



# SYNERGY OF EFFECTIVE POWER SECTOR AND TOWN PLANNING UNIT

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## ABSTRACT

The ever-increasing population in Nigeria brings to bare, the need for enhanced social amenities. This is because, no matter the population upsurge, everyone desires to enjoy at least the minimum comfort. While the need for comfort cannot be overemphasised, there is again the need for survival on necessities like Electricity supply which also plays a very vital and strategic role in the economic development. In view of the fact that electricity supply is not sufficient to meet expected demands, several vices are introduced in its supply chain. Key among this is the illegal connections which affects the national grid supply. This paper investigated the role utility companies play in ensuring compliance of standards and the role of the town planning team in the environmental management of the enforcement and recommends a synergy of efforts between the two parties for effective and qualitative service delivery.

**Keywords:** *Town, Planning, Electricity, Development, PHCN*

## INTRODUCTION

Access to electricity is essential for human life (Tully, 2006). Increasing electricity availability contributes to improved social development and faster economic growth. Access to energy has a direct impact on health, education, life expectancy, child mortality and contributes to income generation and employment (Tully, 2006).

Developed countries across the globe enjoy wealth and economic prosperity partly because of their unrestricted access to electricity (Sanchez and Tozicka, 2013). Most developing countries still struggle to improve access to electricity for their populations, while for the less developed countries, there has been no significant improvement in terms of the number of people with access to electricity. Not much has changed in the past four decades in the less developed countries (Chaurey *et al.*, 2004). In fact, in Sub-Saharan Africa for example, those with electricity have decreased by 39 million from 2005 to 2009 (Sanchez and Tozicka, 2013). At the end of 2011 over 1.3 billion people had no access electricity globally and 95% of these live in sub-Saharan Africa or South-East Asia, while 84% of them live in rural areas. Nigeria is one of the most urbanized countries south of the Sahara on African continent with many of her large towns growing at between 4 and 5% per – annum despite the present economic recession (Sanchez and Tozicka, 2013).

Over the recent decades, a number of economists and geographers have studied small towns in less developed countries and have reached the conclusion that one of the ways to combat growing poverty, especially in the cities is by improving living conditions in the countryside (Corrado, 2010). According to these scholars the way to do this is by strengthening the position of small and medium sized towns to enable them to supply the goods and services required by the inhabitants of the surrounding rural areas.

The state of the physical environment especially in the urban centres is also a major source of global concern today (Ogundele *et al.*, 2011). The concern is greater in developing nations like Nigeria. This is evident from the fact that the urban environment is greatly of man's making. The safeguarding of the urban areas from human injurious physical, social, economic and political activities should be man's paramount responsibility.

### Historical Development in the Power Sector

Electricity in Nigeria predates the establishment of the Electricity Corporation of Nigeria (ECN) in 1951.

The history of electricity production in Nigeria dates back to 1896 when electricity was first produced in Lagos, fifteen years after its introduction in England (Okoro and Chikuni, 2007). The amalgamation of ECN and the Niger Dam Authority, NDA by Decree No. 24 of 1972 gave rise to the National Electric Power Authority (NEPA), mandated to maintain an efficient, co-ordinated and economic system of electricity supply for all parts of the federation. NEPA became a government monopoly, responsible for the production, transmission and distribution of electricity to final consumers. However, this exclusive monopoly of NEPA over the generation, transmission, distribution and sales of electricity ceased in 1998 in line with the privatisation drive of the Federal Government initiated by the change of name to PHCN (Power Holding Company of Nigeria) in 2005 (Okoro and Chikuni, 2007). Since inception of NEPA (renamed Power Holding Company of Nigeria, PHCN in year 2004), the authority expands annually to meet the ever-increasing demand. Unfortunately, majority of Nigerians have no access to electricity and the supply to those provided is not regular (Obadote, 2009). In 2013, part of the PHCN was sold to the private sector, the Generation and the Distribution while the government held on to the Transmission sub-sector by concessioning it to a Canadian firm – Manitoba. The distribution sub-sector interacts directly with the populace. This sub-sector, through its new owners are expected to expand the existing distribution network by injecting more distribution transformers and also new line.

## MATERIALS AND METHODS

### STUDY LOCATION: IFO TOWNSHIP

The study location is Ifo town, located in Ifo Local Government of Ogun State. Due to the availability of land resource and the low cost of living, Ifo town has experienced an upsurge in the population of residents motivating this work

A physical survey of the study location was carried out. Electrical installations like electric poles and transformers were assessed. We then used a focus group discussion (FGD) to explore the objectives of this work. Participants were recruited from the staff of the Ifo unit office of Ibadan Electricity Distribution Company (IBEDC) and Ota zonal planning office. Only participants who felt comfortable communicating their ideas, views or opinions were recruited. Open-ended questions which respondents answered in their own words were applied and it lasted for about 30 minutes for each respondent.

## RESULTS AND DISCUSSION

### The Need for Enforcing the Nigerian Town Planning Policy

The Nigerian Town and Country Planning Ordinance of 1946 constitutes the legislative basis for all laws and regulations governing urban and regional planning up to the present. The Act was designed to promote order in urban development by establishing planning authorities which could control urban growth and was modelled on the British Town and Country Planning Acts of 1932. The Nigerian Ordinance empowered local planning authorities to initiate urban plans “coordinating and facilitating the construction of public utility services, transport, communications, and other public services as well as conserving and developing the resources of the area concerned”.

