Analysis of Commercial Land Use Proposal Changes in Relation to Physical Planning Decision in Jimeta, Nigeria

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Abstract: Commercial lands in most Nigerian cities have extended, encroached, and converted adjoining residential land uses in a manner totally outside the scope established by planning authorities. This lead to traffic obstruction, overcrowding, fire and health hazards, and degradation of urban quality. Therefore, this paper aim to identify the factors responsible for the pattern of commercial land development with a view to consider them as input for an effective commercial land control and development in Jimeta. Data including maps and information obtained from various sources were used to prepare a 'snap shots' of commercial land and activities located within various land uses of Jimeta using ArcGIS 10.3.1. The study revealed that the core commercial land development in Jimeta was initially on the bank of River Benue. However, the Master plan of Jimeta in 1976 moved this central business district (CBD) away from the center of development. Banks and hotels were included in the core plan of the CBD, but it was not effectively implemented. The factors responsible for the uncontrolled nature of commercial land development in Jimeta include failure of planning agencies, under-allocation of land for commercial use, permission by Institutions, political interference, and lack of protection of the Master plan. The study conclude that in other to minimize such problems in future there is need to make the Master plan a legal document by legislation. The production of a Master plan should be accompanied by a well-articulated planning brief that specifies commercial land requirement in every sector and sub-sector.

Keywords: Commercial land use change, physical planning decisions, urban plan

1. Introduction

In most Nigerian cities, land allocation for commercial activities are proportionately small in relation to other land uses especially residential. The evidence for this could be seen in many land use proposals for major capital cities. Furthermore, land use documents guiding development has tended to centralize location of commercial land but in some few occasions, commercial land are provided for in the neighborhoods. One may rightly conclude that commercial land allocation follows the format of western models of city structures as guidance. Indeed, planning manuals/standards tend to recommend a much lower percentage allocation for development. For example, land use proportion guidelines mostly suggested a percentage of not more than 5% for major cities in Nigeria.

The reality is however being radically far ahead of assumptions in development plan proposals in almost all cities, concerning expansion and growth of land for commercial activities in terms of size and geographical presence. The reality is also in excess of prediction of limits and of capacity of planning agencies to control commercial activities as cities grow. Some prominent example includes Abuja, the capital of Nigeria within the residential areas of Zone 2. This previously residential zone has been transformed into a commercial activity area occupying more than 50% of the land area of that neighborhood. In Kano city, the frontage of almost all major roads and prominent streets have been converted into commercial shops for a variety of purposes. This is more severe around markets where commercial activities have spilled beyond their intended limits. Commercial activities in Nigerian cities has taken an independent character despite the regulations to guide it development, geographical limits, specified activities and intensity of use. Many commercial land proposals are in reality in excess of their boundaries. Most local markets have extended, encroached, and converted adjoining residential land uses in a manner totally outside consideration or scope established by planning authorities. Commercial activities also take up a variety of functions often unintended in the initial land use proposals, for example, the activities may be livestock markets, grain produce, building materials, general goods or spare part for automobiles. Shops along major avenues are often carved out of residential buildings and can stretch for kilometers impacting on smooth flow of traffic. Commercial vehicles transit areas, known as 'motor park' in Nigerian English, often attract and develop commercial functions that in time serves the residential neighborhoods around them, but in the process become undesirable.

1.1. The Framework of Analysis of Commercial Land Development in the Context of Nigerian Cities

It may be difficult to explain the development of commercial land within Nigerian cities as driven on the basis of western models of commercial activities, essentially due to historical and social reasons based on the difference of characteristics between the two societies. That is, due to commercial activities within Nigerian cities being predominantly small scale and of the informal variety. Planning agencies lacked serious capacity to organize a disciplined land and cadastral design system and enforce it to control development. Most indigenous cities are a mixture of colonial and traditional

form coalesced together in a dynamic intermix of commercial activities often encroaching on road setbacks, traffic flows and are seemingly aesthetically chaotic. It is also noteworthy that African city plans had not abandoned altogether plans of commercial development based on models not suitable to our reality here.

The factors responsible for commercial land development and change may depend on the category or types of commercial activities in Nigeria. The first category includes commercial banks, which are formal in nature, in that they are often located on government designated areas on account of their modern financial functions. It is said that their locations require advantage of agglomeration [1]. Banks require to be closer to their customers or their markets as 'the location of bank affects the size of deposit and profits' [2]. Apparently, given the choice of taking decisions on location, banks and other commercial enterprises of similar nature, may prefer locations that captures more profit to them than one dedicated and allocated by government agencies.

