

Effect Of Rural Roads And Marketing Infrastructure On Income Of Farming Households In Osun State - Implications For Sustainable Development

*Olagunju, F.I, **Ayinde, O., **Adewumi, M.O. And **Adesiji, G.B.

*Department Of Agricultural Economics, Ladoke Akintola University Of Technology, Ogbomoso, Oyo State

** Department Of Agricultural Economics And Farm Management, University Of Ilorin, Ilorin.

**Department Of Agricultural Extension And Rural Development, University Of Ilorin, Ilorin.

Correspondence E - Mail- olagfunk@yahoo.com

ABSTRACT: Technological development practices that enhance and support entrepreneurship are essential because they cultivate innovation which, in turn, creates new jobs, new wealth, a better quality of life and sustainable development. The downward trend in Osun rural smallholder farmer's income highlights the need to examine the effect of road and market infrastructure on their income. Specifically, the study proceeded to identify the socio-economic characteristics of the rural farmers, identify other various rural services infrastructure available to the respondents, examine the effect of road condition and market infrastructure on the income made by farmers. A multistage random sampling was used to select 260 respondents from the study area. Questionnaire and interview schedule were used to collect data from the respondents. The analytical techniques used are descriptive statistics, regression analysis, ANOVA and T-test. The result revealed that a high percentage of the respondents are married (81.5%) and male (90.0%) respectively. 75.0% of the respondents are of the opinion that transportation cost affect income, 55.0% and 53.3% affirm that market infrastructures have effect on farmers' produce and income respectively. It also showed that most essential infrastructures such as pipe borne water, electricity, bank, market stalls, are lacking in the study area. Those present are in fair condition and the annual income are being affected by distance from market, condition of road from the farm to the market, other occupation and availability of tarred road based on the findings from the analysis of variance (ANOVA). From the paired t-test, availability/non availability of tarred road, condition of road leading to the market, occupation and distance from the market significantly (at 1%) affect the annual income positively/negatively. The implication of this study is that policy should address farmers' access to rural market services, which are sometimes in bundles, and the role of locating services in centers is pertinent as it stimulates agricultural and rural development.

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INTRODUCTION

Generally, for a nation to develop there is need to construct and maintain roads both in urban and rural areas. With particular reference to the rural areas, a key element in rural development is the ability of the nation to overcome infrastructural constraints, especially that of rural roads in our rural areas. Hence, Balogun (1991) identified that these constraints relate to the acute shortage and lack of basic infrastructure and social amenities such as shelter, portable water, access roads, electricity, and education, among others.

There is equally this general agreement that it is the responsibility of government alone at all the three tiers to provide these infrastructure needs in both the urban and more especially in the rural areas. This general belief according to many commentators on strategy for rural development is as a result of the huge capital outlay involved, more especially in road construction, repair and/or maintenance. Anyanwu, Oyefusi, Oaikhenan and Dimowo (1997) observed that, "the provision of these facilities has often been

perceived to be the responsibility of government alone but due partly to the large social overhead costs and in part to the high degree of social and economic externalities that they generate.

Agricultural development is essential for economic growth, rural development, and poverty alleviation in low-income developing countries. Productivity increase in agriculture is an effective driver of economic growth and poverty reduction both within and outside agricultural sectors. Such productivity increase depends on good rural infrastructures, well functioning domestic markets, appropriate institutions, and access to appropriate technology. While the state of rural infrastructure varies widely among developing countries, lower income countries including Nigeria, suffer severe rural infrastructure deficiencies. Deficiencies in transportation, energy, telecommunication, and related infrastructure translate into poorly functioning domestic markets with little spatial and temporal integration, low price transmission, and weak

international competitiveness (Per Pinstrup and Satoru, 2006).

One of the major constraints on the growth of smallholder agriculture in African countries is high transaction costs (Machethe, 2004), largely attributable to poor infrastructure. This situation is no different in Nigeria. A large proportion of rural households continue to lack access to basic services (Stilwell & Makhura, 2004). Government initiatives to improve the quality and quantity of infrastructure in the rural areas through programmes such as the construction of small dams and boreholes for rural water supply and the clearing of feeder roads for the evacuation of agricultural produce and - the supply of electricity to rural areas from large irrigation Dams, the establishment of nine River Basin Development Authorities (RBDAs) in addition to the two existing ones (Sokoto and Rima RBDAs); DFRRRI, the Poverty Relief and Infrastructure Investment Fund and the Comprehensive Agricultural Support Programme, have registered limited impact on the lives of many rural people (World Bank, 2006).

