



RESEARCH ARTICLE

IMPACT OF PLANTATION AGRICULTURAL PRACTICES ON HOUSING DEVELOPMENT IN AWI,  
AKAMKPA LOCAL GOVERNMENT AREA, CROSS RIVER STATE-NIGERIA

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ARTICLE INFO

**Article History:**

Received 08<sup>th</sup> March, 2017  
Received in revised form  
10<sup>th</sup> April, 2017  
Accepted 09<sup>th</sup> May, 2017  
Published online 30<sup>th</sup> June, 2017

**Key words:**

Plantation estates, Agricultural practices,  
Housing Development, Land use.

ABSTRACT

This paper investigated the impact of plantation agricultural practices on housing development in Awi, Akamkpa Local Government Area of Cross River State–Nigeria. A total of 200(two hundred) questionnaires were distributed to the indigenes of Awi to capture information such as the type of agricultural practices in Awi, the impact of plantation agricultural practice and the analysis of land use in Awi. Both random and systematic sampling techniques were adopted in the study. Findings revealed that over 85% of agricultural practices in the study area is plantation estates of forest made up of gmelina owned by the Cross River State Government and oil palm estate. It has also shown that these plantation estates occupied over 90% of the total land area of Awi resulting to shortage of land for building development. The paper also showed in its land use analysis that over 60% of the land has been consumed by plantation agriculture and which has limited housing development. The paper finally recommended the introduction of site and service scheme and public private partnership (PPP) in housing development among others.

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**Citation:** TPL Samuel I. Emri, TPL Benedict E. Ojikpong, Ukpali E. Obongha and Jennifer K. Upuji, 2017. "Impact of plantation agricultural practices on housing development in awi, akamkpa local government area, Cross River State-Nigeria", *International Journal of Current Research*, 9, (06), 52348-52351.

INTRODUCTION

Agriculture is one of the largest industries in the world. More people are involved in agriculture than in all other occupations combined (Ronald 2004). Moreover, one of the greatest and most pressing challenges facing today's world is to produce enough food to feed its growing population. This is a problem often not appreciated by economist who estimated that the world's food production has expanded 2.6 times since 1950 more rapidly than the human population. However, virtually all land that can be cultivated is already in use, and since a majority of the world population is poor, the pressure put on the arable lands has begun to have a declining effect. Over 35% of the world's top soil has been lost from agricultural lands since 1950 (Peter and George, 1999). In Awi community, 60% of their top soil has been used for agricultural practices like oil palm plantations and Gmelina plantation. As a matter of fact these practices had a greater impact on housing development, because nobody can build on someone's oil palm plantation and the gmelina plantation owned by the government of Cross River State. Obateru (2005), viewed land use as a science and art of space organization.

This involves the location and allocation of urban and rural land classified in to residential, commercial, industrial, recreational, open space and agricultural. This is for the purpose of creating physical environment that is orderly, economically, functionally, efficiently and aesthetically pleasing for living working, recreation and circulation. The residential use has an indisputable influence on spatial distribution of all other urban sub-system with a dominant emphasis on built environment.

Viewing agricultural practices positively, it becomes very pertinent because of its contribution greatly to food production. But the negative aspect particularly in the study area where oil palm plantation and the gmelina plantation of the state government have hindered housing development. In order to assess the consequences of plantation agricultural practices in our environment, both social and economic benefits and the often positive and negative environmental consequences on our immediate environment and the other land uses especially on residential land use are to be looked into. This paper, however, investigates the impact of plantation agricultural practices on housing development in Awi, Akamkpa Local Government Area of Cross River State-Nigeria.

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## Conceptual framework and literature review

**The concept of sustainable development:** Sustainable development as a concept largely incorporates the twin objectives of human development and environmental protection. As defined by the Brundland commission in its 1987 report on our common goal of meeting the needs of the present generation without compromising that of future generations (World development Report 2004). It is further elaborated as a process in which the exploitation of natural resources, the direction of investment, the orientation of technological development and institutional change are all in harmony and enhance both current and future potentials to meet human needs and aspiration (NEST 1992). Sustainable development is not a new concept. It is in fact, the latest expression of a long standing ethnic involving people's relationship to the environment and therefore very much related to the concept of human relationship to the environment and their adaptation pattern to change in the environment. The concept of sustainable development has been adapted to this study in building the literature review.