The second category of commercial activities are the traditional form markets; of stalls with variety of mixed goods ranging from trading in textiles, spices and domestic items, foodstuff, etc. These markets actually originated from precolonial times and were subsumed at locations within the landscape of cities, because they are retained intact surrounded by western style land use and activities. The principles for their location in northern Nigeria have been documented, usually located in front of the traditional rulers' palaces within the walled city or, at times outside the city gate or even both. Other traditional markets replicating this have been allowed to take the chaotic pattern of those in the past. It is further recognized that existing development characteristics of activities on land could influence the development of commercial centers through the process of evolution [3]. Furthermore, European planning in Northern Nigeria took the form of the dual city pattern whereby the traditional township was left intact, unplanned while a modern western counterpart was established with European planning standards observed and enforced. Today, traditionally established markets have become the most available and indispensable, incorporating wholesale business components within them. One such example is the Kurmi market in Kano that was said to have been as old as Kano city, an ancient town in the middle of Northern Nigeria. At presence it serves as the largest hub of wholesale market for industrial goods in Northern Nigeria the region where Jimeta is located.

The last category of commercial land originates from the growth of hitherto uncontrolled commercial development along corridors of major streets that later became rampant to the extent of transforming frontage of more than half of avenues of areas once exclusively proposed for residential functions only. In this category changes have been attributed to decision making processes. But this is not unique to Nigeria. A study of commercial strip in Urbana, revealed the case of a residential land conversion into a commercial one, due to two reasons [4]. One being 'key governmental decisions' and the second being the decision of 'individual businessmen'.

In Jimeta, the primary determinant of all land use allocations including commercial land use, was the 1976 Master plan [5]. The Master plan has proposed all possible commercial land requirements on the basis of factors presumed under its control in administrative and technical terms. In reality commercial land and activities are observed to be at variance with proposed planned development. Commercial activities often evolve where not anticipated or control of commercial land development was not confined within limits initially given by proposals.

This paper has already stated that the uncontrolled growth of commercial land and activities had undesirable consequences on traffic obstruction, unwanted crowding, fire and health hazards, and encroachment of commercial functions into residential areas with unwanted consequences on residences and general urban quality. It is also apparent that there are forces responsible for the uncontrolled character of commercial land development and that they have not been acknowledged in explaining their deviation from proposed development plans.

The uncontrolled development of commercial land and activity patterns needs to be examined to unravel the reasons they are difficult to predict and control, and lessons derived from the study. The contribution of this paper is to identify the possible driving factors or explanations responsible for the pattern of commercial land development, across historically physical development timelines, so as to consider them as input for an effective commercial land control and development in Jimeta. The aim of the paper can be achieved as follows;

- i. Provide a description of the commercial land proposals of the Master plan of Jimeta and identify observed changes.
- ii. Explain the possible driving forces for the changes or deviation from the commercial land requirements proposed, leading to uncontrolled commercial activities.
- iii. Identify the consequences of the changes and suggest possible solution for a more sustaining proposal for commercial land development in Jimeta.

2. Materials and Methods

2.1 The Study Area

Jimeta is the other part of the twin city of Greater Yola. It is also the administrative and commercial center of Yola, State Capital of Adamawa State, Nigeria, and the headquarters of Yola North Local Government Area (LGA). It lies along the Benue River on 9°16′45″ N and 12°26′45″ E at an average elevation of 136 meters (Figure 1). The city has an estimated total population of 224, 233 persons as at 2010 [6].



Figure 1: The Location of the Study Area (Jimeta) [7]

At 2017, the projected population of Jimeta stands at 257,573 persons. To the north and east is bounded by Girei LGA while to the south and west with Yola South LGA. The topography is the type that may provide challenges to the location of masts. The lowest point in the town ends in Njuwa, an ox bow lake; the highest points being the Bagale hills surrounding the town on the eastern side, together with river Benue constraining the expansion of the town towards that side. The population is divided into high, medium and low density residential dwellings but none of which has households of less than 7 persons on average [7].

