poverty count, access to clean water and electricity recorded 34.5%, 52.1%, 42% and 41% as against urban values of 31.3%, 18%, 75% and 86% respectively (NDP, 2021-2025). This evidence underscores the need

for integrated rural development with rural infrastructure provision leading the way.

The population of the rural areas in Nigeria are predominantly small scale farmers who grapple with limited access to modern farming inputs, productive resources and basic infrastructural services including culverts, storage and irrigation facilities (World Bank, 2015). The infrastructural facilities are therefore aimed at overall development of the rural areas and critical to the achievement of the sustainable development goals. Of note is physical infrastructure such as roads, electricity, pipe-borne water; social infrastructure like schools, hospitals, housing and; institutional infrastructures like land tenure, credits and loans facilities, local traditional banks and cooperative association.

By 2050, 70 % of the world's population will live in cities, making cities critical in achieving a sustainable future for the world (UNDP, 2020). The explosion of cities occasioned by rising population and migration effects has contributed in no small measure to the proliferation of urban slums (UN-Habitat, 2021), therefore in achieving goal 11 of the sustainable development goals which seeks to make sustainable cities and

communities, efforts must be made close the infrastructure gap between the rural and urban centers to curb the rate of rural-urban migration which accounts for more than 43% of urban population (Fox *et al* 2017).

Available records indicate that rates of rural-urban migration greatly exceeded rates of urban job creation and swamped the absorptive capacity of both the formal sector industry and urban social services. This paper therefore suggests that accelerated infrastructure provision in the rural areas be made as a catalyst for achieving sustainable development.

## **2. Case for Rural Infrastructure Provision**

In the idea of development no nation can boast of being developed when appreciable number of her citizens are living in squalid poverty, ravaged by hunger and starvation and abysmal hope of improving their livelihoods. Whereas the rural sector carries the bulk of the countries natural resources, the rural areas still subsists of poor individuals who live on less than 1\$ a day (NBS, 2020).

One of the factors attributed to the high level of rural poverty is the lack of adequate infrastructure such as pipe borne water, electricity, good roads, schools, health

facilities and commercial facilities including sanitation and storage facilities, forcing young able bodied citizens to abandon their jobs on the farm to seek greener pastures in towns and cities resulting in a very sharp fall in food production with attendant high cost of food stuffs. Available records (NEPAD, 2020, NBS 2019, Fox *et al* 2017, World Bank 2015, posit that larger percentage of these small scale farmers will remain poor unless basic infrastructures are provided in these rural areas and that the provision of infrastructures is part of integrated rural development strategy which combines the development of various areas of the rural society including agricultural, educational, health nutrition, rural electrification, rural water supply and cooperatives simultaneously. The provision and access to these facilities go a lon way in improving quality of life of rural dwellers.

Apart from poverty problem, the prime factor for rural-urban exodus is the attraction of the infrastructural facilities placed in the latter; and this trend will continue unabated until such facilities are relatively or equitably provided and sustained in the former. Hence, the sustainability of rural development; particularly the provision, operation and

maintenance of appropriate rural infrastructures has, over time, eluded the hopes and aspirations created in the minds of rural folks. There is also a lack of coordination in the distribution of infrastructures to make them more relevant to the people they are meant to serve (UNDP, 2020).

Rural infrastructure development is a positive action, as it is aimed at improving the welfare of the rural people. Rural infrastructural investment could imply the desirability of overcoming deprivation and low quality of rural life as the creative capacity of the people to produce goods is improved through the deliberate use of infrastructure to transform productive processes, reduce physical labour power and improve health and living.

### **3. Issues for Rural Infrastructure Provision**

Initiating and sustaining RI are a function of several factors. Key areas of need in achieving progress on Goal 11 are practical processes for multi-stakeholder engagement in all stages of RI that build consensus, inclusion, resilience and sustainability. The neglect to rural infrastructure development is a major cause of rural -urban migration. The role of RI in attaining sustainable development goal 11 is buttressed in positive

impacts of diverse rural infrastructure on the socio-economic lives of the rural dwellers.

Some issues of RI bother on insufficient technical skills to understand/use the new technology or even managed and maintain them, this underscores the sustainability of such infrastructure and poses a great threat to its viability. Once a project is certified as completed and functioning, its management/maintenance becomes a critical factor in achieving the desired goal leading to sustainability (Madu 2022). Neglect of rural infrastructures affects the profitability of agricultural produce. It impedes the marketing of agricultural commodities, preventing farmers from selling their produce at a reasonable prices and good time and may lead to spoilage.

### **4. Rural Infrastructure Provision for Sustainable Development**

Rural infrastructures as defined by (OECD 2020) are those basic physical, social and institutional forms of capital, which enhance rural dwellers' production, distribution and consumption activities and ultimately the quality of life. In other words rural infrastructure are those facilities and services that are needful to improve on the quality of life of the rural people. In the light of these

definitions, this paper adopts rural infrastructure social, human and institutional capital which enables rural residents to better perform their production, processing and distribution activities thereby improving the overall quality of life.

There have been different definitions of what could be termed sustainable development. The basic implication of the concept of sustainable development as embraced by International Institute for Environment and Development (IIED) is that – such development should leave to the next generation “a stock of quality of life” assets no less than those we have inherited.

