

FACTORS INFLUENCING THE PATTERN OF LAND USE ALLOCATION IN NIGERIA

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Abstract

Town Planning Authority, Ministry of Lands, Works and Housing, Environmental Protection Agencies and Legislative Bodies respectively undertake regulatory measures that determine the uses of land. Government policies on development of land at Federal, State and LGA levels have some far reaching effects on pattern of land use in the society. Hence, this paper analyzed some of the factors influencing the pattern of land use allocation in Nigeria. Also discussed are the theories of urban structure. In conclusion, recommendations were made which include among others, the awareness of the identified factors – to understanding urban land – use allocation, as public sector planning, directly affects the land use development process and markets.

Introduction

Studies on the factors influencing the pattern of land use allocation, the location of towns, the manner of their growth, their morphology and the processes in the operation formation of patterns of distribution and uses have according to Oyebanji (2003) revealed that several kinds of influence are at work. However, professionals of different fields seem to deal with it differently. Litchfield (1969) stated that the sociologist is of the opinion that it is the human being and his psychology, which is the key to the process, his attitudes, interest, values, prejudice, likes and dislikes.

The geographer believes that man's activities are dominated by nature, putting emphasis on things like relief, elevation, climate and geology. On the other hand, the economist suggests that the main reason for putting any piece of land to use is the economies, which are to be obtained from using it, arising for example, from its accessibility to people and its situation in relation to other pieces of land. Other primary reasons for its becoming useful is also based on the quantum of benefits derivable from its location in relation to established uses and proposed or existing demands of transportation or communication.

All the above views are statements of facts, but it can be stated that human beings putting to use, particular site or parcels of land in particular way(s) and for different purpose(s) can not be explained completely from any of the above submissions.

Theories of Urban Structure

The land use process focuses on the conversion of individual parcel of land from rural to urban uses and on the role of public and private sector actors in that allocation. Cities found today are normally as the result of different growth patterns that have occurred in the past. The gradual emergence of a definite pattern of land use is the direct result of the interplay between the forces of accessibility and complementarily which later becomes complex as a city grows.

Three major theories of development can be used to explain the overall structures of cities. These three theories were developed over the twenty-five year period from 1920-1945 and each added to the knowledge of cities.

Over time, however, the concentric zones became sectors as transit and highways elongated land use patterns. Eventually, nuclei developed or were more formally identified as transportations to land uses. Hence, when evaluating the land use pattern of a large older city, which has undergone such changes, it maybe possible to find all three patterns. Rarely do contemporary cities illustrate entirely any one theory of land use (Nwanekezie, 2009).

Concentric Zone Theory

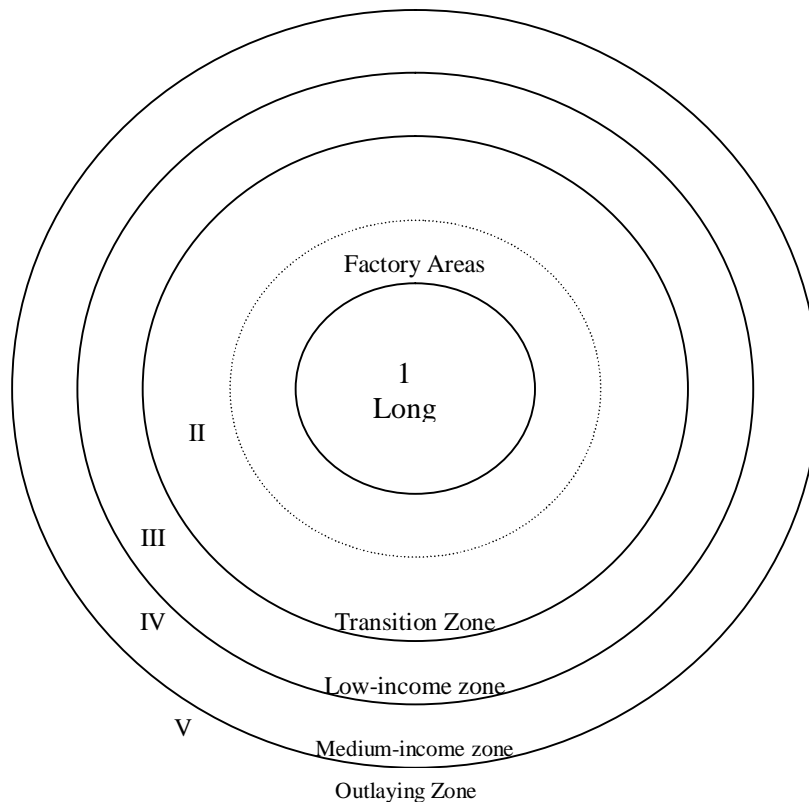
This theory according to Nwanekezie (2009) was developed by E.W. Burgess in 1925 from the study of the city of Chicago. Figure I below indicates the theory; burgess designated his central zone as the loop area. This zone is oriented around (100%) one hundred percent spot and includes the

stores, office buildings, and banks. It is the business centre of the city, the focal print of its commercial, social and civic life.