2.2 Methods

The method adopted in this investigation is the one that provided us with 'snap shots' of commercial land and activities located contextually within various land uses of Jimeta. The mapping of commercial land, divided into categories, was thus achieved by providing images at certain timelines of significant decision making actions. These have been subsequently explained in the paper. The commercial land categories are defined according to their functions or similar characteristics. The first category are Banks and Modern commercial businesses including Hotels, Filling Stations and high end supermarkets. The second are traditional markets, 'motor parks' or commercial passenger vehicle parking areas, which attracts commercial transactions of the small and medium enterprise varieties and attempts to capture itinerant shoppers too busy to patronize formal markets. The third are shops along residential frontages of major highways, usually converted from residential use to take advantage of passing traffic. The approach towards collection of data for this paper was as follows:

- i. Desk review of maps and document from official sources and the Master plan of Jimeta.
- ii. Updating and merging the information obtained with current digital images.
- iii. Surveying and mapping of commercial shops that evolved along major highways and streets in Jimeta.
- iv. Interviews with government officials and locals to fill in the gap on information required.
- v. Utilizing ArcGIS 10.3.1 application for mapping analysis and location based analysis.

The various steps enumerated above would together provide a description of commercial land, observed changes from the proposed plan as well as the explanations for the changes and finally the consequences of changes on the overall development of Jimeta.

3. Results and Discussion

3.1 Development in Jimeta Commercial Land

Jimeta developed as a commercial entrepot close to Yola, which was the precolonial capital of Adamawa Emirate and later the capital of Adamawa province in the 1960s. Jimeta grew as a twin city to Yola located on the river front about 10 kilometers from Yola. Together they were referred to as Greater Yola for administrative purposes. However, Jimeta is the modern, administrative part of the two, while Yola remained the traditional component. Along the bank of River Benue was where the Europeans set up their trading post and

administration. At that location on the river bank, a Customs check point was established while a ferry service carried goods and services to the western side of the River Benue at Bajabure. Most transactions and general goods were ferried out of the region through there for onwards journey by train at Yadi-buni or to Maiduguri for export. The first commercial activities and indeed all activities were developed by the riverside at Jimeta. The type of activities at the river bank includes trading posts and Cinema for entertainment. Later on colonial administrative apparatus was set up less than a kilometer from the river bank. These include colonial offices, court and police post. About the same distance, the first traditional market was sited. It was in that Shinko market that items for local consumption were traded. As a consequence of these developments that residential housing developed in all directions, with the Colonial Government Reserve Area (GRA) separated from that of the locals.

By the early 1970s, Jimeta had a sizeable population that had sustained banking, modern shops, clubs, and three commercial centers for business transactions. Greater Yola gradually became very prominent in the region commercially and administratively as a provincial capital, of which the growth of Jimeta surpassed the sleepy traditional settlement of Yola.

3.2 The Commercial Core Concept of Jimeta Plan and Implementation

The core proposals of the Master plan followed the concept of European Central Business District. This core proposal was moved away from the river bank side, which was then in the 1970's grossly inadequate and away from the center of development. The development of national road networks and building of bridges and regional access to Yola diminished the prominence of the river side as a commercial hub. Yola was also promoted from a provincial capital to that of a State capital, during the period of the formulation of the Plan. Therefore, moving the CBD to a central location with adequate land was the right move. As can be observed from Figure 2, the major components of the commercial areas are New Commercial area described as a layout to serve large scale commercial functions, Central Business Area (CBA), that centralizes all modern commercial activities like Banks, motor park, filling stations, fire brigade station, cinema, while the surrounding area was proposed as mixed land use of (local authority layout) and low cost housing development. The third part of the commercial plan was Market and Market Extension, made up of a traditional type market with a bus station and goods delivery section as well as a generously large market extension area, three times the size of the original market in anticipation of future growth.

The major weakness of the commercial plan was that the major component of it was not implemented. For example, the New Commercial area dedicated to serve whole sale and large commercial layouts was little used for the purposes stated. Instead only the plots at the frontage of Galadima Aminu Way were used as commercial even though the area was dedicated for mixed residential commercial use. The areas are now being used as the banking district, instead of the areas allocated to banking and hotels. The rest of this large expanse of land is now more than half residential. The CBA and its extension were not consolidated for the purpose of commercial functions, much. Part of the land was used as the Fire Station as proposed but most of the rest were converted to government offices, a construction company premises, a seminary, an area dedicated to Churches/religious development and schools. Instead, the local authority layout at the western portion around this component was converted to the New Jimeta Market Complex, a traditional market upgraded with modern facilities. As for the Market and Market extensions, the whole area was removed from that site and relocated at its opposite across the Atiku Abubakar Way, where the Jimeta Shopping area was built after it was burned down. So, the Bus station and goods delivery parts of the proposals were not implemented at all.

