

The Emerging Central Business District (CBD) in Lafia Town, Nigeria, and its Related Urban Planning Problems

Barau Daniel, and Bashayi Obadiah

Abstract—A spatial analysis of a large 20th century urban settlement (town/city) easily presents the celebrated central Business District (CBD). Theories of Urban Land Economics have easily justified and attempted to explain the existence of such a district activity area within the cityscape. This work examines the gradual emergence and development of the CBD in Lafia Town, Nigeria over 20 years and the attended urban problems caused by its emergence. Personal knowledge and observation of land use change are the main sources of data for the work, with unstructured interview with residents. The result are that the absence of a co-ordinate land use plan for the town, multi-nuclei nature, and regional location of surrounding towns have affected the growth pattern, hence the CBD. Traffic congestion, dispersed CBD land uses are some of the urban planning problems. The work concludes by advocating for integrating CBD uses.

Keywords—Urban planning, Central Business District (CBD), downtown.

I. INTRODUCTION

THE agglomeration of populations of people into relatively large settlements, as a result of food surplus, suitable defense locations, and water source and rudimentary technology dates back to pre-history [1]. Probably the singular visible evidence without statistical count of human population growth is the number of large and larger settlements that have characterized every society and culture from unrecorded time to the present. In Africa, ancient Urbanization is traced to Egypt, Alexandria being one of the earliest cities [2].

West African and indeed Nigeria Urbanization are often discussed on the basis of pre and post Colonial urban structure which has affected the CBD structure of earlier Nigerian cities [3]. Spatially, a city is viewed as a combination of activity areas, built up spaces worked together by communication routes. The CBD is one of these activity spaces. The evolution, subsequent control through urban planning and design of the CBD affects its functionality and that of the other component of a city.

The paper primarily examines the emerging CBD of Lafia town, in Nigeria with a view of unraveling urban planning

Barau, Daniel is with the Department of Urban and Regional Planning, Nasarawa State Polytechnic, Lafia, Nigeria. (phone: 08036752189; e-mail: baraudaniel@yahoo.com).

Bashayi, Obadiah is with the Department of Urban and Regional Planning, Nasarawa State Polytechnic, Lafia, Nigeria. (phone: 08038069607,08022059170; e-mail: tpolobedcrown@yahoo.com).

problems caused by its emergence. The following objectives will guide the sequence of the work.

- (i) Concept and Nature of CBD's with particular attention to Nigerian cities
- (ii) The Emerging CBD of Lafia town
- (iii) Problems of CBD's
- (iv) Some suggested guidelines in the planning, design and management of CBDs

II. CONCEPT, AND NATURE OF CBD'S

All the three socio-spatial theories in Fig. 1 [4], [5] subscribe to the presence of a component part of a city called the Central Business District. Reference [6], [7], it is that part where activities seem most alive in the North American Literature; hustly and bursty. In many cities it represents where the city began or the earliest part of the city, except in cases where massive planning and redevelopment have strongly influenced its location through planning policies and design.

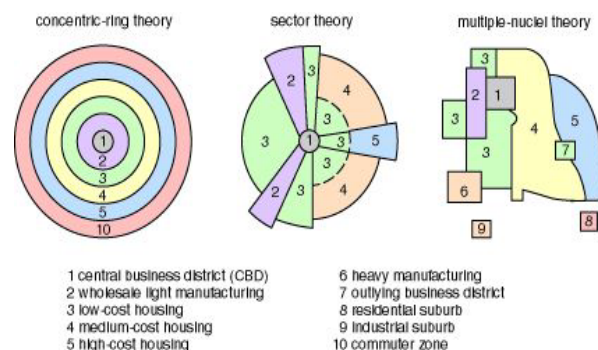


Fig. 1 Three models for looking at the pattern of land use in older towns and cities

The concentric model, suggested [8], displays a series of concentric circles with the central business district (CBD) at the centre and the commuter zone on the outer ring. The sector theory, put forward by Homer Hoyt in 1939, has industrial and residential zones in sectors radiating from the CBD at the centre. The multiple-nuclei theory was developed [5]. In this model, the different zones grow in several independent areas rather than solely around the CBD.