### Literature Preview

Human history is replaced with a list of past civilizations which flourished, but eventually decline partly as a result of lack of proper management of their respective environments. In order to avoid a repeat of history, therefore, adequate attention must be devoted to good management and conservation of the environment so that increased in food, fiber and other resources can be produced at minimum cost and the risk to the survival of future generation minimized. In the absence of rational and conscious sustainable exploitation of the physical and natural resources, irreplaceable and probably irreversible damages inevitably result. (NOUN 2009). According to Yudelman (1998) and Douglas (1992), African problems are always looked at the context of economic constraints. Yet eroding soils, deteriorating range land, dwindling forest and falling water tables, consequences of environmental mismanagement, are testimonies to the related crisis of ecological degradation. We therefore need to understand the inter-relationship of the sectors of the Nigeria economy so that we do not promote one development at the expense of another. Hence, sustainable development should be the overriding issue in future planning, and this among other requirements, demands adequate knowledge of sensitivity towards resources management. Sustainability expands the concept of development by recognizing the ecological limits imposed on achieving a given set of development objectives. Sustainable development is a "positive socio-economic change that does not undermine the ecological and social system upon which community and social systems are dependent".

The residential land use compasses of various housing units to the entire residential neighbourhood complexes. Housing is more than shelter; it is a bundle of services. It is the totality of the housing environment which includes the shelter (Omole, 2001). The importance of housing to the socio-economy wellbeing of the century and the economic development of the nation cannot be over emphasized. Housing is also an issue that touches on the life of individuals as well as that of the nation and great importance is ascribed to the role it plays in endangering human comfort by both nature and society. It has been universally accepted as the second most important essential human needs after food since it embraces all the

social services and utilities that make a community or neighbourhood a living environment. Residential land uses range from high density, represented by the multiple-unit structures of urban cores, to low density, where houses on plots of more than an acre, but on the periphery of urban expansion. Linear residential developments along transportation routes extending outward from urban areas should be included as residential appendages to urban centres but care must be taken to distinguish them from commercial strips in the same locality. The residential strips generally have a uniform size and spacing of structures, linear driveways and town areas. The commercial strips are more likely to have buildings of different sizes and spacing large driveways, and parking areas. Residential development along shoreline is also linear and sometimes extends back only one residential parcel from the shoreline to the first road. Areas of spares residential land use, such as farmsteads used to indicate such uses as housing situations such as those existing on military bases, at colleges and universities, living quarters for labourers near a work base, or lodging for employees of agriculture and field operations or resorts thus, will be placed within the industrial, agricultural, or commercial and services categories. (Lianzefa, 2007).

In Nigeria particularly, land is still largely under the control of families, clans and villages, generally Yoruba's have no concept of ownership of land. Land to them belongs to God. In the worlds of a Nigerian chief in 1921 as related by Famariyo in his book (land tenure and agricultural development, 2007), he conceives that land belong to a vest family of which many are dead, few are living and countless numbers are still unborn. Davies (1998) holds the view that the land use is unnecessary that by shifting emphasis from absolute ownership and freehold to occupancy and use, it kills incentives and undermine security of tenure and thus incompatible with modern agricultural practice. There is still strong adherence to the conventional land use planning approach, most major cities including Lagos, Kaduna, Port Harcourt, Onitsha, Enugu and some in other parts of the Niger Delta region have been developing with the conventional land use approach (Jiboye 2005). This has generated diverse environmental problems manifesting in the form of deterioration of cities into slums, pollution, congestion, unsanitary condition and epidemics in residential environments therefore to focus on the impacts of agricultural practice on residential land use. Various factors are to be considered for the isolated state such as the consistency in soil quality and climate, profit maximization by the farmers, land surrounded by unoccupied wilderness, etc. which are all present in the study area. The review of various literatures on the subject matter has shown a useful insight into what is expected from the study.

