

# An Assessment of the Level of Infrastructural Provisions in the Existing Farmhouses in Greater Yola

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**Abstract:-** Farmhouses are integral component of agricultural practice all across Nigeria. This is owing to the fact that most of these activities are carried out in semi urban or rural areas. The quality of farmhouses and the level of infrastructural provisions available in farm settlements are factors that will enhance or inhibit effective agricultural practice in Greater Yola. This paper seeks to assess the level of infrastructural provision in the study area in order to proffer suggestions that would promote the practice agriculture thereto. Ten farmhouses were randomly selected from the study area, seven of which were found to be Large Plantation Farm Type and three were Small Owners or Latent Farm settlements. Check list was used in generating data about the availability of infrastructural provisions in each of the farmhouses, and the study reveals that most of the farmhouses were not built in line the standards and quality of modern farmhouses, while some large plantation farm type have considerable infrastructural provisions, the small owner or latent farm type do not have them, this is likely affecting agricultural practice negatively. It is therefore recommended among others that efforts should be geared towards improving the quality of farmhouses as well as increasing infrastructural provision in order to encourage agricultural practice in Greater Yola.

**Keywords:-** Farmhouses, Infrastructural Provision, Agricultural Practice

## I. INTRODUCTION

Farms are usually developed in the rural areas in Nigeria and are inhabited by the bulk of the nation's population; they serve as the base for the production of food and raw materials. They are also the major sources of employment, wealth creation for the economy, and a principal market for domestic manufactures (Olatunbosun, 1975). There are gross inadequacies and insufficiency of sustainable infrastructural provisions e.g. electricity, water supply, sewage systems, etc in farmhouses which has over the years become the bane of practicing and prospective farmers. The cost of connecting these farms with the power and water grid towards improving their infrastructural provisions is enormous, posing great challenge to the development and sustenance of agricultural development schemes (Nchuchuwe and Adejuwon, 2012).

It is unpopular nowadays to find youths especially school graduates planning on investing in agriculture which is usually propagated in the rural areas. A very recent statistics revealed that only less than 33% of university and college graduates of agriculture in Nigeria venture into agricultural production. The reasons for this phenomenon are enormous, but the one related to this research is the lack of social amenities and infrastructure of modernity that can facilitate the generally desired quality of life in the existing farms where there are employment opportunities for them (Halla, 2016). Most farms within the greater Yola do not provide farmhouses and where they do, they fall short of basic minimum housing conditions and quality. What roles then can Architecture play in improving the livelihood of prospective farmers especially those already involved in agricultural activities?

It has been established that the success of any architecture is its ability to articulate the cultural relics and the day to day activity of a people into spaces that make up their dwelling units. It is therefore expedient that the architecture of surrounding farm houses be assessed with the intent of developing a prototype design towards improving on the predicament of farmers and farm dwellers.

Despite the importance attached to farming activities, farm settlements are not attractive to live in. There is absence of infrastructure, which improves the quality of life. Usually, absence of potable water, electricity and good feeder roads are common scene of farm settlements (Olayiwola and Adeleye, 2005). Infrastructural problem in farmhouses is hampering the growth of farm settlements especially by the younger generation, hence the need to devise architectural means of ameliorating the problem.

Halla, D. (2016) posits that in the underdeveloped areas, two types of buildings are found: those of the large plantation-type farms, and those of the small-owner or tenant farms. In these, buildings are generally small and scattered, the construction of a single large building being too expensive. This form of farm layout seems to find prominence in Nigeria as farms are more often than not sited in undeveloped areas. The practices of the small-owner or latent farm are overwhelmingly predominant as farmers cultivate and grow their crops and animals around their dwellings or travel some distances to find larger expanse of land for crop cultivation.

The basic requirements for the farmer's family are about the same as those of the urban family, but certain features of the farmhouse depend on the farm-life pattern. Because the farmer generally comes directly from the fields or the service buildings, with soiled clothes and boots, it is necessary to provide a rear entrance with a washroom or lavatory and clothes-storage space. For the same reason, many farmers prefer a dining place close to the kitchen or included in it. The house must include an office and a large food-storage place with ample refrigeration, including a freezer in many countries, as most farm families are large. There are usually three or four bedrooms.

Satisfactory modernization of old farmhouses is difficult in some cases, but if the available floor space is sufficient and the main walls strong, renovation can give good results. The cost of a new house must be proportionate to the farmer's income; for this reason, farmhouses in underdeveloped regions have less floor space with a main room (kitchen and dining room), two or three bedrooms, a large washroom, and a storage place. The aim of this research is to carry out an assessment of the level of infrastructural provisions in the existing farmhouses in Greater Yola. This will involve identifying farmhouses and farm settlements around Greater Yola, study their level of infrastructural provisions

## II. STUDY AREA

This study will encompass identification of farmhouses within the Greater Yola environs in order to classify, ascertain and evaluate their architecture and infrastructural provisions base.