The CBD represents the core area where daytime population concentration and density is highest compared to other parts of a city. Further sociological description of the

CBD is that it is the zone that is surrounded by the low class workers principally because they work within the CBD as live close to it as building structures are of poorer quality so rents are low. Also, the advantage of paying less in transport cost to reach the CBD is given as a reason for the low class workers living immediately around a CBD.

Probably the economic interpretation of land use structure within a city including the CBD has given a clearer understanding of existence and expansion of a CBD. One of such early models that seek to interpret urban land use is that of Richard Hurd cited in [9]. Hurd asserts that any utility or activity may compete for any location within the city, and all lands go to the highest bidder. In this model competition is the basis that distributes the spatial pattern of urban land uses including the CBD uses. A similar work by Haig in 1920 cited in [10] argues that rent paid on urban land is a charge for accessibility or savings in transport cost. The process of bidding is to determine the occupant and hence its use. The principle that determines the layout of a metropolis is the minimization of cost of friction of space. In this model, rents, transport costs, and location are interdependent. A third model which seems to have gained prominence as the basis economic interpretation of land use is that of Ratcliff. Reference [6], [9], this model maintains that land use is determined by the relative efficiencies of various uses in various locations. Efficiency in use is measured by the ability to pay rent and ability to extract economic utility from a site. The process of adjustment in city structure to most efficient use is through competition of uses for various locations. The use which is able to extract the highest return from a given site will be the successful bidder. This is the basis of the orderly arrangement of land use pattern to perform most efficiently the economic functions that characterizes the urban life. In [11], it was found out that application by land developers in the city of St. Catherine, Canada, were those seeking approval to change the existing use to that which will attract a higher economic benefit. Thus economic forces allocate land uses, shaping the city especially the CBD which is mostly competed for because of its accessibility. Reference [12] describe the 20th century CBD (and still exist in this 21st century) as that which gave the visual expression to the growth and dynamics of the industrial city. The CBD became the symbol of progress, modernity and affluences. It gave the precise status of any particular city from size and degree of economic, social political and cultural life of cities. The organization of the functions within the CBD set the framework for the future of the development of the city. Four major areas of the CBD are identified as:

- a. Department stores and shopping
- b. Districts Downtown office
- c. Districts Warehouse zones
- d. City Halls and Civic parade

A further analysis of these four areas spatially shows a high density core with retail, offices, entertainment and civic zone. The lower density frame consists of warehouses, educational facilities, Hotels, Medical services, and antiquarian bookstores picture frames etc.

A typical Nigerian city's CBD may have same features. Reference [13], describes three types of city centre in Nigeria unlike the single one described above which is typical of most American and post industrial Western cities. The three types of cities centres are:

- i. The single centre cohesive pattern centre (Onisha, Calabar and Sapele),
- ii. The non cohesive single centre (Enugu, Maiduguri, Kano, Ilorin, Zaria, Ibadan),
- iii. Multi-centres (Kaduna, Port-Harcourt and Lagos).

The nature of the structure of Nigerian cities and their CBD's largely depends on whether the city in question is pre-colonial or post-colonial. Most pre-colonial cities centres are dual city centres, [14], [15] and post-colonial city have single centres, a little more close to the typical Western European city. The Nigerian CBD's especially those of the pre-colonial cities have many functions which are non existence in the CBD's of American cities; these including hawking, open and multi shopping points of food, soup materials, clothes etc. These exist and may cover a considerable area space and is distinct from the modern large departmental stores for both wholesale and retail business including offices, few eateries etc. as described earlier. The former represents the Nigerian traditional city centres, while the later represents the influences of colonialism on urban form, architecture and urban life. This dual city centre phenomenon presents some urban planning challenges in some Nigerian cities.

