ENTRENCHING AN EFFICIENT URBAN INFRASTRUCTURE DEVELOPMENT IN UYO, NIGERIA: A PRAGMATIC APPROACH

FRANCIS P. UDOUDOH AND VICTOR UMOREN

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ABSTRACT

Urban infrastructure covers all facilities or services provided to support structural and economic development in urban centres. It is developed and maintained by public agencies to facilitate the achievement of common socioeconomic objectives. This paper is concerned with infrastructure such as accessible roads, electricity, pipe-borne water, telecommunication and waste disposal system. Two hundred (200) questionnaires were administered on residents of Uyo urban. The respondents were categorized into four groups including civil/public servants, students, cyclists and house wives/petty traders. To each group, fifty questionnaires were administered using random sampling techniques. Out of which 188 copies representing 94% were properly completed and returned. It was pertinent to conduct oral interviews as a means of extracting more information. Statutory agencies responsible for the provision of infrastructure were also visited such as Ministry of Works and Transport, Akwa Ibom Water Company Limited in Uyo. The results are presented statistically in tables and analyzed. The research observed that the sector is characterized by inadequacy and inefficiency to the detriment of the public. It concludes that public private partnership should be introduced into the sector as it appears the government alone cannot provide and maintain urban infrastructure.

KEY WORDS: Urbanization, Infrastructure, Development and Maintenance.

1.0 Introduction

Infrastructure refers to "all basic frameworks that advance social growth and development. This embodies the physical, social and economic facilities and processes" (NIEVS, 1997). It embodies all facilities and services provided to support structural development in urban areas which enhances human settlement. The issue of infrastructure development has been a serious concern to urban growth in Nigeria. Urban infrastructure is developed and managed by public agencies with the intention to achieve common social and economic objectives. Despite the efforts by the various tiers of government in this direction, the demand of urban population has not been met. This inadequacy has affected the pace of physical and economic development in the city.

In order to have a thorough appraisal of the topic, the researcher found it necessary to embark on an overview or historical framework of infrastructure development in Nigeria from pre-colonial period to date. This paper is concerned with urban infrastructure including urban roads, water supply, electricity, telecommunication, drainage/sewage system. The study is concluded by making recommendations on how to improve infrastructure provision in urban centres of Nigeria.

1.1 Aim and Objectives of the Study

The aim of this study is to critically examine how urban infrastructure could be pragmatically entrenched in urban development process in Uyo, Nigeria. To achieve this, the under-listed objectives are set:

- i. To examine the infrastructure development trend in Nigeria.
- ii. To assess the state and functionality of existing urban infrastructure with emphasis on quantity and quality.
- To identify the problems militating against effective infrastructure provision in the study area.
- iv. To make appropriate recommendations towards improving the system.

2.0 Review of Related Literature

The history of infrastructure in Nigeria is marked by unsteady and uneven development. In the colonial period, infrastructure was built to suit the colonial administration and economic needs oriented towards the trade and communication lines. Emphasis was on transport development based on ports and distribution of imported goods (Umezuruike, 1997 and Ukum, 2002). Thus, the development of several sea ports in Nigeria including Lagos, Port Harcourt, Calabar, and Uyo (Nwaniba). This was followed by the provision of basic infrastructure for the whites and few privileged Nigerians who lived in the Government Reserved Areas (GRA). In the later case, the other parts of the urban centres were left to wallow in abject poverty without the basic urban infrastructure. The era of military regime made concerted efforts to provide and upgrade infrastructure facilities in state capitals and major urban centres. This resulted in the establishment of Nigerian States Urban Development Programme (NSUDP) in 1977 with a

Francis P. Udoudoh, Department of Estate Management, University of Uyo, Uyo, Nigeria. **Victor Umoren,** Department of Urban and Regional Planning, University of Uyo, Uyo, Nigeria

directive to improve infrastructure facilities in the newly created seven states. Tadaro and Smith (2006) lamented that rapidly population increase has threaten to precipitate the collapse of existing urban infrastructure. Consequently, most government particularly in developing countries are unable to cope with the vastly increased strain on urban infrastructure.

The rate of decay in infrastructure in Nigeria became rather very alarming during the military era (1985 – 1996). In order to ameliorate the problem, Urban Development Bank was established to manage urban infrastructure and services throughout the country on sustainable basis. The bank had the mandate to mobilize long term funds for on-lending, rehabilitation and maintenance of basic urban infrastructure and services. The services of this bank have not been fully tapped by many states of the federation particularly the states in Niger Delta Region of Nigeria. Okpokpong (2007) observed that Akwa Ibom State has not benefited at all.

