

## **Process of Urban Land Use in Nigeria**

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### **ABSTRACT**

This paper focuses on the process of land use change in Nigeria. Since city development occurs over time, the need to integrate land process with land use planning becomes things of apparent attention. City planning and development in Nigeria has been based on this factor. Development of cities in Nigeria is a reflection of land use planning. The paper explains that relationship among land uses in Nigeria is a reflection of land reform and land theories. The findings of this paper is that both direct and indirect causes inhibits proper land use planning in Nigeria such as land clearance for agriculture and other economic purposes, wood fuel harvesting in a non-sustainable fashion, overstocking of and overgrazing by animals due to improved animal care, among others. the paper suggested that if we embrace land management framework, adherence to appropriate policy measures and coordination of the policy measures, availability of proper land information, allocation of adequate resources and ensure that our administrative system is put in order, the issue of poor land use planning will be minimized particularly in the evolving cities in Nigeria.

**Keywords:** Land, Land Use Planning, Urban Planning, Land Reforms, Urban Development

### **1. INTRODUCTION**

Land is required for various uses in both the urban and rural areas of all society. It is a major factor of production and a vital element in the socio-economic development of any country or society (FMH&UD, 2006). Thus, as nations grew in size and rural areas become urban centers and urban centers become large metropolitan areas, there is always increased competition as well as demand for land for different purposes. This requires adequate planning and control to ensure harmonious development and functional efficiency of these uses and settlements. To achieve this fundamental and acceptable activity, layouts of various land uses such as residential, commercial. Industrial, open

spaces and recreation, circulation and institutional uses among others are undertaken to standardize and control physical developments and ensure harmonious growth. To ensure adequate provision of these uses and meet the needs of users of urban facilities and services land allocation and space standards are specified in the literature. Furthermore, as the population of the world becomes more urbanized and cities grow, urban planning becomes more critical (Smith and Engel, 2006). According to Oyesiku (1998), the forms and patterns of distribution of structures in general to promote the good health, accessibility, convenience and harmonious land use in environment are a function, to a considerable extent, of the rights and methods of dealing with land.

A modern nation, as a modern business, must have adequate information on many complex interrelated aspects of its activities in order to make decisions. Land use is only one such aspect, but knowledge about land use and land cover has become increasingly important as the Nation plans to overcome the problems of haphazard, uncontrolled development, deteriorating environmental quality, loss of prime agricultural land, destruction of important wetlands, and loss of fish and wildlife habitat. Land use data are needed in the analysis of environmental processes and problems that must be understood if living conditions and standards are to be improved or maintained at current levels. One of the prime prerequisites for better use of land is information on existing land use patterns and changes in land use through time. The U.S. Department of Agriculture (1972) reported that during the decade of the 1960's 730,000 acres (296,000 hectares) were urbanized each year, transportation land uses expanded by 130,000 acres (53,000 hectares) per year, and recreational area increased by about 1 million acres (409,000 hectares) per year. Knowledge of the present distribution and area of such agricultural recreational, and urban lands, as well as information on their changing proportions, is needed by legislators, planners, and State and local governmental officials to determine better land use policy, to project transportation and utility demand, to identify future development pressure points and areas, and to implement effective plans for regional development. As Clawson and Stewart (1965) have stated:

*In this dynamic situation, accurate, meaningful, current data on land use are essential. If public agencies and private organizations are to know what is happening, and are to make sound plans for their own future action, then reliable information is critical.*

The variety of land use and land cover data needs is exceedingly broad. Current land use and land cover data are needed for equalization of tax assessments in many States. Land use and land cover data also are needed by Federal, State, and local agencies for water- resource inventory, flood control, water-supply planning, and waste-water treatment. Many Federal agencies need current comprehensive inventories of existing activities on public lands combined with the existing and changing uses of adjacent private lands to improve the management of public lands. Federal agencies also need land use data to assess the environmental impact resulting from the development of energy resources, to manage wildlife resources and minimize man-wildlife ecosystem conflicts, to make national summaries of land use patterns and changes for national policy formulation, and to prepare environmental impact statements and assess future impacts on environmental quality.