III. THE EMERGING CBD OF LAFIA TOWN: BACKGROUND OF THE STUDY AREA

A. *Origin and Growth*

Present day Lafia has its origin as a multiple nuclei of the Migili and Alago market point, in the early 1700s, the arrival of Borno emigrants (beri-beri) late 1700s [16] and the establishment of a railway station in the mid 1800s. The beri beri who were accepted and permitted to settle by the Andoma of Doma were admonished to live in peace (lafia in hausa language) with other ethnic groups. Hence, Lafia became the name of the settlement. The north/south Port-Harcourt, Maiduguri regional road that passes through the town, and agricultural rich hinterland reinforced the permanency of the settlement. The rapid growth of Lafia to its present size is attributed to political, social and national development. Regionally, after the civil war, (1968-1970) both soldiers and civilians settled in Lafia contributing to its growth. As a major railway station (when passenger and goods trains were in operation before the civil war and after, up to 1985), Lafia attracted and still attracts farm produce and passengers from the hinterland. Hence the location of the present Lafia market and commercial ribbons has physical links to Lafia railway station. Presently Lafia town is the administrative headquarters of Lafia local government and headquarters of Nasarawa State. Lafia local government was one of the local government in the then Benue- Plateau State in the 12 states structure of Nigeria between 1966 and 1976. Benue and Plateau were two provinces in northern Nigeria. And Lafia

Native Authority (local government, as they were then called) was part of the Benue province. When Benue state was created from Benue Plateau state in 1976, the Lafia local government opted to remain in plateau state. The Lafia local government of 1976 was later split into Lafia, Awe, Doma, and Obi local governments of more states in the country in 1996, Nasarawa state was one of them with Lafia as the headquarters of the state.

B. Regional Setting

Regionally, Lafia town is about 100km (straight distance) from the federal capital city Abuja and approximately south-east (SE) from federal capital territory (FCT). This means that Lafia town is within the 100km radius from the geographical centre of Nigeria. A regional trunk 'A' road passes through the city thus fostering inter-regional interaction. Cities that are of higher population size and higher order services that Lafia city interacts with are Makurdi (100km) south, Jos (190km) north east, and Abuja (180) [see Fig. 2], Lafia in National/Regional setting. All those cities have express roads linking them to Lafia. As a state capital and large city, Lafia serves as a higher order city in the provision of consumer goods, administrative and other services to the immediate smaller towns that are directly linked to it. Such towns are, Nasarawa Eggon (20km and North of Lafia), Akwanga (60km, North) Doma (30km, South west) Kadarko (45km South) Assakio (40km West) and few other towns.

Lafia as the headquarters of Lafia local government has several towns and villages, some which have expanded and are mapped as independent nucleus of the larger Lafia area. Shabu, North of Lafia is physical part of Lafia metropolis, also is Kwandare [See Fig. 3, map of Lafia LGA]. These were small independent towns some years ago but are today part of the larger Lafia metropolis using the public facilities and services available to Lafia people.

C. Physical Features of Lafia

Reference [17], put Lafia as belonging to the Benue valley. The major stream, a river west of Lafia drains into river Mada which flows into Benue drainage basin. The soils are sandy making many un-tarred roads (most roads are unturned) difficult to use either by cars or motorcycle. Below the sandy soils are sedimentary formations that are easily eroded when there are heavy rains, creating gully's and floods on low lying roads that have no storm water drainages.

Geologically, [17] describes the metropolis as sitting on Lafia formation. This formation comprises essentially of sandstones which are brownish. The sandstones are described as fine to coarse grained friable and telepathic. The sandstone formation is not of even thickness, as the formation increases in thickness from south to north ranging between 10m to 150m.

The climate is characterized by, high temperatures, ranging between 27 – 30°C mean annual. The relative humidity is between 60-80%, with rainfall ranging from 1120mm to 1500mm spanning between late March to early November. The metropolis as any other large human settlement has

greatly altered the natural vegetation. The natural common grassland savannah trees like shear butter, locus beans tree, Maje (Hausa) are hardly seen. These have been thinly replaced by mango, nymph, cashew, gmalina, eucalyptus, making the built up area naked vegetationally.

IV. THE CBD OF LAFIA

Lafia Urban area has an estimated population of about 400,000 [18]. Basically, the physical form of Lafia is lineal about 25km of road length approximately north south. The width varies along this length of between 8km at one end, bulging to 15km towards the centre of the length wise and finally reduces in width again to about 6km. Crude calculations puts the built up area at about 250km sq (Approximately 25000 Ha).

