Reinvigorating Urban Nodes and Spatial Growth in Akure, Nigeria

Joseph Omoniyi Basorun, Federal University of Technology, Nigeria

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Abstract

Rapid urbanization in developing nations of the world is quite obvious. In Nigeria, the uncontrolled intensification of land use at the designated business cores of its urban centres (nodes) is now an issue of serious planning and management concerns. Governments at various levels are currently facing the daunting challenge of controlling these urban physical and social problems of almost defied solution which planners are striving to address with planning-driven strategies. The interest in Akure for this research is because it is an urban centre and the administrative capital of Ondo State that has witnessed immense development and growth in commercial activities with incidents of multiple dysfunctional nodes. This paper disaggregates Akure into the specific neighbourhoods with nodes using remotely sensed and demographic data for analysis of relationship between planned and unplanned nodes in the city viz-a-viz the effect on spatial interaction. This will help to generate effective business core and for urban planners, environmental managers students/researchers while representing advisory mechanism to government and nongovernmental organisations.

Keywords: Urban centres, urban nodes, neighbourhood, business cores, land use, spatial growth, reinvigorating, planning, management, Akure.



1.0 Introduction

Urban business cores or nodes have become increasingly important as cities continue to grow and the spatial structure transforms into many problems with the poor development policies particularly in the developing nations. Cities are locations of high level of accumulation and concentration of economic activities and complex spatial structure that are supported by transport system (Protibha, 2010). The transport network in most cases, connects urban nodes, thus maximises the efficiency of urban and extra-urban space, allowing clients to visit businesses, customers to reach retail establishments and local residents to improve their mobility while undertaking economic and social activities.

The process of outward expansion of cities is a function of a number of interconnected alterations in economic, transportation, demographic, political, industrial and social specialities. These determine the land use activities and their spatial interaction. The increase in spatial interaction between the various land uses which results from increasing economic growth and urbanization as currently witnessed in major urban centres now becomes a great challenge. This is because the movements generated within and between the land uses produce conflicts along major traffic corridors and activity centres (Akhuewu, 2010). Commercial activities, for instance, are noted for their intensity, but there is limited amount of land "space" within most commercial business districts (CBD) of the urban centres where there are severed and varied demands for the little available space.

The expansion of the city and the complexity of the total environment lead to further development of multiple nodes at the periphery. These nodes increase as the existing ones are absorbed for others to emerge at the outer zone, thus, giving a perspective of development from the spatial realm. Interestingly, the diverse characteristics and uniqueness of these districts (business cores) make them attractive to both the inhabitants of and the visitors to these cities (Hidalgo et al, 2005; Carr and Servon, 2009). However, as the existing physical, social and economic conditions of these areas fail to satisfy the contemporary needs of urban dwellers, many inner-city inhabitants and activities have to relocate closer to the contemporary facilities of suburban settlements (Pojani, 2008; Vehbi and Hoskara, 2009).

In recent years, there have been many debates in the worldwide literature about how vitality and liveability in historic commercial districts in city centres can be improved in a sustainable manner (Balsas, 2000; Ribeiro, 2008). This study, therefore, aims at reinvigorating the urban nodes and spatial growth in Akure, Nigeria. The precise objectives are, to: (i)examine the urban growth pattern; (ii) identify the existing nodes and the associated land use problems; and (iii) regulate the use of land to achieve an optional coordination of different human activities for the improvement of the quality of life.

2.0 Review of Literature

Diverse approaches exist for urban land use planning and development. Onibokun (1985) opines that urban and regional planning or simply town planning, is a systematic assessment of ... alternative pattern of land use and other physical, social and economic conditions in such a way to encourage land user to adopt options that increase productivity and meet societal needs in a sustainable manner. To attain sustainable planning, however, requires an overhauling of environmental, economic

and social justices that uphold adequate and well managed infrastructural facilities for city dwellers, as well as "behavioural and structural changes that guarantee social equities between and within cities needs" (Odufunwa et al, 2012). In most parts of Asia and Africa countries, these cities remain the heart of a fast changing global economy and world economic growth with increasing urbanization growth and activities (UN World Urbanization Prospect Report, 2005).

Nigeria as Africa nation has been experiencing an accelerated shift of her populations from rural to urban areas. This rate of urbanization has engendered several challenges and problems similar to situations in other parts of the world (Muta'aHellandendu, 2012). As observed by Gharkhlu and Zanganeh Shahraki (2009), the investigation of growth stages and formal development of cities all over the world indicates that recent technological changes especially those in transportation, contribute to the rapid physical growth of cities and the change in their patterns. The established transport routes usually connect the urban nodes and facilitate movement to the commercial business districts for enhancement of economic activities and social interactions. What is apparent in the current urban scenario is that these nodes are being threatened and physically degraded by the impact of urbanization.

