

Geospatial Information, Land Administration Reform and Sustainability in Developing Economies: The Nigerian Experience

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SUMMARY

The evolution of land tenure system in Nigeria is reviewed and the various constraints on development are presented and discussed. The Land Use Act of 1978 is reviewed and various drawbacks and constraints on access to and transactions in land are discussed. The implementation of the Act is concentrated on titling of the urban land which constitutes about 3% of the country's national space. Thus, about 900,000.00 square kilometres of Nigerian land is effectively locked up as "dead capital".

It is in attempt to unlock this "dead capital" as asset in land market economy that President of the Federal Republic of Nigeria Alhaji Umaru Shehu Yar'Adua made the National Land Reform as part of the Seven Point Agenda (SPA) for national development. On the 2nd of April this year the President inaugurated the Presidential Technical Committee on Land. The Committee was charged with, through a well articulated "Terms of Reference" the responsibility of drafting a road map for improving the institutional, legal and technical framework to transform the land tenure system to a dynamic land market economy. Various aspects of the Land Reform Agenda are presented and discussed.

In Nigeria and most developing economies, geospatial information is generally not recognised as the basic tool in policy making, planning and economic development, as it does not arouse political interests. The paper presents and discusses the need and usage of geoinformation for sound and interdisciplinary decision making for sustainable economic development especially in the context of Land Reform Policy of the Federal Government. The need to create national topographical database, a national cadastre system driven by geospatial information management; and development of appropriate national geospatial data infrastructure (NGDI) and information communication technology (ICT) is stressed.

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1. INTRODUCTION

Land is a basic natural resource. It supports all human activities and it is from it that all other economic resources are derived. It can hardly be renewed or increased without adverse consequences, and therefore must be judiciously and efficiently managed in a sustainable manner for the use and good of all. It is for this reason that different countries the world over have evolved land tenure and land administration systems to protect various “interests” in land. Nigeria has had her share of land administration reforms from the colonial era to the promulgation of Land Use Act of 1978. The proposed land reform programme of the Federal government is an attempt to address, in a holistic manner, the inadequacies of previous land reform process.

Land administration is the process of regulating land and property development and the use and conservation of the land, the gathering of revenues from the land through sales, leasing and taxation, and the resolving of conflicts concerning the ownership and use of the land (Dale and McLaughlin 1999).

The major goals of any land administration reforms are among others, to ensure that (Dale 2007):

- There are secure dealings in land.
- The cost of transactions is kept low.
- There is access to credit.
- There is transparency in all dealings.
- There is easy access for all participants, poor or rich.
- Minority rights are protected.
- Environmental sustainability is supported.

Underlying each of these is a fundamental need for reliable geoinformation a developed cadastre, appropriate information communication technology (ICT) and good governance systems. The success or otherwise of any land administration reform system depends on the flow of information relating to land and property between different government agencies and between these agencies and the public. This can be achieved through appropriate Land Information System (LIS) and National Spatial Data Infrastructure system (SDI). In the remaining of this paper the evolution of land tenures system in Nigeria will be discuss, the current land reform programme of the Federal Government which aims at transforming Nigeria into a land market economy will be presented and the objectives of the programme

discussed. The need to employ a sound technical approach in the implementation will also be discussed.

2. EVOLUTION OF LAND TENURE SYSTEM IN NIGERIA

2.1 Pre-Colonial Era

During the pre-colonial era the land space in Nigeria consisted of land adjudicated by might of warfare, occupation and rulership in which princes and religious adventurers carved out dominions for their followers and communities. Community leaders and warlords had great influence in the administration of land for communal living, farming and grazing purposes. In the northern part the predominantly nomadic Fulani rare their cattle over large expanse of land and found settlements and markets as they move without defining boundaries for any group of communities or settlements (Mabogunje and Oguntinyinbo, 1997; Adedeji, 2006). Then there existed a feudal pattern with Emirs claiming ultimate title to land, with fief holders. In the Southern Nigeria, land was held by the community, village, or family. In the main land was owned by extended lineage, individuals having only usufructory rights by virtue of their member of the group.