## **2. LAND USE REFORM IN NIGERIA**

Land reform in other words can be called land replenishment. Land reform is the reorganization and improvement of land and its resources when considered to be faulty, ineffective, or unjust in order to increase or improve its productivity and exploitation for the general benefits of the people. Land reform in Nigeria is a huge task that is embarked on by scholars and notable politicians all over the country. In the concept of land reform in Nigeria, land is seen as a social security function to most people because after all else has failed they could still return to their villages to stake a claim on a portion of the family land and raise crops on this for subsistence. A land ownership and use policy must recognize the fact that the very existence of some people rests on their having access to a piece of land and any attempt to wrest this from them would be strongly resisted. It is in this light that an attempt is made to examine Nigerian experience on the land tenure and the land reform issues.

Nigeria has been regarded as the most populous nation in Africa with a teeming population of over 130 million crowded over a land area of about 923,000 square kilometers. It has over a hundred cities with populations that pass for urban centres. Nigerian cities notably Lagos, Kano and Ibadan are among the first one hundred largest cities in the world (World Gazetteer, 2005), which translates into pressures on land and thus high urban dynamics. The pressures on land orchestrated by increased rates of urbanization brought with it intractable urban problems, such as poor environmental sanitation, pollution, crime, unemployment and overcrowding among others. Many writers confirmed that Nigerian urban centres are faced with rapid growth and development, which contribute to land use change. The goal of land use change analysis is said to revolve around

two central and interrelated issues, the *drivers* and *impacts* of the land use changes. The drivers of the change are the causes and processes that bring about the change while the impacts are the consequences of the change (Kate, Turner and Clark, 1990). In general, the study of impact of land use change has received more attention and publicity than the drivers simply because it is the impacts that are readily felt. In most cases, the drivers are hardly appreciated. In the same vein, although there are environmental and socio-economic impacts of the change, one of the reasons for this is that the economic impacts are more subtle, long-term and subject to the influence of many more complex and less visible and verifiable factors than the environmental ones. However, the environmental and economic impacts are in many ways interrelated. The environmental impact may be viewed as causing the economic impacts, while the economic impacts accentuate the environmental, causing successive rounds of land use change. A very good illustration is the extraction of fuel wood by the peasants, which naturally degrades the vegetation cover. The degraded vegetation offers little or no opportunity for future extraction of fuel wood which further impoverishes the local people by forcing them to expend more energy and resources in going further and further into the forest in search for fuel wood, and causing even greater damage to the forest resources (Adesina and Amamoo, 1994; Warren et al 1991).

When accessing land reform in Nigeria, many difficulties has arrived in the sense of opening inequalities of traditional and tripartite ownership to land and also the diverse implications to land and the definition of land use change in the range of socio-geographical context in Nigeria. Example of such problems is land tenure system. Existing literature has expressed the concern of renowned scholars (Fabiyi 1974; Famoriyo 1977; Gandonu 1977; Okpala 1980) on the problems of traditional land tenure system in Nigeria. The illustration of the scholars with respect to the problems of land tenure could be interpreted based on the duplicity of ownership of land with consequent excessive transaction costs, fragmentation of land into uneconomic sized tracts, and inalienability of land which makes land part of the physical capital but not a part of financial capital. The necessity to ensure equitable access to productive opportunities on the land and security of such access once gained makes land reform measures mandatory. To exacerbate the situation, wide scale speculative purchases of large tracts of (communal) land, in the absence of land taxes has reached a crescendo. Most of the purchases are done by wealthy non-farmers who held the land idle, waiting to capitalize on an appropriate market situation, while food production is on the

decline (Fabiya, 1974). Many government development projects have been shifted by a prohibitive amount of compensation demanded by speculative purchasers who had previous knowledge of Government intentions (Famoriyo, Fabiya and Gandonu, 1977). In other instances, disputed claims and counter claims over ownership of the proposed site and the attendant law suit coupled with court injunction which often prevent the development of land subject to litigation make such land unavailable.

All the above changes and inconveniencies have “led to the questioning of the relevance of equity of traditional relationships and established institutions of land and have given moral sanction to demand for change”. The military administration in its third National Development Plan 1975-1980 commented on the problem posed by land acquisition for development projects thus “with regard to land acquisition for federal project, it is now clear that the burden is too great for any single ministry if it has to perform its other functions. Difficulties in land acquisition had been mentioned by virtually all public agencies as the most important single factor “which frustrated the implementation of a number of their project”. On individual ownership of land and speculation in urban land, the military administration said “furthermore individual ownership of land and speculation in urban land has led to considerable increase in the price of land. This trend has been accentuated by the application of the principle of equivalence in land valuation. Moreover, fraudulent land transactions and endless legal tussle over title ownership have combined to stifle housing development with consequential and significant escalation in the price of rented accommodation”. In the urban centres of the country, acquisition of land for development projects and building purposes became virtually impossible for individual particularly the low and the middle income groups and small business concerns because the price had become so prohibitive.