## MATERIALS AND METHODS

This study was conducted in Awi, Akamkpa Local Government Area of Cross River State – Nigeria. The study employed the primary and secondary sources of data. The primary sources of data collection were through administration of questionnaires and personal interview and observation for first hand information to ascertain the impact of plantation agricultural practices on housing development in Awi. The secondary sources of data employed in this study were textbooks and journal articles on the subject matter. Data on the type of plantation agriculture practiced in Awi, impact of plantation agricultural practices and land use analysis were captured in the questionnaire. A total of 200(two hundred)

questionnaires were distributed to the indigenes of Awi. Random sampling technique was employed in the selection. Respondents were interviewed in order to assess their views on the impact of plantation agricultural practices on housing development in the study area. The descriptive statistics of Tables and percentages were adopted for the analysis.

**DATA PRESENTATION, ANALYSIS AND RESULTS**

**Table 1. Type of plantation agricultural practice**

TYPE	Frequency of Respondents	Percentage (%)
Forest Estate	100	50
Palm Estate	70	35
Peasant Farming	15	7.5
Subsistence Farm	10	5
Others	5	2.5
Total	200	100

Source: Field Survey (2016)

The Table 1 above shows the type of plantation agriculture practiced in the study area. Forest Estate made up of gmelina owned by the Cross River State Government takes the highest of 50% followed by oil palm estate with 35%. While peasant farming and subsistence farming has 7.5% and 5% respectively. This means that gmelina estate and oil palm estate has taken over a vast land that would have been used for building development.

**Table 2. Impact of plantation agricultural practices on housing development**

Option	Coverage (Hectares)	Percentage (%)
Forest Estate	36,489.25	33
Palm Estate	42,784.55	40
Peasant Farm	16617.48	16
Subsistence F.	12,349.18	11
Total	108,240.46	100

Source: Field Survey (2016)

The Table 2 above shows the impact of plantation agricultural practices on housing development in Awi and it shows that forest estate made up of gmelina has occupied 33% of land meant for housing development, oil palm estate occupied over 40% of the land. While peasant and subsistence occupied a negligible proportion of only 16% each. This means that the forest estate made up of gmelina, owned by the Cross River State Government and the oil palm estate by individuals and companies like Calaro Palm Estate has taken over land for housing development. Peasant and subsistence farming has no serious impact on housing development since it occupies a small land area. The information is depicted in Figure 1