2.2 Colonial Era

Before the amalgamation of Northern and Southern Nigeria in 1914, the Colonial Nigeria was divided into colonies and protectorates where multiplicity of land tenure systems existed. The arrival of Europeans in Southern Nigeria in the later part of 19th drastically changed the land holding system. As soon as the European traders, who were used to freehold, began to acquire land parcels in Lagos colony, they did so with the concept that the transactions conferred on them absolute ownership and the right of alienation. The transactions in land by the Europeans and the introduction of English freehold system in 1861 (Elias, 1971), caused deep conflicts between the customary system of land tenure and imported freehold system, which resulted in endless and bitter litigation. However the Northern Protectorate was saved the experience of Southern Nigeria. Lord Lugard who occupied Northern Nigeria at the turn of 19th century used the “tools” he found locally. The Emirs who exercised “proprietary” rights were appointed or re-appointed and given “letters of appointment” which transferred their feudal pattern of land holdings to the Crown. The Native Rights Proclamation of 1910 nationalised all land and placed it under the control and administration of the Governor in the interest of the indigenous population.

3. THE LAND USE ACT OF 1978

The introduction of freehold in the southern states and the subsequent economic development resulted in the evolvment of many and varied interests or rights in land. Subsequently, ownership of land, especially in urban areas, became a great economic venture and speculators made it very difficult for other land users and even various governments and their agencies to acquire land for development purposes (Atilola, Fajemirokun, 1979).

It was in an attempt to halt the foregoing contrasting land tenure systems, the attendant litigations and difficulty being experienced by various governments in accessing land for public good; and the desire to ensure that “rights of all Nigerians to the land of Nigeria be asserted and preserved by law”; and in order “that the rights of all Nigerians to use and enjoy land in Nigeria, and the natural fruits thereof in sufficient quantities to enable them provide for the sustenance of themselves and their families should be assured, protected and preserved” that the Federal Military Government promulgated the Land Use Act of 1978 (Federal Republic of Nigeria, 1978).

The Land Use Act was revolutionary as it sought, for the first time, to unify the land tenure systems all over the country in addition to nationalising land in the country’s geographical space. The Act vested all land in the territory of each state on governor of the state and created a statutory title to land known as the statutory lease hold, and customary rights of occupancy to be granted by the governor or the local government chairman respectively. A Certificate of Occupancy is issued, in either case, to the lease holder as an evidence of title. Other objectives of the Act are to:

- To remove bitter controversies and litigations that usually arises over title to land.
- To streamline and simplify the management and ownership of land in the country.
- To assist the citizenry, irrespective of his social status, to realize his ambition and aspiration of owning land.
- To enable government to bring in control the use to which land can be put in all parts of the country and facilitate planning and zoning programmes for a particular use.
- To curtail the activities of land speculators and remove the undue influence which certain traditional rulers have on land.

The land Use Act with all its potentials and promises to transform the land tenure system in the country did not work as intended for various technical, institutional, social reasons and lack of sincerity on the part of various government.

3.1 Problems and Shortcomings of the Land Use Act of 1978

The following, inter alia are the problems and shortcomings of the Land Use Act 1978:

- **Technical issues:** lack of prerequisite maps for determining who owns what land; the non-explicit demarcation of urban and rural areas, and the assumption that the prerequisite national cadastre and geospatial data infrastructure, which are *very essential* for a *land tenure reform*, were available.
- **Lack of political will by government:** Each succeeding Federal Government since the promulgation of the Act had exhibited lack of political will to implement various provisions of the Act to make it succeed. The Act made allowance for transitional provisions for the orderly assimilation of the land tenure systems it

hoped to replace, but 30 years, after these other land tenure systems are still being operated.

- **Operation of the Land Use:** The operation of the land Use Act by its “trustees” – the State Governors and local government Chairmen had been characterized by its use as political weapon, lack of transparency, arbitrary and selective administration of its provisions.
- **Lack of Security of Tenure:** The Act has not succeeded in removing the uncertainties in title to land; instead, it seems to accentuate it. It does not protect small scale peasant farmers who continually lose their farm lands through acquisition for urban expansion and large-scale acquisition of land for commercial agriculture, most of which are speculative, without paying adequate compensation.
- **Consent Provision:** The requirement of obtaining consent of the governor for statutory right of occupancy or local government for customary rights of occupancy holders before transaction in land can be effected is cumbersome and expensive.
- **Land Titling:** The process of obtaining title to land is expensive and tedious, consequently 30 years after its operation less than 3% of land in the country, mainly in the urban areas, is covered by registrable title.
- **The philosophy of the Act** that: all land belongs to the state; all undeveloped land has no value and hence has no market value; and that there is no freehold of land deterred the development of market land economy in Nigeria.