### **3. THE THEORIES OF LAND USE CHANGE IN NIGERIA**

Nigeria urban environment are different in the way they develop which could be spontaneous or planned (Babalola, 2009). The difference between traditional unplanned and contemporary modern cities brought both some advantages and disadvantages which affect the quality of urban life. While the growth of unplanned settlements is from the micro to macro scale, this process is inverted in planned settlements and this has led to lack of hierarchical organization among different levels and also loss of connections between them (Oduwaye and Enisan, 2011). The presentation of theories of land use change made clear one basic point – which each theory focuses on particular aspects of the

subject. Each theorization tradition specializes more or less on a given spatial and temporal level which determines, to a considerable extent, the nature of and the emphasis placed on the components of the system studied. At lower levels, theorizing is usually more concrete and gives (or aspires to give) more realistic accounts of the agents, context and mechanisms of change. At higher levels, theorizing is more abstract and getting from theory to the real world is not always simple and straightforward. Similarly, each theorization tradition conceptualizes land and land use change differently; some conceptualizations are more realistic while others are abstract and "space-neutral". Some theories specify the land use patterns that result in the process of change while some others give only indistinguishable indications. The former are associated usually with a state of equilibrium while the latter make no such assumption considering land use change as a continuous, rarely equilibrating process. The role of the theorization tradition is critical with respect to the identification of the drivers of land use change. Some theories emphasize the economic; some others the socio-political, while some others the environmental determinants of land use change. The recent trend is towards more integrated theoretical schematic although the influence of the "mother discipline" remains strong in most cases. Explanation of land use change and direct reference to the mechanisms of change varies also considerably among theories depending on their epistemological basis. This is one of the justifications why, in their present form, very few theories have filtered down to models of land use change.

Land use change research has both a temporal and spatial dimension. Land use change studies of the past and present have focused on understanding drivers and processes through the analysis of changing land use patterns derived from remotely sensed data and/or the reconstruction of historic land use maps. These studies have led to many of the drivers of land use change becoming widely understood and well documented, although new case studies will always throw up new ideas. Moreover, new drivers become important as new issues and land uses emerge; the recent rise in land-based bioenergy production being a case in point. Interpreting process from an observation of the outcomes of a land use change can, however, only go so far. More recently, land system research has shifted away from data-driven, statistical methods to better theorizing about human decisional and behavioural processes using empirical evidence at the level of individuals and/or societies. Consequently there has been considerable progress in developing and experimenting with models of human processes at landscape scales, notably through Agent-Based Models

Land system research is undertaken across a wide range of spatial scale levels from the individual land manager, when trying to understand human processes, to the global scale level when attempting to explore the land use relationships with climate change and biogeochemical cycling. These analyses are usually based on modelling, but models that represent human behavioural processes within the land system do not exist at the global scale. The only methods currently able to assess global scale land use change are based on the reductionist and spatially-aggregated paradigms of Integrated Assessment Models or the optimization strategies of macro-economic models. In spite of their limitations, these approaches retain considerable influence within the global climate change and biogeochemical modeling communities. Future research will need to better incorporate human behavioural and decisional processes in global scale models, including for example the representation of institutions and other governance structures to endogenise policy feedbacks on land use change. This needs to be underpinned by empirical databases of land system case studies and social survey research from across the world.

#### **4. PROBLEMS ASSOCIATED WITH URBAN LAND USE CHANGE IN NIGERIA**

Increase Economic Growth and Decline, the increase in the case of rise and fall (growth and decline) of major economic powers in Nigeria has led to the serious problems for the populace. This has gone a long way to affect the way of life of the people ranging from their activity patterns. This change has intensified concern over the sustainability of resources (resource management) and land use change across the nation.