Fadare (2004) stressed that the primary function of an administrative framework for planning is to control the use of land and the character and arrangement of buildings so as to achieve and secure convenience and beauty. Its purpose is to harmonise the human external and internal environment to invariably promote healthy and comfortable living. The main activities performed by the town planning authorities were development control, collection and processing of building plans.

From findings, there appears to have been a gross ineffectiveness in the implementation of the planning ordinance. Reasons given for the ineffectiveness of the major planning ordinance are:

1. That the national government stresses economic planning and downplays physical planning generally;
2. That local planning authorities are subject to excessive political interference in matters relating to development control;
3. That funding is inadequate to implement local planning schemes;
4. That there is a lack of a well-trained planning workforce at all governmental levels - federal, state and local; and that there is little coordination between planning levels: “instead there is usually competition between the local political authority and the local planning authorities.

The Role of Town Planning in National Development  
Town planning is a professional discipline in the field of environmental studies and management. Its role in national development is essentially for all town and country planning activities and development in the country. Town planning is a public-oriented development control fully managed by the government. Agboola (1985), defines development control or land use control “as a collection of interrelated para-legal and administrative techniques and instruments

designed to safeguard, regulate, conserve and disburse land or part thereof in the interest of the overall community”. Under the effective rule of law and good governance, physical planning is meant to take adequate control of future development.

The United Kingdom has a planning devolved into the Welsh Assembly, the Scottish Parliament and the Northern Island Administration (Umezuruike, 2015). Physical planning in the United States of America is tied to zoning and sub-division regulation (Kayden, 2000). Physical planning in Nigeria initially towed the centralised planning practices like the style of the British, but the enactment of decree 88 of 1992 as amended in decree 18 of 1999 conceived planning as practised in the USA.

### Town Planning, Electricity Supply and Development Control

Development control can be defined precisely as the process of implementing building and land sub-division regulations and specifications. One of the most notable features of many Nigerian cities is the very disorderly nature of the cities. There has been a phenomenal growth of urbanization resulting in our major cities growing and expanding in an unplanned manner.

Several settlements spring up, while many others expand at an exponential rate on a daily basis. Most of these new/expanded settlements require social facilities to make the inhabitants comfortable. A key factor to the quick establishment and expansion of an area is access to supply of electricity. In most part of the Nigeria, once a new developing area or community acquires a transformer, it encourages other land owners to develop their sites and therefore, several houses begins to connect indiscriminately to the electricity supply network.

Figure 1 below shows an indiscriminate connection to an electric pole.



Figure 1: Indiscriminate Connection to an Electricity Supply Pole



Figure 2: Broad View of Indiscriminate Connection to an Electricity Supply Pole

As stated earlier, the agglomeration of population into urban areas leads to the quest for more basic utilities and facilities to commensurate with the demographic structure. In Nigeria, areas originally designed for residence had often times witnessed an influx of industries leading to incessant power disruption in those areas due to heavy overloading of transformers which hitherto were meant for residential areas. This attitude constitutes external environmental hostility to the organisation. The effect of this is also felt where the standards are compromised because of the need to quickly meet demand. For example, Figure 3 – 5 below shows the compromise of standard materials and location of poles in a bid to meet up the supply of electricity to the newly developed area.



Figure 3 Broken cross poles



Figure 4 Broken cross poles



Figure 5 Falling electric poles

While Figures 3 and 4 show the effect of sub-standard materials, Figure 5 reveals the impropriety of the erection of the poles. A good relationship between the utility providers and the town planners would have either prevented or corrected this anomaly which had been there for not less than two years.

## CONCLUSION

This study examines the behaviour between the town planning and the power supply in Nigeria using Ifo town as a case study. Findings have revealed that power sector can not only be made effective by increasing

the power generated or increasing the transmission and distribution network. Effective planning is also required. The distribution system can be made more effective if the power sector work hand in hand with the town planning unit in order to cope with the rapid population growth rate. The role of town planner is essentially to develop towns and settlements within the country. The town planning unit will improve the stability of electricity supply and improve cost recovery if the city layout is properly carried out. Based on the above, the following recommendations will be advanced.

1. The communities that are being developed and need additional infrastructures such as additional transformers should be allotted and the relevant agencies such as town planning agencies should be involved in the process.
2. The town planning department should keep updated information on the developments in their domain, thereby providing improvement on the services of the energy providers and preventing indiscriminate connection to equipment such as transformer and lines.
3. The streets should be well numbered so that

bills would be sent to a specific address which will result in settlement of electricity bills promptly as working with the town planning will improve the market structure of the power industry.

4. The Federal Government should empower the Town Planning unit financially and technically so as to acquire the requisite knowledge and skills needed for effective collaboration with the electricity utility providers.
5. Electricity provider should work hand in hand with the town planning authorities in order to help in achieving the overall economic growth and ensuring a reliable service delivery.
6. The Urban and City layouts should be properly implemented in all Nigerian urban areas.

Current findings have revealed the lack of synergy between the power sector and the town planning unit. Thus, there is need for a conscious effort on the part of the two institutions to develop a mutual relationship in the area of town planning and electricity service provision for the benefit of the community at large.

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