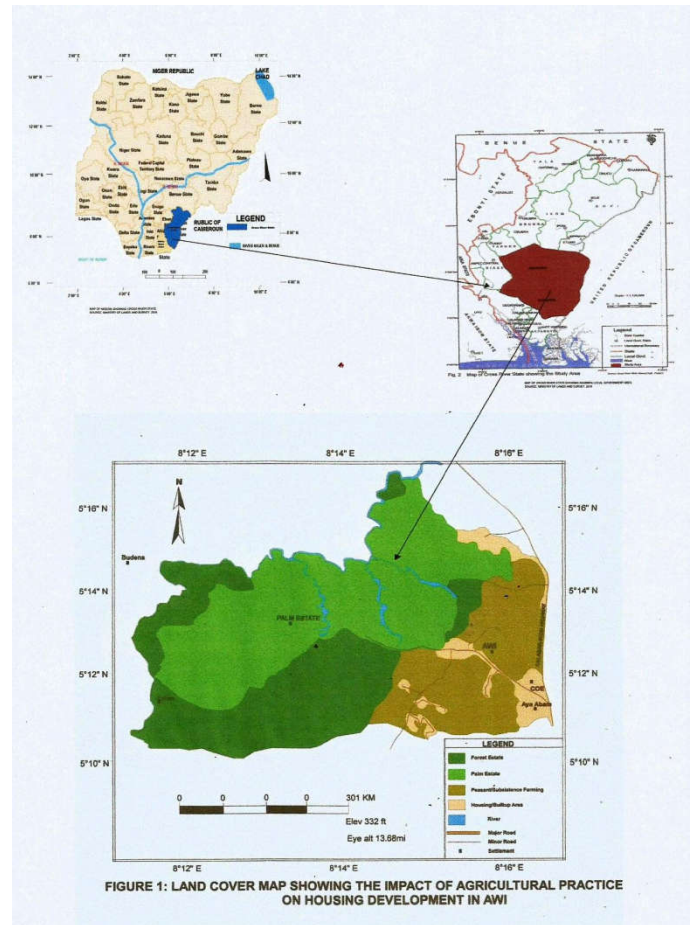
**Table 3. Land use analysis**

Option	Frequency of Respondents	Percentage (%)
Agricultural land use	120	60
Residential land use	35	17.5
Educational land use	25	12.5
Circulation land use	10	5
Commercial land use	10	5
Total	200	100

Source: Field Survey (2016)

The Table 3 above has shows the land use analysis in the study area. Agricultural land use top with 60%, followed by residential land use 30%, educational/public land use 12.5%, commercial and circulation took 5% each. This means that

greater part of the land in the study area is devoted to agriculture.



**FINDINGS**

The results of this study has shown from the analysis that the type of plantation agriculture practiced in the study area are forest estate made up of gmelina owned by the Cross River State Government and the oil palm estates owned by private individuals and the Calaro Company. These estates have consumed approximately 85% of the total land for agricultural practices in the study area. This has made it practically impossible for developers who are willing and ready to acquire land for development. Also private developers have always found it difficult to get land for development especially developing private accommodation to serve both staff and students of the Cross River State College of Education, Akamkpa. Secondly, considering the impact created by these plantation estates on housing development in the study area, it has been found from the analysis that over 90% of the impact came from forest plantation of gmelina and oil palm estates. This is a serious indication why housing development has not been effective in Awi. The land use analysis of this study has also proven that 60% of the use of land goes to agricultural practices while 40% goes to the entire land uses as illustrated in the Table 3 above.

**Recommendation**

This study recommends as follows:

- The introduction of Site and Service Scheme: It appropriate to introduce site and service scheme in which the Cross River State Government use her power of 'Eminent Domain' to acquire all the lands occupied

by the estates and prepare the layout with facilities such as roads, electricity, waste collection points and materials, water and security and then, lease the plots to private individuals for housing development.

- Public and Private Partnership (PPP): It is also recommended that the State Government could partner the private sector for housing development in Awi. These private developers would build and transfer the ownership to individuals who remit payments in installments. These individuals' especially civil servants could also be encouraged to own their homes through this process. However, these processes will also provide descent and affordable accommodation to both staff and students of the cross River State College of Education, Akamkpa which is located in the study area.
- Building of Satellite Towns: The functions performed by a Satellite town are significant as they help in decongestion of a city population. However, if Awi because of its proximity to Calabar is developed as a satellite town, it will help to reduce urban congestion in Calabar and its inhabitants can commute to work in Calabar at ease.

Finally, the State Government lunched Mortgage Finance And Home Ownership Options in 2007, it was however noticed in the course of the study, that the focus in terms of location is Akpabuyo Local Government Area. This is probably due to the proximity of Akpabuyo to Calabar. It is recommendations the location of "Home Ownership options" be extended to Awi in Akamkpa Local Government Area.

### **Conclusion**

In conclusion, this study was out to investigate the impact of plantation agricultural practices on housing development in Awi and the results shows that plantation agriculture takes over 85% of the land for agricultural practices in Awi, it's also consumed over 90% of the total land area of Awi and thereby, reducing land for housing development.

Over 60% of the land use analyses were meant for agriculture in the study area. This has negatively affected housing development in Awi. The paper has however recommended for site and service scheme, building of a satellite town in awi and public private partnership (PPP) in housing development in the study area.

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