Generally, basic infrastructure facilities in Uvo. like in other ruban centres in the region are poor. The level of accessibility to these basic structures and services by the urban population fall short of that which can generate and appreciable level of industrial development as well as commercial and social activities (AK-SEEDS, 2004). In view of the peculiar nature or urban infrastructure, government sets up different agencies for the provision and management of the various utilities (Olusayo, 2009). This was also for administrative conveniences. In Akwa Ibom State the agencies include Akwa Ibom Investment and Industrial Promotion Council (AKIIPOC), Akwa Ibom Power Company Limited, Akwa Ibom Water Company Limited, Akwa Ibom Transport Company Limited, among others. The establishment of Petroleum Trust Fund (PTF) in 1996 and Niger Delta Development Commission in 1999 was to improve infrastructure in the region which has long been neglected. Uyo is one of the urban centres in the region.

In Nigeria, the developers had to face tremendous difficulties and huddles in connecting the public utilities from the main to the respective properties. Odu (1997) argues that infrastructures normally arrive after development. This adds to the overall cost of urban development. There are situations where the infrastructures should be installed side by side with development or after the development has taken place. This depends on funds availability, location of property and developers requirements.

Inadequate infrastructures development has presently become a serious urban problem in Nigeria. The provision of urban infrastructure does not follow statistical data. Its development in urban centres is not usually targeted at a particular size or stage of urban development, neither is it guided by statistics of existing and future population trend. According to Ogbuefi (2002), at some points in the life of an urban area, some of the available infrastructure would reach their threshold limit. The pressure on infrastructures in Uyo, and most Nigerian urban centres, has been so high that they have reached their maximum level of capacity utilization. This creates a picture that portrays poor infrastructure maintenance as they are allowed to decay sooner than installed.

It has also been noticed that the monopolistic nature of public agencies managing urban infrastructure has brought irregular services. Consequently, the existing ones are overstretched when illegal connections are made, making supply epileptic and grossly inadequate. Ajanlekoko (1997) has criticized the provision of infrastructure in most Nigerian urban centres as being in a state of comatose, neither dying nor living, particular electricity, water and drainage.

Infrastructure management involves the tasks and processes carried out to preserve, restore or improve a system or an asset with its elements to sustain its utility and value (Nwuba, 1997). This is to control the impact of decay and obsolescence. Effective maintenance policy enhances the functioning of infrastructure. It has an important bearing on both the physical and economic lives and performance or urban infrastructure. Once in place, infrastructure undergoes a continuous process of decay and obsolescence which result from the process of time, usage, climate and environmental factors (Nwuba, 1997).

Ajanlekoko (1997) has criticized the provision of infrastructure in most Nigerian urban centres as being in a state of comatose, neither dying nor living, particularly electricity, water and drainage. The available infrastructure cannot cope with the area teeming urban demand. Urban infrastructure propels the socioeconomic growth of a city. To be able to do this, Iseh (2003) advices that its provision should be followed by proper maintenance; in order words, they must always be seen to be in good performance condition.

There is a static concept of infrastructure in Nigeria. This is the failure to recognize that infrastructure is an on-going process of delivering essential services. The process entails funding of operation and maintenance. This process being poorly organize in conjunction with, lack of proper infrastructure design, planning and expansion of existing infrastructure in the face of rapid urban population growth; has compounded the pressure on existing infrastructure, leading to rapid deterioration in the quality of urban lives.

2.1 The Study Area

Uyo started as a small village in Offot clan and grew to become a third class township in 1917 (Mabogunje, 1968 and Ekop, 2003) thus giving Uyo the status of an urban centre. In 1960, the Eastern Regional Government created Uyo province out of the then Calabar Province. When this was abolished following the creation of South Eastern State in 1967, Uyo became a Division and later Headquarters of Uyo Local Government Area consequent upon a National Local Government Reform of 1976 (Ema, 1989). This position was held until the creation of Akwa Ibom State from Cross River State in 1987 when Uyo was named as its capital city. This transformation brought about increase in population and economic activities and by extension higher demand for infrastructural services. The study area is centrally located within Akwa Ibom State landmass. The land is seemingly flat and gently sloping into the ravine. Uyo is characterized by mixed land use development pattern with a social mix of all income categories.



Fig. 1 Uyo Capital City Territory showing the Study Area **Source:** Uyo Master Plan (1988)

3.0 Methodology of Study

The major sources of data for this study were the records from government ministries and parastatals, including Ministry of Works and Transport, Ministry of Housing and Urban Development, and Public Utility Department in the Governor's Office, Uyo. A total of 200 questionnaires were administrated on residents of Uyo urban. Out of which, 188 copies representing 94% were properly filled and returned to the researcher. This forms the sample size for the survey. It was also pertinent to conduct oral interviews as a means of extracting information from residents of the city. The data collected were subjected to statistical analysis using tables and percentages.