3.3 The Growth of Shops along Major Roads in Jimeta

Before the early 1990s the implemented commercial activity spaces were adequate, and serving requirements with little stress except for the organic growth of commercial areas around the Mohammed Mustapha Way leading to Shinko market, Old Jimeta market, and to the river side, now catering for trade with only Cameroon Republic using large boats and barges. A short strip of shopping area had emerged at the Bata Shop end of Bishop Street junction for the sale of high end clothing. In these two areas, shops developed organically from conversion of residential housing, creating mixed land uses.

From the year 2000, Nigeria experienced a rapid movement of people from rural areas to cities due to partial collapse of rural economies. In Jimeta, this resulted in a sudden influx of populations, raising the necessity for increase in shopping facilities and modern business transactions. The pressure became high for the establishment of more commercial land for traditional markets, which we are going to discuss next; and for shops to those unable to secure spaces elsewhere and in neighborhoods with no space dedicated to them for shopping.

It was the failure to adhere to the implementation of the principles of the core commercial plan that led to the rapid expansion of commercial shops along the main streets. This first reason was followed up by others. The Jimeta Commercial and CBD core in the proposed plan, had provided enough dedicated spaces for every category of commercial use at the center. It had also provided spaces for future expansion. But little of this has been implemented, instead most of the land was appropriated and converted to other activities like administrative spaces, residential uses, religious spaces and schools. This happened at the time when demand for commercial spaces rose due to population demand without corresponding land to satisfy the commercial requirements, even though the initial core could have

satisfied those needs. The second reason for the proliferation of shops along the major roads was on account of the existence of institutional lands lined up along the roads discussed but most importantly the willingness of the officials of those institutions and the planning authorities to approve the change of use of land for institutional land for commercial shops along the frontage of their property and/or appropriating portions of it for commercial development. Thirdly, lack of administrative insight to include commercial shopping areas within designated layouts and schemes contributed to the demand for shopping along routes, instead of shoppers doing so in their neighborhood centers as part of normal standard of planning. However, interview with authorities indicates that neighborhood shopping areas had been provided only to be converted as in the case of the core. An example of such areas was the shopping center provided at Barracks junction which was mostly not implemented except for a filling station and few shops, due to conversion of proposed commercial land (Figure 3).



Figure 2: Master Plan Proposal of Jimeta [5]

3.4 Development of Traditional Markets, Motor Parks, and Petrol Filling Stations

The Master plan had already provided the necessary spaces for traditional markets including land for future expansion which was not occupied for the purpose intended. Instead other areas were used for traditional markets, banks, motor parks that resulted in the dispersal of the core. Some examples of these decisions include a traditional market located on land at Bishop Street junction outside the central core proposal, but later when the market was burnt due to fire within a crowded space, the market was relocated to the its present site meant for local authority residential layout, which is now the Jimeta Modern market complex. The old market was rebuilt as modern shopping area (Figure 4). All the same the character of this area has changed to that of a traditional market because local traditional market activities were admitted and given space within the market leading to overcrowding again.

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Figure 3: Commercial shops along major roads



Figure 4: Markets, motor parks and petrol filling stations related commercial activity areas

In 2002, traders occupying market stalls in the Jimeta Market Complex were told to vacate the market for renovation and upgrading to a regional market status. They were told to temporarily relocate in three areas. The motor park attached to the market was located in two areas within the Kofare industrial zone, then traders of domestic items were located at opposite the vacated market in a space occupied by government offices while the rest were taken to the Mubi road bye pass close to airport roundabout. At this location, the traders were resettled into seven distinct specialization areas. They are, timber and construction materials, tippers and offloading of vehicles area, yam and fruits, livestock and livestock feeds; vegetables, fish and meat; grains and general goods, and finally, iron mongering and iron scraps.

After the commissioning of the market from which they vacated four years previously, it became difficult to return the original occupants due to the cost of built shops and in any cases more traders increased their presence into the numerous markets created that it was impossible to remove the markets. At Jambutu, one of the motor parks was converted to a dry fish market to accommodate traders that relocated their business from Maiduguri due to the Boko Harm attacks. This action had created a locus for a mini shopping to cater for travelers and the neighborhood. The bye pass markets had remained as they were catering to their areas of commercial specialization. Fallujah, the temporary market located in government premises were told to vacate, of which most of them complied by setting up illegal stalls encroaching the major access to the main market and also occupying the parking bay of the market, constituting a nuisance and disrupting traffic. Due to high demand for commercial activity, and lack of foresight, the upgrading of the New Jimeta market created more unplanned commercial activity areas within Jimeta, with unintended consequences on development control and sustainable planning.