The foregoing and other attendant problems of the Act informed the agitation for its review by many stakeholders.

4. NEED FOR REFORM IN NIGERIA

Land is a natural asset of the common man which government should help in converting to capital and means of empowerment. At present this natural asset of majority of rural Nigerians is locked up as “dead capital” as various interests in them does not possess registrable titles to raise capital. Only about 3% of the land in Nigeria is covered by registrable titles. It is this low level of land titling that accounts for the high level of poverty in the land as it is not possible to harness the potentials in land without title deeds. The philosophy of the land Use Act that all land belongs to the state and should be held in trust by the governor for the people, and that undeveloped land has no value, constitute a great obstacle to the development of a dynamic market land economy and therefore needs a rethink for the current initiatives of unlocking the commercial potentials of land in Nigeria to be realised.

It is the current dysfunctional nature of land administration dynamics, and concerns arising from its unproductive nature, as noted herein, that drives the need to provide a better strategy that will make Land Administration work and also provide benefits to all citizens of Nigeria.

5. THE NIGERIAN LAND REFORM AGENDA

On the 29th May 2007, President Musa Yar’adua, during the inauguration of the current democratic government announced the “Seven Point Agenda” which will form the pivot of administration’s development programme. The seven point Agenda of the present democratic government like its United Nations’ counterpart, the Millennium Development Goals (MDGs), have their roots in sustainable development. While the MDGs address issues of eradication of extreme poverty and hunger to environmental sustainability, the Seven Point Agenda ranges from food security to land administration reform, which is a basis for sustainable development, for no nation can be said to develop in a sustainable manner if the condition of “extreme poverty and hunger” exists. It is noteworthy that the seven point agenda includes land administration reform; this implies that government recognises that all other development agenda are dependent on a sustainable land policy. The seven point agenda of government listed below form a part of government’s “Vision 2020/20”, which is expected to transform the country into one of the 20 developed economies by year 2020.

- Agenda 1: Power and Energy (Generate adequate power supply to facilitate industrialization)
- **Agenda 2: Land Reform (Review existing land laws to ensure equitable use of the Nation’s land assets for socio economic development)**
- Agenda 3: Food Security (Develop agriculture and water resources to ensure) adequate food supply for local consumption and export)
- Agenda 4: Security (Adequate attention to the provision of security to lives and property)
- Agenda 5: Wealth Creation (Diversification of revenue base and increased production to provide jobs)
- Agenda 6: Education (Reform education sector to improve skills and enhance standard)
- Agenda 7: Transport Sector (Development of rail, road, air and water transportation to facilitate movement of persons, goods and services)

5.1 The Technical Committee on Land Reform

The importance attached to land reform was demonstrated by President Yar’Adua on Thursday 2nd April, 2009, when he inaugurated the nine-member Presidential Technical Committee on Land Reform. The committee’s terms of reference include, among others:

- To review pre-land Use Act and land tenure in existence in different parts of the country with a view to putting the land tenure system in Nigeria into a historical perspective.
- Collaboration with and provision of technical assistance to states and local government areas to undertake land cadastral nationwide.
- Determination of individuals’ “possessory” rights using best practices and most appropriate technology to determine the process of identification of locations and registration of title.

- Ensuring that land cadastral boundaries and title holdings are demarcated in such a way that community, hamlet, village, village areas, towns etc will be recognizable.
- To assist and encourage States and Local Governments to establish an arbitration mechanism for land ownership conflict resolutions.
- To establish a National Depository for Land Title Holdings and Records in all states of the Federation and the Federal Capital Territory.
- To establish a mechanism for land valuation in both urban and rural areas, in all parts of the Federation and
- To undertake any other activity that will ensure an effective, simplified, sustainable and successful land administration in Nigeria.

The new Land Reform Agenda is a milestone in the development of a national land policy for Nigeria the success of which is fundamental to the realization of the other six points in the Seven Point Agenda. The Presidential Technical Committee on Land Reform was charged with the task of charting a roadmap for improving existing institutional and legal framework of land tenure with a view to developing a land market economy for the country. The terms of reference of the Committee though not exhaustive forms a framework from which a comprehensive land policy and management can be formulated for the nation. The Committee has since called for memoranda from all stakeholders to assist it in its arduous task.