Using the indices of a CBD described in the foregoing section i.e. concept and nature of CBD makes it difficult to isolate and determine the CBD of Lafia. This is because there are strong several isolated spots of business and related CBD uses. Three prominent areas are:

A. The Bukan Sidi Business / Civic Districts

This district has the city stadium, many eateries, few banks with the largest bank building (Central bank building) ongoing. There are also, professional offices, with a very high day and night population concentration within the area. The main road passing through the city as described in the regional setting separates these buildings and uses so that they are on two sides of the road. This district also has a very large existing and emerging civic buildings, the state government ministries and federal Government secretarial when fully in use these will employ thousands of people and generate and attract traffic.

B. The Government House Civic/ Business District

This district has civic uses of a city hall, the two city libraries, a Government House (seat of the state government), State government legislative building, Hotels and eateries, tertiary educational institutions, not less than eight government ministries. There are large shopping stores mostly retail. The day's population is high but care than that of Bukan Sidi at night because of the presence of government House. This district about 10km away road length wise away from the former, and also not along the same road of the former, but on another regional road that meets the road that cuts the city, north-south wise.

C. The Older Lafia Business Districts

This district has all of the uses as in the other two but less of governmental civic use and more of street hawking and street vehicular parking. A common feature in most Nigerian towns that helps distinguish which part is the oldest is the presence of a postal station normally near a railway station. This district contains the town's postal station near a railway station which flourishes in other stationary retail business than the postal service. Since the increased usage of digital electronic mails (ICT), the large area reserved for the expansion for the postal

service is occupied by several other uses including eateries. This may be said to be the emerging CBD of Lafia over the others because of gradual change in land use from residential use to commercial use. Whereas the former districts described might have had their land uses being agriculture then straight to business use. But uses in this district may be adjusting to a third more land use type i.e., changing to higher economic use. Other reasons that may accept this district as the emerging CBD of Lafia are:

- i. The presence of high day population and also in the night.
- ii. Its local name, terminus.
- iii. Has the highest number of short distance traffic lights to regulate the heavy traffic in the district.
- iv. It contains the only town's city beautification sculpture that attempts to depict the states cultural heritage in a roundabout.
- v. There are ribbons of business use along some streets that enter this district e.g. the building material and the traditional market.
- vi. The presence of the oldest police station.
- vii. It is the most accessible area (for now) from other parts of the growing city.

V. PROBLEMS OF CBD'S

The development of highway that could accommodate large shopping malls with adequate parking space in America urban revolution of the mid 20th Century was an attempt to solve problems of CBD's by relocation some CBD's the various forms of urban governance structure that emerged in the U.S. in this period (mid 60's) such as the commission system, the manager system, and the Mayoral system were effort geared towards rapid urbanization and the problems of CBDs- congestion and gradual decay [19]. This is partly the problem of the emerging CBD of Lafia town. Being one of the earliest parts of the city, there are very old residences presently an image of a decaying city rather than a CBD. Also the presence of a traditional market close by, the very high usage of motorcycles as a means of urban transportation, and the intercity vehicular traffic that have to pass through this part make the congestion problem a significant one.

The decaying nature of the emerging Lafia CBD needs to be probed further. New and modern commercial buildings require large land lots to build on. Assembling land in this oldest part of Lafia is rather difficult because of various ownership of small holdings for some of the buildings; there are several owners because of inheritance system, so up keep or selling is difficult. So new CBD uses unable to find lots for development opt to conglomerate in other places as their new location offers an added advantage of lower cost of land per unit area. This explains the reason for the fast growth of the two CBD/civic districts discussed earlier. Thus the slow changes add to decaying nature of the CBD especially where the very old residences are adjacent to any new successful development like banks.

An urban management or urban planning student can easily say the problem exists because of lack of urban development

plan for the city, designating and defining the CBD and other land uses. But experiences have shown that plan implementation including land use control has a low percentage of achievement. Planning practice does not exist in vacuum, the politics, culture and economy of the people must be contextualized even in planning policies. There may be a further need for research into urban land ownership structure and fashioning policies that can accommodate faster changes.