Vidinha and Faria (2007) highlight some problems causing loss of attraction of the city centres to include: the rise of new attraction centres in the suburbs; increased insecurity, the high cost and difficulties of accessibility and parking; the lack of leisure or entertainment facilities; changes of consumption and buying habits; and growing competition among the different forms of commerce. Reinvigorating these nodes involves "removal of the physical fabric and the active economic use or utilization of buildings and spaces with the support of three courses of actions' demolition and redevelopment; refurbishment and conversion for a new use" (Tiesdel et al, 1998)

Remarkably, urban node reinvigoration in the form of urban revitalisation programme has been applied in the United States Main Street Programme and the United Kingdom Town Centre Management scheme as an economic restructuring aimed at strengthening the economic base on downtown areas (Listokin, et al; 1998; Reeve, 2004). The Han District of Bursa had similar experience being a large city in Turkey located in north western Anatolia within the Marmara region. From theoretical perspective, this is accompanied by economic revitalisation, the main three principles which Vehbi and Hoskara (2009) describe as; "encouraging, having mixed land uses, tourism and high-income people with job opportunities, fulfilment of human needs and improvement in living conditions.

To achieve the above principles, Tiesdel et al (1998) suggest three different types of strategic approaches to restoring the economic viability of the commercial districts in the long term (Tulin et al, 2011). These are functional restructuring (new uses or activities replacing the former ones), functional regeneration (maintaining and improving the competitiveness of the area's existing retail concentrations) and functional diversification (new uses that synchronise and support the area's economic base). Urban planning generally is concerned with the organisation of urban space and ensuring orderly development of settlement and communities. Urban planning either in the form of designing new urban settlement, promoting urban growth or as a regulation of urban development is an old and constantly evolving science with its

basic purpose of ensuring healthy, safe and efficient urban environment for people to live in and execute their various activities. (Mngutyo and Ogwuche, 2013).

3.0 Materials and Method

3.1 Research Locale

Akure is an urban centre in Yoruba region of Ondo State in the South Western part of Nigeria. It became the provincial headquarters of Ondo Province in 1939 but now doubles as the capital city of Ondo State and Akure Local Government headquarters since 1976. These dual political roles of Akure have attracted people to the city and have changed its economic, social and physical structures. Akure locates at appropriately 700kilometers South West of Abuja, the Federal Capital of Nigeria and

about 350kilometers to Lagos (the former capital of Nigeria). It lies on latitude 7⁰ 5' North of the Equator and longitude 5° 15' East of the Greenwich meridian. It stands on the altitude of about 370 meters above the sea level (Ondo State Government Agro-climatological and Ecological Monitoring Unit, It shares geographical 2007). boundary with Akure North and Ifedore Local Government Area in North, and Idanre Local the Government Area in the south.

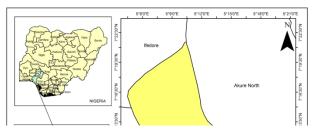
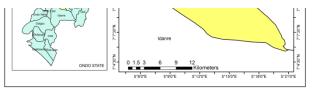


Fig. 1: Akure South in the National Setting



3.2 Method

With the aid of satellite imagery of Akure obtained via Google Earth (www.googleearth.com) coupled with reconnaissance survey, the number of existing nodes in Akure was determined to represent the research spots. The google earth imagery and the global positioning system (GPS) were used to validate the coordinates of the nodes in Akure. The street guide map of the city was saved in an image-exchange format and plotted out in ARCGIS 10 software. Subsequently, a buffer was carved out as service or patronage area of each node after contacting the residents in the area. Other required data on spatial interaction were collected through literature search, master plans, field observation, discussion with focal groups and Heads of Urban and Regional Planning Unit, Ondo State Ministry of Housing and Urban Development as well as the Akure South Local Government secretariat.