Increasing commercialization of agriculture, land degradation, expanded and shifting opportunities for labour migration. Commercialization of Agriculture, land degradation, and expanded shifting opportunities for labour migration has become a serious issue that imposes great constraints for the process of land use change and resource management in Nigeria. The land use change and resource management is greatly affected with these factors in many ways such as the adverse effects they brought on the economies, the unfavourable changing conditions of the people especially the local people. There is poor equipment for data collection. Poor tool for data collection which has always been a problem of the country due to the lack of strong base technology and also this has cause a great deal when analyzing the basis structure in the land use change and resource management. The use of remote sensing/GIS has always been a rare technology in Nigeria. Also other technologies that is widely used in geographic investigation.

Urban Sprawl, outward spread of built-up areas caused by their expansion. It is the result of urbanization. Unchecked urban sprawl may join cities into conurbations. Green belt policies are designed to prevent urban sprawl. Another problem is deforestation which is the indiscriminate cutting or over-harvesting of trees for lumber or pulp, or to clear the land for agriculture, ranching, construction, or other human activities. This is a problem associated with land use change.

## **5. CAUSES OF LAND USE CHANGE AND RESOURCE MANAGEMENT IN NIGERIA**

Factors giving rise to resource and land use deterioration are complex. There are direct and indirect causes. Direct causes include land clearance for agriculture and other economic purposes, wood fuel harvesting in a non-sustainable fashion, overstocking of and overgrazing by animals due to improved animal care, an inappropriate farming practices, i.e. fallow period shortened and loss of shelterbelt due to changes in social and economic conditions, population growth with its complex ramifications for urbanizations thereby generating high demand for urban fuel (and charcoal) and food which must come from rural and semi-rural areas. The most significant cause is the common ownership of land. Common property ownership leads to a situation in which each user tends to maximize his/her own self-interest, ignoring the effects of his/her actions on other users and the users cost of consumption. The common property argument is linked with the failure of the market to develop properly.

Government policies can also lead to misuse of resources. For example, tax policy, market control, relative fuel pricing, and land use control are just some of the complex policy choices that can indirectly affect resource use. Global awareness of the crisis concerning the conservation of biodiversity is now acknowledged following the United Nations conference on Environment and Development (UNCED) held in June 1992 in Rio de Janeiro, Brazil. At the conference, the role of indigenous knowledge and local people in environmental management and development were recognized and their significance for the conservation of biodiversity and sustainable development of natural resources was also noted. It is now also accepted that the economic fortunes of many developing countries is inextricably bound up in the state of their natural resources particularly with the quality, quantity and sustainable use of soil, water, forestry and agricultural product. Overexploitation of these resources, coupled with only limited appreciation of their complex interdependence has led to misuse and depletion of renewable resources.

## 6. **ENHANCING LAND MANAGEMENT IN NIGERIA: SOLVING LAND USE PROBLEMS**

**Land Management Framework:** The framework established for the management of land is probably the most important factor in the successful formulation and implementation of land policies. Land is usually administered by a group of government departments, ministries, autonomous or semi-autonomous government Agencies, with each overseeing a specific aspect of land management. Some common aspects overseen by the agencies include the distribution of land rights, the regulation and monitoring of market processes, public lands, development planning and control, technical standards, and fiscal matters (Yahya, 1983). The adequacy and effectiveness of a land management system affects the ability to implement all aspects of an urban land policy, and the achievement of the desired policy objectives. It affects the ability to plan and regulate the use of land, the ability to enforce regulations, and the ability of the public sector to successfully participate directly in the land market. The effectiveness of a land management system is a reflection of the collective effectiveness of the individual institutions overseeing the different aspects of land management. Among the factors that improve the effectiveness of land management institutions are: the availability of definite and unified policy guidance; the clear definition of institutional responsibilities; the degree of coordination between the different institutions; the capacity of the institutions in terms of manpower, resources, and equipment; the availability of adequate information on land; and the level of decentralization in decision making (McAuslan, 1985; SCBR, 1983).