Environmental pollution in the form of high level exhaust emission by motorcycles and vehicular traffic, though not mentioned earlier cannot be ignored as one of the problems of the emerging Lafia's CBD. Prolong dense fog/mist as a result of high level emissions by automobiles in the central area of Lafia is visible in the mornings and evenings. The issue of poor environmental quality of many cities in Nigeria, including unattended solid waste (paper cartons and polythene bags) also abounds in the city of Lafia. To enhance visual aesthetic urban designers look for some ingredients in CBDs that will mellow down tension, such as some leisure spots, large walk ways to accommodate pedestrians, entertainment and so forth. These are completely absent in the emerging CBD of Lafia city. 'Necropolis' refers to a dying city in Greek literature. This is not the case of Lafia. It is simply a city which is rapidly urbanizing and is unable to cope with societal expectations of what a city should be, and may be the proverbial problem of new wine in old skins. Nevertheless, some immediate and gradual improvements can be done.

VI. SOME SUGGESTIONS AND RECOMMENDATION ON DEVELOPMENT OF LAFIA TOWN CULTURAL AREA

As shown in the foregoing sections, central areas of cities do depict a lot about the city. Because the problem of decaying central area of Lafia is not peculiar, as some other cities in Nigeria may have similar situations, it is hereby advocated that a regional or national survey of cities of certain sizes be done by the federal ministry of Housing and Urban Development. The survey will give the existing conditions of such cities. The result of the survey on the existing condition should be made public for all interested parties in urban development for reasons that will be explained later.

Urban revitalization especially of city centre is not new considering the long history of urbanization as discussed earlier. In Nigeria, the history of planning can't be without mentioning the Lagos slum clearance of 1883 [20]. Recent initiatives in this regard has suggested strategic planning as Leinberger report as cited in [15]. The report lists twelve steps that may be applied to decaying and dying city core as:

1. Capturing the vision
2. Developing a strategic plan
3. Forging a Healthy private / public Partnership
4. Making Right Things Easy
5. Establishing Business Improvement Districts
6. Creating a Catalytic Development Company.
7. Creating an Urban Entertainment District
8. Developing a Rental Housing Market
9. Pioneering Affordability and strategy
10. Focusing on for-sale Housing

11. Developing a Location Serving Retail strategy.

12. Recreating a strong Retail Market

These stages may not all be very strong or highly emphasized as Lafia being not yet a large metropolis. The usefulness of making the survey of cities public as suggested earlier is allowing a Public/Private Partnership (PPP) Development purposes. Financial institutions like mortgage and Commercial Banks will need to study the report of survey so as to make decisions on development of any components of the CBD. Common areas of such investments include eateries, entertainments centre, shopping malls, and even organized leisure places which translated into action. This means that necessarily planning administrative and legislative structure and institutions will have to be put in place. Some of these measures will improve the outlook of these measures will improve the outlook of the emerging CBD of Lafia and the city as a whole.

ACKNOWLEDGMENT

Authors would like to express their gratitude to the Management of Nasarawa State Polytechnic through the TETFund intervention to do this research, the Academic and non-academic staff of the Department of Urban and Regional planning other colleagues in Urban and Regional Planning profession who have been helpful as well at various stages of the research. Authors are also grateful to the Rector, Nasarawa State Polytechnic for his support.

Authors wish to thank field assistants- ND II URP 2011/2012 session of the Department of Urban and Regional Planning, Nasarawa State Polytechnic, Lafia.