Theoretically, economists proceed from the premise that the creation of infrastructure leads to widespread benefits, no doubt, infrastructure is essential in supporting rural development. The importance of infrastructure to sustainable development of any society has been documented by many studies and reports (World Bank 2015, Fox et al 2017, Aderamo and Magaji 2021, UN 2022) At the micro-level, it is recognized that infrastructure investment enhances private sector activities by lowering the cost of production and opening new markets, presenting new production opportunities and

trade (AU/ NEPAD, 2021). Utmost importance is accorded to infrastructure as the foundation for growth and development in rural Africa. The structural gap in African infrastructure is considered a serious handicap to growth and poverty reduction. Equally, the strong linkages between infrastructure investment and the key indicators of social wellbeing are essential to the attainment of Sustainable Development Goals (SDGs).

Scholarly classification of rural infrastructure fall into four categories including; Physical Infrastructure, comprising of electricity, roads, bridges, railways, storage facilities, irrigation and water resource development facilities, drainage and soil conservation facilities and other forms of processing facilities; Economic infrastructure e.g. credit, loan, production support; Social Infrastructures including health and medical facilities, communication facilities, educational components (vocational and adult educational facilities and; Institutional Infrastructure like cooperative societies, farmers’ unions, community development programmes/projects through self-help efforts, financial institutions like banks, post offices, agricultural research facilities made up of research sub-stations, experimental

farms, demonstration plots, agricultural extension and training services. Provision of RI is critical to promoting inclusive growth and sustainable development. In fact, the shortfall of RI is a major trigger of rural-urban migration and a set back to the attainment of SDG goal 11 in that the fragile urban infrastructure are over stretched by increase in migration. Today, migration has become a major factor contributing to excess labour force in the urban centers, which has continued to increase the rate of unemployment and other social challenges caused by the imbalances between rural-urban environments

## **6. STRATEGIES FOR TACKLING RURAL INFRASTRUCTURE DEFICIT**

- Up scaled commitment to RI investment by governments at all level, including development partners to eradicate abandoning of projects
- Improved leverage with government/RI providers through organization, representation and capacity to speak on issues of concern, which is the people's participatory approach (PPA). This PPA approach allows communities

to initiate their infrastructure needs, while Government through relevant agencies will take care of logistics in the area of investigating the genuineness of need and articulation of proposals, allowing target population to participate through the process engendering sense of ownership, among other things forestall vandalism and promote sustainable development.

- There should objective spatial distribution and location of RI to maximize comparative advantage
- There should be improved and well-coordinated system of technical competence for adequate and proper maintenance, repairs and monitoring of projects/programmes
- It is very important for policy makers to establish a system perspective that links the agricultural and non-agricultural sectors in the rural area as present situation reveal that the agricultural Ministry under which you find Rural Development has its mandate related to farming per se, thereby

excluding the nonagricultural sector.

### **Conclusion**

The significance of bridging the infrastructure gap in the rural areas in the country illustrated in this chapter should not be taken to mean that rural infrastructure development is a replacement to urban expansion and renewal. The intention of focusing on RI is to draw attention to the potentials of RI investments as a veritable tool in attaining the SDG goal 11. Only about 3% of the earth is occupied by cities and that means that the larger human populations are still rural and it is this population that feeds the nation and to a large extent determine the quality of national life. The provision of RI could promote other meaningful, income generating and economic development activities in the rural areas and especially spur agricultural activities expansion to export dimensions leading to accumulation of wealth and foreign exchange for sustainable growth. Furthermore the provision of RI will help to curb rural urban migration, tighten labour supply for agriculture and lessen the burden on the already weak urban infrastructure like housing, thereby reducing the incidence of slums. In spite of the size and

potential wealth of Nigeria's rural areas the dearth of RI remains a crucial part of her economic problems. These trends are expected to persist in the foreseeable future except urgent steps are taken to change the narrative. It is therefore correspondingly pertinent that increasing attention be focused on the roles RI could play in raising living standards and achieving sustainable cities and communities.

### **Recommendation**

The suggestion made by this chapter is to provide the incentives and insights into returns on rural infrastructure investments to lead the campaign in reducing rural urban migration and emphasize that we cannot expect rapid sustainable development or substantial agricultural production if rural infrastructure compassing the areas adduced to earlier are not provided or improved upon. In general this chapter suggests that Government should institutionalize a regulatory framework that will encourage a multi-faceted investments in infrastructure provision to create a sustainable environment that will enable the rural areas to optimize her landmass and mineral resources which offer area specific advantages towards economic

empowerment and growth. These RI investments should be based on the proven sustainable development goals indicators which include; evidence based investments, adaptable to local priorities, targets areas to make rapid impact and strong emphasis on community ownership. Other specific recommendations include;

- Expansion of training and skills acquisition capacity to hand over innovative and requisite skills, competence and technological know-how for maximum productivity,
- Identify commercial and mutual benefits linkages between rural-urban areas to improve labour mobility and engender sustainability of rural infrastructure,
- Ensure competence among personnel beginning from planning to implementation to provide a strong and robust value chain

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