It is noteworthy that geospatial information is recognised as the basic prerequisite for land administration reform and a land market economy; a conspicuous omission in the Land Use Act.

5.1.1 Geoinformation and Land Administration Reform

The prerequisites for a land administration reform can be generalized into three main components viz.: *knowledge, development of appropriate ICTs*, and *action*. Knowledge refers to human capital development – acquisition of skills and capacity building. It also includes knowledge of the contents of the geographical space of interest. Appropriate ICTs are required for communication and dissemination of information in order to stimulate the development of an information society and the sharing of vital information on land for sustainable development. On the other hand *action* refers to the tasks of integrating, planning and execution which are the main component of any land administration reform process. Most invariably action is aided by knowledge, especially knowledge of the spatial contents of the environment. Thus the most basic prerequisite for any land administration reform is the spatial content of the environment for, in reforming the land administration of any nation for sustainable economic development, its physical and economic resources, as well as the natural, cultural and infrastructural features must first be identified, taken stock of and surveyed. Since the goal of land administration reform is to deliver desired quality changes for citizens in the real world, it is evident that meaningful reform of policies cannot be implemented without adequate information (geoinformation) on the **spatial contents** of the real world - geographical space - of interest, since all human activities are spatially or geographically based.

We cannot manage, reform, or administer what we do not know. Therefore the first step in any land administration reform is to have adequate knowledge of the extent and (spatial contents) nature of the land which administration we want to reform. This knowledge, known as geoinformation, is provided by surveying and mapping services.

6. IMPLEMENTING THE LAND REFORM AGENDA

The Presidential Technical Committee on Land Reform is yet to come up with the final approach and methodology for implementation of the Land Reform Programme; however many ideas are being touted on the preparation of the land cadastre for the Land Reform Programme including obtaining approximate deeds from satellite or aerial orthophoto maps using persons trained on ad-hoc basis. But considering: the fact that the country is well endowed but poorly mapped; the need to create a topographical database which will be required to drive other development projects in all sectors of the economy; the need to situate the cadastral survey within the context of the existing laws of the country; the cost of improving initial approximate land cadastre; the available technology that can be deployed to rapidly carry out cadastral surveys employing best practices; the surveying community through the Nigerian Institution of Surveyors (NIS) had proposed to the Technical Committee, that the National Land Cadastre should be executed within the ambit of the existing legal land laws employing relevant professionals and best practices, that will deliver within shortest period possible. This will ensure that the mistakes of the past are avoided and also correct the deficit in geoinformation requirement of the country. The NIS recommendations, among others, are given bellow.

6.1 Creation of Topographical Database and Spatial Data Infrastructure

- The Federal Government of Nigeria should embark on Digital Aerial Mapping of the entire country to produce topographic databases at the (data acquisition) scale of 1/2000 for State capitals, FCT and other urban areas and 1/10000 for rural areas.
- Federal Government should establish at least Thirty Five (35) Global Navigation Satellite System's (GNSS) Continuously Operating (Geodetic) Reference Stations (CORS) at spacing of not more than 200km from each other, as well as passive *First and Second order geodetic controls* nationwide.
- The State Governments should break these down to *Third and Fourth order controls*, all on a unified geodetic reference datum. This should be done in partnership with the Private Sector

6.2 Determining the “possessory” Rights and Identification of Locations and Registration of Title Holdings

- Deployment of geospatial professionals, equipped with Digital/analogue base maps for charting, to enable precise determination of locations in accordance with Surveyors Council of Nigeria (SURCON) minimum standards.
- The National Land Cadastre, showing the extents and location of individual rights on land, should be carried using Total Stations, Real time Kinematic GPS equipment, and other position determination equipment and their associated software; and ancillary equipment to process them for dissemination and inclusion in any land data bank.

6.3 Demarcation Of Communities, Hamlets, Villages etc. to be Recognizable for Purposes of Demarcating Cadastral Boundary and Title Holdings:

Government to urgently produce large and medium scale maps at appropriate scales to cover the entire country: 1:2000 to 1/5000 for urban areas and 1/10000 to 1/25000 for rural areas using the products of item 1.

6.4 Establish of an Arbitration Mechanism for Land Ownership Conflict Resolution at the States and Local Governments Areas:

The Federal Government should legislate and create Land Management/Arbitration Bureau for land ownership conflict resolution in the States and Local Governments as an alternative to tortuous court actions.