4.0 The Spatial Growth of Akure

The city's morphology has changed over time to assume its present status. The growth is in the form of a dual process of external expansion and physical or internal growth and reorganisation. The presence of government seat in Akure, job opportunities, provision of community facilities (road, water, etc) and social facilities (hospitals, schools, markets etc) precipitated the migration of youths from the surrounding towns/settlements for job opportunities among others, leading to increase in population (Okoko, 2002). In 1952, Akure had a population of 38,852 which

increased to 71,106 in 1963 at a growth rate of 5.5% per annum. The city population has been growing sporadically since the creation of Ondo State in 1976. It was estimated as 164,000 in 1984 and 239,124 in 1991 (NPC, 1991). This figure was projected to 269,207 by the National Census Board in 1996 and put at about 353,211 by the Federal Bureau of Statistics in 2006.

The city accommodates quite a number of Federal, State and Local Government establishments (ministries, industries, administrative, educational/research etc.) trade centres, statutory co-operations and quasi-governmental institutions, thus attracting large spectrum of immigrants. It has witnessed remarkable growth in its organisation in recent years and its population in the past few decades has more than tripled (Ifeoluwa et al, 2011). The resultant effect is rapid growth of the built-up areas of the city which has made it one of the fastest growing metropolitan centres in south-western Nigeria. Geographically, Akure is compact; of about 8-kilometer radius from the city centre and contains roughly 730 residential family and public layouts as well as administrative quarters served with about six notable nodes along the six major roads. Major private and public land uses along the routes were examined to ascertain the complementary roles played in attracting population to boost trading at the nodes.

Table1: Major land uses along the main routes in Akure

S/N	Route	Node	Major Landuse
1.	Oba-Adesida	King's (Central) Market	•
2.	Ondo Road	Isikan Market	(i) Army Barracks (ii) Prison (iii) Police Station (iv) Schools (v) Warehouse (vi) Radio Station (vii) Television Station (viii) Coca-Cola Depot (ix) Motor Park
3.	Arakale/Ode/Igbatoro	NEPA Market	(i) School of Nursing (ii) Federal Secretariat (iii) State House Of Assembly (iv) Governor's House (v) School Of Health Technology (vi) Investment Holdings (vii) Maternity Centre (viii) Hotels (ix) Old National Electric Power Authority (NEPA) office.
4.	Aule	Mojere Market	(i) Pharmaceutical Shop (ii)

			Automobile Workshops (iii)
			Schools (iv) Petrol Stations
			(v) Churches (vi) Hospital
			• • • • • • • • • • • • • • • • • • • •
5	Oke-Aro	Idanre Garage	(i) National Open University
		Market	of Nigeria (NOUN) (ii)
			Motor Park (iii) Police Station
			(iv) Banks (v) Event Centres
			(vi) Churches
			(vii) Ware Houses (viii)
			Housing Estates (VIII)
			Housing Estates
6.	Ilesha/Benin	Onyarugbulem	(i) Federal University of
0.	nesna benin	Market	Technology (ii) Nigeria
		Market	National Petroleum Company
			Depot (iii) Cocoa Refinery
			(iv) Automobile Market
			(v) Federal Road Safety Corps
			Office (vi) Nigeria Union of
			Teachers Secretariat (vii)
			Hotels (viii) Petrol Stations
			(ix) Federal Government
			Housing Estate (Shagari
			Estate)

Source: Author's findings, 2015

5.0 Features of the Urban Nodes

5.1 Physical Planning

Apart from the central market (King's market), none of these nodes was initially planned as a district or neighbourhood centre. In the recent state government urban renewal approach, Nodes 1, 2 and 3 were planned and redesigned; comprising open and lock-up stalls with parking spaces to improve the architectural outlook and attract patronage. However, the existing physical condition of the nodes cannot satisfy the contemporary needs of the urban dwellers. First, there is arbitrary demarcation of family lands in these areas, houses and compounds are developed without reference to any specific system of layout, thus, complicating the physical landscape. Second, traffic problems have been aggravated by newly constructed shopping malls and

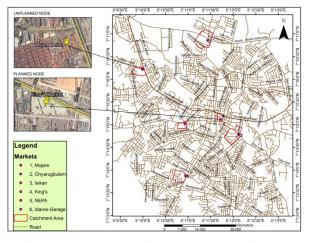


Fig 2. The Urban Nodes in Akure Street Guide

transport infrastructure to improve accessibility. This in turn pushes out the low-income inhabitants from the and interaction node increases between land use and transport or communication. Consequently, there is the difficulty of adequate parking and lack of diversity of uses such as leisure activities to attract different age groups and new expectations for nodes. The town-centres atmosphere lack pleasant environment that can encourage shoppers to relax, socialise and enjoy the shopping experience. Most shoppers now desire unique shopping places that reflect the characteristics of the locality and prefer more natural environments where there is a feeling of contact with the outside world. (Coleman, 2006).