**Appropriateness of the Policy Measures:** Different countries and urban areas have different social, economic, political, and historical Backgrounds. The effectiveness of land policy measures is determined by the appropriateness of the policy measures within the context of these backgrounds. As Dunkerley notes: The wide variety of control systems reflect the varied development of social systems and ethics. In consequence, what is appropriate and works to the best public advantage in one city. Generally cannot be transferred with similar results to another city, even within the same country. Inappropriate land policies could be counterproductive, and hinder the achievement of policy objectives. In developing countries, inappropriate land policy measures are generally identified as major contributors to the inability of ensuring the adequate supply of land in urban areas. Land use regulations and control measures, for example, are reported by the World Bank to be a complete failure in most of the countries (McAuslan, 1985). The failure of these measures stem from the use of foreign and inappropriate instruments and models of control, which bear no relevance to the prevailing rapid rate of urbanization and limited administrative capacity in the

developing countries. Building codes are also another example of inappropriate instruments of control in developing countries. Generally, they have often been derived from codes in the developed world. They are generally out of date and inappropriate, not taking full account of local materials and above all, of the standards that be generally afforded.

**Coordination of policy measures:** The vast array of policy measures used to achieve the interrelated and sometimes conflicting objectives of land policies create side effects due to interrelationships which could be counterproductive to the achievement of the policy objective. The effectiveness of land policy measures depends to a great extent on the coordination of policy measures in order to minimize the side effects due to the interrelationship between different policy measures. The result achieved by a particular policy measure is a function not only of its efficient implementation, but also the result of the effects provided by other, different measures. **Availability of Information:** The availability of adequate information on land is a necessary prerequisite for the effective implementation of most land policy measures. The most unsophisticated and rudimentary effort to establish positive control requires information. At the very minimum, it is necessary to have records of existing land use, development density, and ownership, along with accurate information on soil characteristics, the location and capacity of existing utilities and services, and so on. For planning purposes, information on economic and social characteristics of the population and its activities are essential. The availability of adequate information determines the ability to control land ownership, control and regulate the use of land, and the ability to develop an effective taxation system. It also affects the ability to acquire land for public uses. The lack of information on land ownership is one of the major problems hindering effective control over development, and the creation of an effective taxation system in most developing countries (McAuslan, 1985).

**Allocation of Adequate Resources:** The implementation of urban land policy programmes usually requires large financial resources, especially if the intention of the public sector is to intervene in the land market on a large scale. Financial resources are required to fund land-assembly programmes, provide services and infrastructure, implement land use plans, and ensure the availability of adequate institutional frameworks in terms of manpower and adequate operating equipment. The ability of the public sector to generate the necessary resources affects the outcomes of the implementation of land policy measures.

**Administrative System:** The outcome in the implementation of land policy measures is also influenced by the level of harmony between the different levels of governments in the application of the policy measures, and by the political and administrative framework within which the measures

operate. Conflicts between the different levels of governments may hamper the effective implementation of land policy measures. The effectiveness of the policy measures also reflects the effectiveness of the administrative system behind the policies, and the political philosophy of the state in which the policy measures operate. Where there is an efficient administrative system, and there is both an obligation on the part of the citizenry to obey regulations and a state willing to enforce them, then there is a tendency for the policy measures to be effective.

## **7. CONCLUSION**

Increasing population has often been cited as a major land use problem agent in the Nigerian tropical rainforest zone, which has subjected the vast expanse of the unprotected landscape to intensive human colonization. This fact is very true of this region, but economic activities by peasant farmers, agro-forestry and gold mining (legally and illegally) are also equally important. According to Lambin et al. (2001), neither population nor poverty alone constitutes the sole and major underlying causes of land-cover change worldwide. Rather, peoples' responses to economic opportunities, as mediated by institutional factors within interplay of local, national and global forces, drive land cover changes. Land use/land cover data are needed as input into the econometric – based per capita consumption (expenditure) model for poverty estimation. In the small area estimation method for example, a number of geographic variables are included as regressors (geographical-level characteristics) in the consumption model.

Land policy measures are subject to subversive pressures from powerful political interests. The efficient implementation of controls on urban land depends not only on institutional capacity and political will, but also on the strength of the countervailing pressures and the account taken of them in the control system. A major problem facing most developing countries in the implementation of land policies is the ineffectiveness of their administrative systems. Most of the countries have bureaucracies that are inefficient, sometimes corrupt and lacking in social discipline. These traits are reflected in the implementation of land policy measures. Another aspect associated with the failure of the land policies in developing countries stems from the fundamental structure of their societies. The developing countries tend to be what has been referred to as "soft states"--states in which national governments require extraordinarily little of their citizens, and in which even those obligations that exist are inadequately enforced.

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