6.5 Establishment of a National Depository for Land Title Holdings and Records in all States of the Federation and the Federal Capital Territory:

The National Depository of land title holdings should be structured in a dynamic way and not just seen as an archive. This means that data in the depository should be properly geo-referenced and accessible. It is also expedient that the compulsory land registration for all title holdings to go into the National depository, must commence immediately. The necessity for developing a land data bank is now more obvious and urgent than ever. The specification for these and other details shall be determined in accordance with International Standard Organization Technical Committee 211 specifications (ISO TC211) and within the context of the National Geo-Information (NGI) policy for Nigeria.

6.6 National Mapping Policy, Security and Funding

- The Federal Government should adopt a National Mapping Policy to ensure that maps are produced adequately to meet users’ needs and updated periodically for sustainable and successful land administration in Nigeria.

- The National Assembly should create a Standing Committee on Surveying and Mapping to oversee effective implementation of the National Mapping Policy.
- In view of the Security implication of Surveying and Mapping, it is imperative that serious attention should be given to compulsory retention of all cadastral and mapping data produced by both the indigenous and multinational companies in the National Depository to avoid the pitfalls of the past in land administration.
- Governments at all levels should fund Surveying and Mapping adequately as recommend by the United Nations.

7. CHALLENGES FACING THE THE LAND REFORM AGENDA

The proposed Land Reform Agenda is still being articulated. While the technical Committee on the land Reform is brainstorming on the optimal approach to the actualization of the technical components of the Land Reform, there is the need to articulate the Land Use, land Reform and Administration Policies. This is necessary for institutionalising of the Reform and consequently for ease of administration and enforcement. To achieve this, the Land Use Act of 1978 which is entrenched in the constitution of the land needs to be reviewed to expunge the retrogressive clauses which made the Act not to be pro poor and entrench the New National Land Policy. This is a big task considering the cumbersome procedure constitutional amendments go through.

In addition the following issues also need to be articulated: Land Use Planning; Legal framework for regulating land registration and delivery; and legal framework regulating physical planning. Planning is a basic tool for proper land management and land administration.

Of equal importance is the sensitization of all stakeholders especially the farmers who may be distrust of governments' actions as intention to dispossess them of their land. The most daunting task is how to separate intricate web of various land holdings such as grants, pledges, tenants etc and who is to be issued title. All these need a lot of adjudication which certainly require patients as well as time consuming.

8. SUMMARY AND CONCLUSION

In this paper the a review of the land tenure system in Nigeria before the advent of colonialism as well as the post colonial land tenure system are presented and discussed. The shortcomings and problems associated with the land administration of post colonial era were highlighted. These shortcomings informed the promulgation of the Land Use Decree (now Land Use Act) of 1978 which sought to ensure that "rights of all Nigerians to the land of Nigeria be asserted and preserve by law"; and in order "that the rights of all Nigerians to use and enjoy land in Nigeria, and the natural fruits thereof in sufficient quantities to enable them provide for the sustenance of themselves and their families should be assured, protected and preserved". The Land Use Act had been in operation since then, but failed to meet the aspirations of majority of Nigerians in terms of access to and transactions in land. The

implementation of the Act is concentrated on titling of the urban land which constitutes about 3% of the country's national space. Thus, about 900,000.00 square kilometres of Nigerian land is effectively locked up as "dead capital".

It is in attempt to unlock this "dead capital" as asset in land market economy that President of the Federal Republic of Nigeria Alhaji Umaru Shehu Yar'Adua made the National Land Reform as part of the Seven Point Agenda (SPA) for national development. On the 2nd of April this year the President inaugurated the Presidential Technical Committee on Land Reform. The Committee was charged with, through a well articulated "Terms of Reference" the responsibility of drafting a road map for improving the institutional, legal and technical framework to transform the land tenure system to a dynamic land market economy. The Committee has since started to work. It has called for memoranda from all stakeholders with a view to charting the optimal method for acquiring the national land cadastre; while the legal and institutional frame work are being worked on through moves to amend the Land Use Act of 1978. It is hoped that current attempt at empowering the masses of Nigerians who possess land but cannot convert it to capital will break the jinx of previous anti poor land administration policies and finally move the nation to land market economy.

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