5.2 Sanitation

Sanitation continues to be of central concern at Akure urban nodes with respect to the manner in which the environmental quality is distorted. Predominantly, the solid wastes generated by the inhabitants of the nodes are disposed indiscriminately to constitute heaps of garbage/refuse overflowing onto major roads, thereby blocking drainages to result in flooding. The extant refuse collection bins cannot optimally cater for the volume of solid waste generated across the nodes, particularly at nodes 4 and 5. Other sanitation-related issues include: high occupancy ratios of 4 to 5 persons per room, traditional means of heating (such as the use of saw dust and firewood) and lack of toilet and bathroom facilities. The efficiency of the Ondo State Waste Management Board (OSWMB) is hindered by high urban agglomeration. In effect, the quality assurance of the nodes remains an assumption with profound risk on the environment and human health. As noted by Lawal (2014), the participation of the private sector is highly desirable if we must realise effective waste management and healthy environment for a productive living.

5.3 Securit

Security is an important factor of node-visit frequency and determinant of consumers' convenience. No doubt, these nodes locate in major commercial axis incorporating the main market, wholesales or warehouses, private and government institutions. They are designated business cores of high intensity, where pressure from interest groups prompts many more development projects. The phenomena of illegal re-building, partitioning, attachments or building extensions and new constructions are pervasive throughout the nodes. Some other structures like kiosks, temporary sheds, etc are jampacked with the unfenced (nodes 1, 4, 5 and 6) markets. This paves way for incessant night theft or burglary and fire outbreak resulting from unwieldy development and extensive high density growth. With security a node becomes more active and flourishing economically and commercially, as jobs and services are protected (Hillman, 1996).

5.4 One-Stop Shopping

The urban nodes are separate nuclei; quite similar but with specialized functions that make each a completely different order. In most cases, they are characterized by concentration of retail businesses, offices and lower-order service activities of unique accessibility and convenience to people. Most of these nodes offer temporary convenience to consumers through one-stop shopping. This patronage behaviour (often interpreted as a spatial factor) implies that, "all but the most esoteric of shopping needs can be satisfied in a single or one centre, all at a time" (Kaufman, 1996). Arentze et al (2005) argues that multi-purpose trips are increasingly undertaken by consumers. Research even reveals that multi-purpose shopping is becoming highly popular, accounting for up to half of all shopping trips (Cairns, 1995). It occurs when consumers are able to purchase both higher and lower-order goods in a single trip (Vaughan and Valerie, 2009).

5.5 Nglect

Many of the urban nodes have served as centres of trade for centuries. No doubt, they still accommodate some commercial buildings and other features of historical and cultural value; they are constantly neglected due to rapid urbanization. The rapid urban growth increases mobility and the rising attractiveness of suburbs settlements. With the main focus on the construction of inter-regional road types and hierarchies, channels of communication and interaction are established, thus, leading to the collapse of the city nodes.

6.0 Policy Issues and Conclusion

Urban planning is concerned with the organisation of space to ensure healthy, safe and efficient urban environment for people to live in and execute their various activities in the most convenient manner. Urban node, indeed, is a critical factor in the process of spatial development both at regional and local levels. In Akure, the rate of growth of the nodes is rapid, hence the need for their proper management to attain sustainable and systemic urban growth pattern. This paper has unveiled the challenges of these nodes, ranging from the unregulated spatial development to poor sanitation and security, one-stop shopping and neglect. The management of the nodes in a smart manner, therefore, is advocated. This requires a joint effort by the State Government and its Development and Property Corporation (OSDPC) in creating a range of housing opportunities and choices for prospective builders; fostering distinctive and attractive communities with a strong sense of place at the suburb; and preserving open spaces, natural beauty and critical environmental areas for recreation at the nodes. The OSWMB in collaboration with private organisations should make provision for adequate trash bins at the nodes for regular waste disposal.

Further efforts of the state government should concentrate on centralizing public facilities (markets, police post, fire station, multi-purpose shopping malls etc) in local communities or neighbourhoods with competitive capability as the current nodes. It should also encourage citizens (community and stakeholders) to participate in spatial development decisions particularly in providing a wide range of housing options for different classes of people under a public-private partnership (PPP) approach. All these promise to elevate quality of life, security, dynamism and support occupations and services at the nodes as Akure environment begins to witness functional restructuring, regeneration and diversification in its spatial growth.

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 $\underline{nbason@yahoo.com} + 2348034721450$