Other zones of the theory include a zone of transition which housing zone in the metropolitan area, containing older housing units; a middle income housing zone, frequently including some of the older suburbs, and the outlying zone of newer sub - urban developments.

Figure I:

Burgess' Concentric Zones in Urban Land Uses



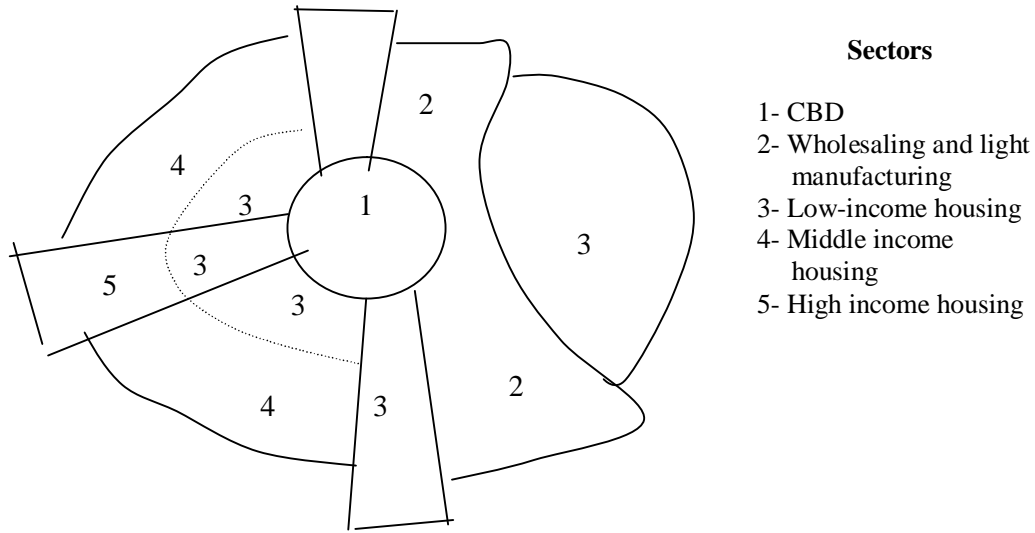
Given this pattern and a growth situation, each zone is held to invade the outer adjacent zone, with a rippling effect. With decline, the outer zone remains static while the transition zone enlarges into the central zone. Although this model is very simple, it does have a certain descriptive value. Its concept implies that growth takes place along the margin of successive zone.

However, growth takes place along the radial lines. It thus disregards the effect of radial ways on land values and uses. The theory ignores the fact that physical barrier such as mountains swamps etc may be far more responsible for development pattern than zonal boundaries.

The Sector Theory

The theory according to Nwanekezie (2009) was proposed by Horner Hoyt in 1939. It is an alternative to the concentric zone theory. It suggests that cities grow not in strict concentric zones, but rather in sectors of similar types of development. That is, residential areas might expand outward along existing transportation links, topographic features, natural amenities, or the like. The businessmen who can afford high rent for their transactions are located at the centre, compatibles uses like manufacturing and ware housing and low income housing lay adjacent to each other, while incompatible uses repelled on another as in the case of high – income housing, manufacturing and warehousing. The theory is illustrated in figure 2 below.

Figure 2:
Radial Sector Theory



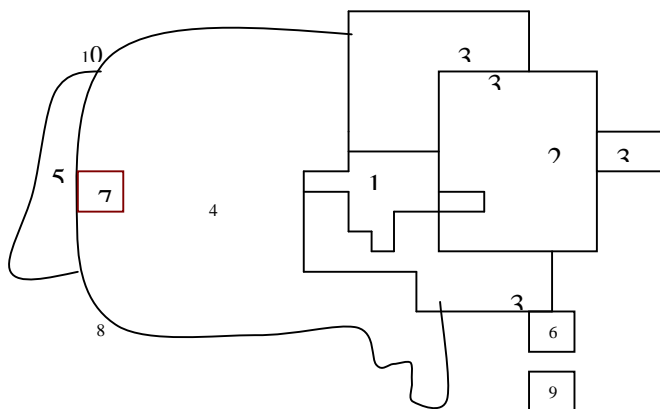
This theory provides a logical explanation for string-street development and for the tendency of commercial district to expand along important streets and to sometimes jump several blocks and then reappear along the same street. It assumes urban growth with succession in land uses in already developed area and in new developments around the fringe of the city.

The land use patterns of many cities vary from the model suggested by this theory, and occasionally modification and adjustment again, are needed to make the theory fit the facts. Urban land factors not necessarily in two-dimensional cartographic generalization of the theory. The sector theory is also a product of a laissez faire society. However, most of the land sectors met found in our cities have evolved from an accumulation of individual decisions. Only occasionally have they resulted from deliberate city planning.