Yola is the capital of Adamawa State. Adamawa is located in northeastern Nigeria. It is one of the thirty-six (36) States which constitute the Federal Republic of Nigeria.

Adamawa is one of the largest states of Nigeria and occupies about 36,917 square kilometers. It is bordered by the states of Borno to the northwest, Gombe to the west and Taraba at the southwest. Its eastern border also forms the national eastern border with Cameroon. Topographically, it is a mountainous land crossed by the large river valleys –Benue,

Gongola and Yedsarem. The valleys of Cameroon, Mandara and Adamawa mountains form part of the landscape.

The major occupation of the people is farming as reflected in their two notable vegetation zones, tile Sub-Sudan and Northern Guinea Savannah Zone. Their cash crops are cotton and groundnuts while food crops include maize, yam, cassava, guinea corn, millet and rice. The village communities living on the banks of the rivers engage in fishing while the fulanis are cattle rearers. The state has network of roads linking all parts of the country.

## III. METHODOLOGY

Random sampling method of study was adopted, and ten farm settlements were identified for the research all located within Greater Yola. Ten (10) sites were subjected to studies, seven (7) of which are established farmhouses while three (3) others are rural farm settlement types. This is to afford an all-encompassing study of the two forms of farmhouses.

### ➤ Method of Data Collection

This research employed the use of check-lists to generate primary data from the sampled sites. The Large Plantation Farm Type whose farmhouses are relatively formal will be subjected to two forms of assessment using check lists. The first is an assessment of their functional spaces and the second is an evaluation of their infrastructural provision. The Small Owners or Latent Farms however are informal in setting; their functional spaces are limited to the prevailing culture and socio-economic variables and may not be fairly assessed with common variables. They will thus be subjected to an assessment their infrastructural provisions alone.

### ➤ Method of Data Analysis

The primary data will be coded Table 1 and scored based on the relativity of the provisions Table 2 analyzed in percentage in order to determine the inadequacies or otherwise of each of the infrastructural features. To effectively collate and discuss the data generated from the Check-list, a system of coding is employed where spaces, functions and Infrastructural provisions are coded to simplify evaluation and discussion.

Table 1: Coding of Spaces and Functions in Large Plantation Farm Type

Spaces and Functions	Code
Rear Entrance	A
Washroom	B
Cloth Storage	C
Dining Area	D
Kitchen Space	E
Proximity of 4 & 5	F
Office Space	G
Large Food Storage	H
Main Entrance	I

Living Room	J
Bedroom	K
Water closet	L
Pipe Borne Water	M
Electricity	N
Sewage System	O
Incinerator	P

Source: Autor's work

Table 2: Assessment/Scores for both the Large Plantation Farm Type and the Small Owner and Latent Farms

Assessment	Score
Absent / Not Provided	0
Dilapidated / Improvised	1
Functional / Provided	2

Source: Autor's work

#### IV. RESULTS

The results are generated from case studies of established farm layouts and rural farm settlements as well as from data generated. The following are the list of farmhouses that were studied:

##### ➤ Large Plantation Farms

• Gese Derdirabe Farms
• Inna Vission Farmstaed
• Shepherds Chalets
• Poultry Manager's
• Farm Executive (1)
• Farm Executive (2)
• Security & Operators

##### ➤ Small Owners or Latent Farms

- Farm Settlement Type 1
- Farm Settlement Type 2
- Farm Settlement Type 3

The coding in Table 1 which represents the spaces in farmhouses of the seven Large Plantation Farms were scored and computed in Table 3 to infer the rate of provision of spaces and infrastructural provisions Table 4. These series of data constitute the background for the discussions that will address the objectives towards directing the findings to a logical conclusion.

Table 3: Assessment for Space and Infrastructural Provisions of both the Large Plantation Farm Type and the Small Owner and Latent Farms

S/N o.	Farms/ codes	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	GeseDerdirabe Farms	2	0	0	2	2	2	0	0	2	2	2	2	2	1	2	0
2	Inna VissionFarmsta ed	0	0	0	0	2	0	0	1	2	0	2	2	0	0	1	0
3	Shepherds Chalets	0	0	0	0	2	0	0	0	0	0	2	2	0	0	1	0
4	Poultry Manager's	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0
5	Farm Executive (1)	2	0	0	0	2	1	0	0	2	2	2	2	2	2	2	0
6	Farm Executive (2)	0	0	0	1	1	2	0	0	0	1	2	2	2	2	2	0
7	Security & Operators	0	0	0	0	1	1	0	0	0	0	2	2	0	0	1	0
	Ratio	4/14	0/14	0/14	3/14	11/14	6/14	0/14	1/14	6/14	5/14	13/14	13/14	6/14	5/14	9/14	0/14
	Percentage	28.57	0	0	21.43	78.57	42.85	0	7.14	42.85	35.71	92.85	92.85	42.85	35.71	64.29	0

Source: Autor's work

Table 4: Results Showing Level of Adequacies in Spaces and Infrastructure in the 7 Large Plantation Farms.