4.0 Data Presentation and Analysis

Table 1: Administration of Questionnaire

S/N	CATEGORIES OF	NO. OF	NO. OF QUESTIONNAIRE
	RESPONDENTS	QUESTIONNAIRE	RETURNED
1	Civil/Public servants	50	48
2	Students	50	50
3	Cyclists	50	44
4	Housewives/Petty traders	50	46
	Total	200	188

Source: Field survey by Authors (2008)

Four categories of respondents were chosen including civil servants, students, cyclists and housewives/petty traders. To each group, 50 questionnaires were administered randomly. Whereas, the civil servants and students filled the questionnaires themselves, the cyclists and housewives/petty traders were assisted by the researcher to complete their questionnaires.

Table 2: Infrastructure Status of Uyo Urban (2008)

S/N	FACILITY	NO. OF YES	PERCENTAGE	NO. OF NO	PERCENTAGE
1	Accessible roads	112	56%	76	38%
2	Constant electricity	62	31%	126	63%
3	Pipe borne water	54	27%	134	67%
4	Telephone services	156	78%	32	16%
5.	Waste collection/disposal	58	29%	130	65%

Source: Field Survey by Researchers (2008).

From the table above, it is clear that the response rate for telephone services and accessible roads are 156 representing 78%, and 112 representing 56% respectively. The introduction of GSM has made communication very easy while many roads have been constructed or maintained by the state government in the last 10 years. Unfortunately, the services of electricity and pipe borne water have remained a disappointment to the residents. The response rate indicated 62, that is, (31%) and 54, that is, (27%) respectively. The poor performance of NEPA/PHCN and State Water Board has increased the levels of stress and pollution in Uyo Urban. This is because most residents and business men have resorted to the use of private generators which constitutes noise pollution, and the operation of boreholes and sachet water which litters the streets.

Table 3: Customers Assessment of Urban Infrastructure Perform

		ELECTRICITY		PIPE BORNE WATER	
S/N	RESPONSE	NO. OF	%TAGE OF	NO. OF	%TAGE OF
		RESPONSE	RESPONSE	RESPONSE	RESPONSE
1	Very impressive	15	8	14	7
2	Fairly impressive	30	16	24	13
3	Impressive	50	27	40	21
4	Unimpressive	93	49	110	59
	Total	188	100%	188	100%

Source: Field Survey by Authors (2008).

On the performance of public urban infrastructure in the study area, respondents were asked to base their minds on electricity and pipe-borne water supply. The results indicated unimpressive performance for both services – 93 (49%) and 110 (59%) for electricity and water respectively. Very impressive recorded 15 (8%) for electricity and 14 (7%) for pipe-borne water. Respondents were unequivocal in stating that public utilities have performed so poorly in Uyo, Nigeria.

Table 4: Source of Urban Infrastructure Supply4 (a)

S/N	ALTERNATIVE SOURCE OF	NO. OF	%TAGE
	POWER/LIGHT	RESPONDENTS	
1	Generator	40	21
2	Lantern (kerosene)	96	51
3	Electric lamp/torchlight	28	15
4	Candle	24	13
	Total	188	100%

Source: Field Survey by Authors (2008).

4 (b)

S/N	MAJOR SOURCE OF WATER SUPPLY	NO. OF RESPONDENTS	%TAGE
1	Pipe-borne water	46	24
2	Borehole	102	54
3	Stream/Rain water	30	16
4	Well	6	3
5	Water vendor	4	2
	Total	188	100%

Source: Field Survey by Authors (2008).

Table 4 (a) shows that the major sourced of power/light in Uyo Urban is lantern which is powered by kerosene, 96 (51%). This is followed by generator 40 (21%). The number of people that use electric lamp and candle as a means of lighting in their houses are 28 (15%) and 24 (13%) respectively. This is because as informed by the respondents, there is no three (3) days that NEPA/PHCN can provide electricity consecutively.

With reference to Table 4 (a) on sources of water supply in the urban, the table indicates that the major source of water is borehole which every household thrive to provide within his premises. The table shows response rate of 102 out of 188 representing 54%. Pipe-borne water follows by 46 respondents (24%), less than half the respondents. Population as many as 30 (16%) still patronize water from natural sources, that is, stream and from rain. Water vendors are not popular in Uyo Urban.

5.0 CONCLUSION AND RECOMMENDATIONS

Available records show that Akwa Ibom State Government has made tremendous strive to improve the state of urban infrastructure provision in Uyo and other urban centres in the state. Government alone cannot successfully provide and maintain urban infrastructure. Thus, the sector is characterized by inadequacy and inefficiency in operation to the detriment of the public. This results in pollution of the built-environment as every household owns and operates a generator set and/or a borehole. This research notes that the causes of the inefficiency include poor funding of agencies responsible for the operation of public utilities, un-sustained maintenance policy, disjointed administrative framework

and poor attitude to work by staff. More so, provision of these facilities is not preceded by adequate statistical data and analysis.

Infrastructure provision requires huge capital which most individuals cannot afford. Thus, corporate

and financial institution should be encouraged by the government to contribute to the development of urban infrastructure, while the private individual and benefiting communities ensure safety in their various domains. Planning, design, installation and maintenance of urban infrastructure should be incorporated in the overall urban development process.

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