The Multiple Nuclei Theory

This theory was developed in 1945 by Chauncy Harris and Edward Unman, after initial explorations by R.O. Mckenzie (Nwanekezie, 2009). It varies from previous views in that, the downtown area is not considered to be the only focal point for growth. Land use patterns are seen to develop as a series of nuclei, each with a different function. Each centre develops from the spatial interdependence of certain functions for example, manufacturing and transportation uses may form one nucleus. Also, hotels, offices, and transshipment facilities may develop around an airport. The resulting model is readily discernible in the form of most cities. See figure 3 below.

Figure 3:
Multiple Nuclei Urban Structure



Uses

1. CBD
2. Wholesaling and light industry
3. Low income housing
4. Middle income housing
5. Upper income housing
6. Heavy industry
7. Outlying business area
8. Residential suburb
9. Industrial suburb
10. Commuter zone

Such nuclei may have had different origins, existing as minor settlement before city growth began or developing where the growth of population and purchasing power supports a sub-urban shopping or business centre. Around the separate nuclei, distinctive types of land use have grown up over time and this existing pattern is strengthened by the general factors determining the allocation of land to specific uses. Thus high rents in the CBD induce firms to migrate or establish themselves in peripheral areas, while the various forms of special accessibility lead similar firms or household to concentrate in particular locations.

By given weight to such factors as topographic historical influences and above all, special accessibility resulting from economic and social forces, the multiple nuclei theory provides a more flexible approach to urban form than the earlier models based on transportation cost and accessibility to a single central core, but the latter notion can be incorporated into the model especially, in explaining the CBD and even suburban subcentres.

Factors Influencing the Pattern of Land Use Allocation in Nigeria

The factors influencing the pattern of land use according to Nwanekezie (2009) can be described within three framework as follows:

- (1) **The physical framework:-** This involves the law of nature, which can be categorized under geographical influence, the use to which land in a particular locality may be put is highly influenced by the regular pattern, of weather conditions, like temperature, amount of rain and its regularity of winds and others. Whether a place is in the desert region, forest or temperate region is often put into consideration before deciding on what the land is suitable for.

Settlement pattern in the desert region differ considerably from that of temperate or forest region. The nature of soil is also put into consideration as in whether it is suitable for a particular use. For instance, solid firm land could be preferred to sandy, loamy or waterlogged area for residential use. With the development of modern technology, many things are achievable, but it is expensive and often not within the reach of everyone especially in the developing nations. Another element in the physical framework is the topography of the area. A hilly, rocky or undulating land area is not suitable for the construction of airport, industrial and commercial use.

- (2) **The Institutional Framework:-** Customs, traditions, laws, organization and other institutions of human society are the practices that influence the use of land (Lichfield, 1969). These practices could be grouped into private individuals and public institutions. Private individuals practices include social behaviours, customs and religious belief. Religiously, there are sacred lands, which can not be used for any other purposes like residential, or commercial except for worshipping gods.

Also, certain uses that contradict the religious belief of some people in a particular community are forbidden. For example, in the Muslim dominated communities, beer parlours, cinema houses, hotels and rearing of pigs are not allowed. Under traditions and customs, some groups of people live together in large numbers while others constitute scattered communities. Some private individuals, group of people or family property owners also dictate what, how and when their land can be put to use. Public institutions include town planning activities, other regulatory bodies, laws etc.

Factors Influencing the Pattern of Land Use Allocation in Nigeria

Town Planning Authority, Ministry of Lands, Works and Housing, Environmental Protection Agencies and Legislative Bodies respectively undertake regulatory measures that determine the uses of land. Government policies on development of land at Federal, State and Local Government levels have some far reaching effects on pattern of land use in the society.

Those public institutions undertake necessary corrective, all preventive measures to counter the disastrous results of the activities of other forces in the usage of land. Apart from the zoning and other town planning regulations, there are, according to Nwanekezie (2009) three other key laws in Nigeria viz, the Land Use Act Cap 2020 LFN, the Environmental Impact Assessment (EIA), Decree 86 of 1992, and the Nigerian urban and Regional Planning Decree 88 of 1992. The principles and policies of the affected public institutions are enshrined in the laws as a way forward for better environmental management strategies.

Conclusion

The land use allocation, now usually part of a more comprehensive urban plan, remains as the primary planning vehicle for land use planning. Zoning Ordinances, subdivision regulations, and other rules provide the implementation component. However, studies have revealed that several kinds of influence are at work, with respect to the location of towns, the manner of their growth, their morphology and the processes involved in the generation formation of patterns of distribution of land uses.

Recommendations

Following the identified factors influencing the pattern of land use allocation in Nigeria, the following recommendations seem justifiable:

- (1) Town Planning Authority, Ministry of Lands, Works and Housing should undertake regulatory measures to determine the uses of land.
- (2) Environmental Protection Agencies and Legislative Bodies, respectively should also undertake regulatory measures-to determine also, the uses of land.
- (3) Public Institutions should undertake necessary corrective all preventive measures to counter the disastrous results of the activities of other forces in the usage of land.
- (4) Awareness of these factors is essential to understanding urban land-use allocation, as public sector planning, directly affects the land use development process and markets.

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