Code	Spaces and functions	Percentage (%)
A	Rear Entrance	28.57
B	Washroom	0
C	Cloth Storage	0
D	Dining Area	21.43
E	Kitchen Space	78.57
F	Proximity of 4 & 5	42.85
G	Office Space	0
H	Large Food Storage	7.14
I	Main Entrance	42.85
J	Living Room	35.71
K	Bedroom	92.85
L	Water closet	92.85
M	Pipe Borne Water	42.85
N	Electricity	35.71
O	Sewage System	64.29
P	Incinerator	0

Source: Autor's work

## V. DISCUSSION

From the results in Table 4, spaces such as washrooms, cloth storage, and office space were not provided at all. Only two out of the seven farmhouses have Rear Entrance representing 28.57%. One of the farmhouse provided dining space while another has an improvised form as five others lacked the facility representing 21.43%. Four of the farm houses provided adequate kitchen spaces while three others have improvised form of kitchen space representing 78.57%. Two farmhouses have good proximity between kitchens and dining spaces, two others have poor proximity while the remaining three have no consideration for this function representing 42.85%. Six farmhouses do not have any form of spaces for food storage, as the one that has a small provision is not enough to accommodate substantial farm produce. This represents 7.14%. Three of the residences have provisions for main entrance while four others have not, representing 42.85%. Living rooms were incorporated in two of the houses; one improvised a living space while the other four have no such provisions at all; representing 35.71%. Bedroom space is one of the optimally provided spaces as six of the seven farmhouses adequately provided them: this represents 92.85%. The water closet spaces have same parametric representation as the bedrooms with same figures of 92.85%.

The infrastructural provisions in the seven farmhouses have the following outcome: Incinerators are absent representing 0%. Three out of the seven farmhouses have pipe borne water provision, this represents 42.85%. Two of the houses are connected to the national grid and one other uses plant to generate electricity as four others have no access to any form of electricity representing 35.71%. Sewage systems as important as they are hardly get maintenance causing great mechanical problems in sanitary systems. Three farmhouses had their sewage systems functional, three others dilapidated and one with no provisions at all. This represents 64.29%.

The small owners and tenant farms were studied under farm settlement types reveal that none of them have any form of infrastructural provisions. Their functional spaces are continually depleted due to economic challenges. This results in duplication of space functions such as the bedroom being used as living space, sleeping area and storage space at the same time. The traditional Barn is fast becoming extinct thereby posing threat to food security.

## VI. CONCLUSION

It has been established that infrastructural provisions in farmhouses around Greater Yola is grossly inadequate and insufficient. The inadequacies and insufficiencies of sustainable infrastructural provisions e.g. electricity, clean water, sewage systems, etc. in areas where mostly farmers are located have posed great challenge towards promoting agricultural practice in Greater Yola. Revelations indicated that spaces such as washrooms, cloth storage, and office space were not provided at all and other common infrastructural provisions were insufficient in the Large Plantation Farms. The infrastructural provisions in the Small Owners or Tenant Farms were nonexistent.

Farmhouses in Greater Yola have been found to be grossly deficient in infrastructural provisions impeding on their efficient functioning as country homes for both Large Plantation Farm settlements and the Small Owners or Latent Farm settlements. This will invariably deter the younger breeds who have expertise and competence to venture into agricultural practices in the study area.

## RECOMMENDATIONS

The following are recommendations which will enhance agricultural practices in Greater Yola:

- In a drive to promote large scale agricultural practice, government at all levels should to encourage the establishment of farm residences with modern infrastructural provisions in order to encourage improved agricultural practices.
- Government and agricultural entrepreneurs should champion the advocacy and enlightenment about good accommodation for prospective farmers to encourage greater participation in the practice of agriculture
- To reverse the trend of rural-urban migration, there is need for all stakeholders in the agricultural sector to invest in the provision of social infrastructure that will improve the livelihood of farm settlers so as to attract greater participation in agricultural practices.
- The academia and research institutes should invest resource towards the furtherance of research in order to develop more effective means of construction and skills enhancement so that farm settlements can begin to spring up all over areas with arable land for cultivation.

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