3.5 Banks and Hotel Activities

Though, banks and hotels were included in the core plan of the CBD, it appears these are not taken seriously during implementation. A few of them were currently located except the Central Bank and not more than two other banks. Since it is the policy of most privately owned banks was not to own estate property but to rent them for use, location of banks depended on rented buildings suitable, of which most of them found within the mixed land use portion of the commercial plan along Galadima Aminu Way, also the most accessible location in the city; and where most of them congregated together within walking distance of the Central bank. However, this highway had become the highest generator of traffic in the town due to the presence of banks, shopping along streets and traffic coming from other parts of Nigeria towards Yola. Since most of the CBD was converted to high density dwelling, religious use, cinema and bakery, etc., most hotels chose to locate in the high income areas of town, the GRAs and medium income parts of town like Bekaji, Malamre, and Karewa. These low density areas most offer security, privacy and an ambient atmosphere needed by their guests. The number of hotels within the area are not more than a couple, but none of them high end in nature and therefore have little value for security conscious guests and travelers (Figure 5).

3.6 Factors Responsible for Uncontrolled Commercial Land Development in Jimeta

The factors responsible for the uncontrolled nature of commercial land development in Jimeta are identified as follows;

- a) The failure of the planning agencies to protect and maintain the integrity of the commercial land central core. This was done by appropriating a huge percentage of the land for government administrative functions, religious uses and also residential usage such that later with population expansion and the need for market space, the land was not there at the central location. Another weakness of the plan is that it did not compulsorily specify creation of neighborhood markets in layouts and planners seldom ensure decentralization. Sometimes neighborhood shopping areas are appropriated as in the case of Barracks road layout plan.
- b) There was also an underestimation of the type and category of commercial use for land that later was in demand, for instance livestock and feeds, grains, vegetable and fruits and domestic groceries, clothing and textiles, building constructions, spare parts, etc. No one anticipated that Jimeta could grow into a regional commercial hub serving the neighboring countries like Republics of Chad and Cameroon.
- c) The growth of shops along major roads was on account of scarcity of spaces but it was made possible because Institutions allowed it and benefitted from the conversion of their frontage for profit. However, the process of conversion of land from commercial was easy and porous and without an assessment of consequences with regards to aesthetics, safety and cleanliness.
- d) The relationship between political leaders and the planning authorities is asymmetrical because politicians have all the power to pass down decisions with little resistance from planning agencies. For example, it was the then reigning Governor that ordered for the relocation of Markets and motor park to a conservation area and an industrial one, but fail to return back allocation to those that vacated the market because another governor chose not to return them. But even on simple expediency planners have been known to convert land on behalf of higher administrators.
- e) The Master plan as a planning document is further an unprotected one, it has no legal backing due to the state's long history of military rule and even today with democracy, the culture of violation persists.

4. Conclusion

The study conclude in other to minimize the problem in future is to make the Master plan a legal document by

legislation. The production of a Master plan should be accompanied by a well-articulated planning brief that specifies commercial land requirement in every sector and sub-sector. There should not necessarily be centralization of all functions. But special commercial functions should have their areas dedicated to them. All traditional markets should be allocated beforehand such that all sectors have their markets and shopping districts. It also makes sense not to approve frontage and gate entrances of residential areas facing the road or highways to prevent conversions. Instead mixed land uses should be allowed but not facing the road.

The asymmetrical relationship between politicians and planners may reduce with increasing democratic culture but also with active collaborations with professional planning bodies and chapters that need to intervene when contraventions become blatant.

The need to have a beautiful and aesthetically pleasant city depends on planning control of its elements. The commercial element of Jimeta currently constitute a nuisance on aesthetics, smooth flow of traffic and health or general quality of life. The reason is traced on account of failure of authorities to respect the proposed provisions of Jimeta city center of which the commercial component was a major part of it. Aided by the presence of Institutional lands and willingness for land conversion, uncontrolled and undesirable commercial activities became a menace that needs to be controlled for the sake of future sustainability of the city.



Figure 5: Banks/financial related commercial activity areas

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