APPENDIX

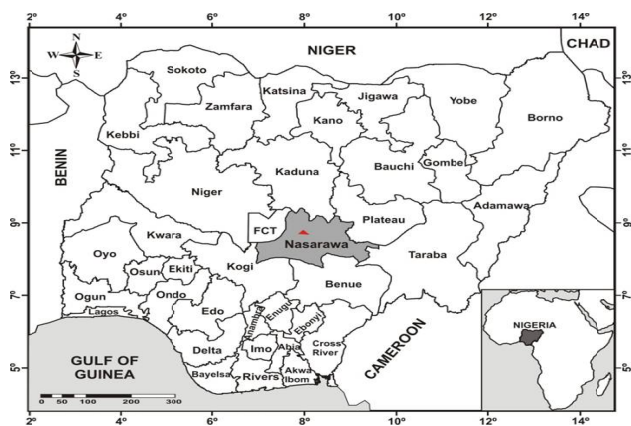


Fig. 2 Map of Nigeria Showing Nasarawa State



Source: Greater Lafia master plan, 1998 SCALE: 1: 100,000

Fig. 3 Map of Nasarawa State Showing Lafia Local Government

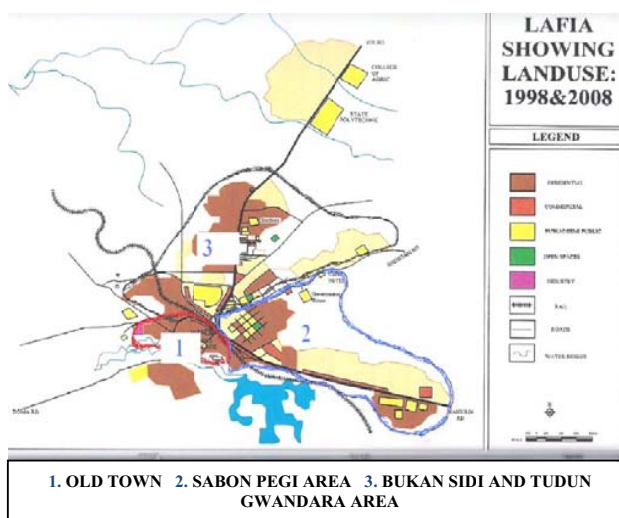


Fig. 4 Map of Lafia Town

REFERENCES

- [1] Mumford, L. what is a city? In the city Reader. Le Gates, R.T. and Frederick S., (ed) Rut ledge, London and New York. 2000.
- [2] David, K.. Cities: Their Origin, Growth and Human Impact (W.H. Freeman and Coy, San Francisco). 1973.
- [3] Urquhart, R. Planned Urban Landscapes of Northern Nigeria, Ahmadu Beels University press, Zaria. 1977.
- [4] Homer Hoyt, 1933. The Structure of Growth of residential neighborhoods in American cities, Washington, D.C., Federal Housing Administration.
- [5] Harris, C.D., and E.L. Ullman, 1945. The nature of Cities; The Annals of American Academy of Political and Social Science, 242: 7-17.
- [6] O'Sullivan, A. Urban Economics Mc Graw HIV New York. 2000.
- [7] Fellmann, J.D; Getis, J, and Getis, A. Human Geography: Landscape of Human Activities, Mc Graw H.U New York. 2005.
- [8] Burgees. E.W., 1925. The growth of the City: An Introduction to a Research Project' Publication of the American Sociological Society, No 18, 1924, pp: 85-97.
- [9] Cartar R. The study of Urban Geography, Edward Arneld London, 1995.
- [10] Chi-seu Liang. Urban Land Use Analysis. A case study of (Hong Keng, Ernest Publications). 1973.
- [11] Barau, D. Zoning: Astudy of urban Land use Zauing in the city of st. Catherines, Canada. (An unpublished B.A (Hons) Thesis, 1982 Brook, University, Onatario Canada). 1982.

- [12] Mc Carthy L and Knox, P. L. (2005) Urbanization Pearson, prentice Hall, New York.
- [13] Uyanga, J. T. Towards a Nigerian National Urban Policy Ibadan University press Ibadan, Nigeria. 1982.
- [14] Agbola, T. Urbanization, physical planning and Urban Development in the West African Region. Proceedings of CAP West Africa, November 14-15, 2008. Abuja- Nigeria. 2005
- [15] Gyuse, T. Arresting Urban Decay in Nigeria; Option and strategy 39th Annual Conference of Town Planners 2008, Yola, Nigeria. 2008
- [16] Oyigbenu, P. E. The making of Obi Local government: Account of Sidi Bako's 1st and 2nd term. S. Evans press Enugu. 2005.
- [17] Offodile, M.E. Groundwater study and development in Nigeria Mecon. Services Ltd., Jos, Nigeria. 2002.
- [18] Abumure F. S. Urbanization. In Atlas, Nigeria. Ed Jaguar, Paris France. 2002.
- [19] Sylvester, I. Urban Governance of Nigerian Cities. 42nd Annual Conferences of Nigerian Institute of Town Planners, Kano. 2010.
- [20] Oyesiku, K. Modern Urban and Regional Planning Law and Administration in Nigeria. Kraft Books Ltd, Ibadan. 1998.