Rural service infrastructure comprises roads, banks, postal services, output markets, input markets and agro-processing facilities. Makhura and Wasike (2003) found that fresh produce markets, cooperatives, milling companies and a variety of butcheries and supermarkets that are located in the nearest towns where emerging farmers operate, can provide potential market centers for rural people. The ability of farmers to access services depends on the state of the road, the transport systems, and the distances from the villages to the nearest towns, among other factors. Rural infrastructural development in Nigeria has long been neglected, yet investments in health, education and water supply have largely been focused on the cities. Consequently, the rural population has limited access to services such as schools and health centers, and about half of the population lacks access to safe drinking water. Nigeria's rural road network has been identified as one of the poorly developed infrastructures in sub-Saharan Africa (Fakayode et al 2008).

Rural roads are somewhat unique in terms of their capacity to literally pave the way for other investments, such as schools, health services, and security services (Fan, 2008). In agriculture, better roads can drastically reduce the cost of inputs such as fertilizers, seeds, and extension services (Gregory and Bumb, 2008; Dercon et al, 2008). On the output side better roads increase the scope of profitable trade, which in turn encourages on-farm investments to raising agricultural production (Khachatryan et al, 2005). This in turn should raise rural incomes, lower food prices (and hence raise disposable income in urban areas), reduce spatial disparity in food prices,

and reduce dependence on food imports. Hence, better rural roads increase net returns to other worthy investments in both the farm and non-farm sectors.

It is obvious that low quality roads impose costs on people living far from market centers. This is nowhere more apparent than in the study area. For historical reasons, roads in many rural areas remain badly maintained or even non-existent. Because the poorest people often reside far from urban centers, this means that these people are the most disadvantaged by the high transport costs resulting from bad roads. For these rural areas, markets cannot be accessed except at very high cost. Bad roads are clearly an obstacle to attaining the potential benefits from market-based economic development.

Problem Statement

Poor road conditions, high transport costs and distant markets have been identified as factors that hamper improved market access for emerging farmers in rural areas (Makhura & Mokoena, 2003; Nieuwoudt & Groenewald, 2003), and also contribute towards the problem of missing markets. Factors that determine access to input and output markets include distance to the markets, the state of the roads, the cost of transportation and the frequency of visits to these markets. Rural services centers and nearby towns and cities are often important sources of inputs for farmers, and also provide a market for farm produce. According to Mabogunje (1980), the analysis of the relationship between centre and periphery, particularly the relationship between infrastructure and people, is viewed as a centerpiece in regional development planning in the developing world.

Infrastructure directly affects human welfare and equity across community and income groups. Urban and rural households in Nigeria experience widely different access to basic infrastructure services. The lowest household income groups have no or extremely limited access to infrastructure (Bogetic & Fedderke, 2005). Physical infrastructure, such as irrigation and transport and road systems, together with institutions such as banks and markets, make possible a range of production options that are translated to higher agriculture productivity through technology adoption (Pinstrup-Anderson & Shimokawa, 2006). This means that investment in infrastructure has the potential to reduce poverty and income inequality between different geographical locations. The role of infrastructure is complex and its effects are indirect. Consequently development economists have not focused on infrastructure as much as they have on directly productive activities such as agriculture and industry.

It has also been established that infrastructure imparts welfare in three basic respects: such affects

utility derivable from existing and budgeted income. Second, its availability affects productivity and capacity to earn income. Thirds it affects households and national stock real wealth in the rural and urban economies. Availability of infrastructure affects people's (poor and the rich) time allocation (Idachaba, 1978; 1994). Infrastructure also has multiple effects on health and quality of life. (Kessides, 1993 and Alaba, 2001) pointed out that individuals are poor because they do not have access to infrastructure services of necessary quality. FAO (1996) stated that infrastructure though are key stimulants to agricultural development and growth, they are limited in all rural areas. Several studies (Fan, Hazell and Thorat 2000; Mundlak et al, 2002; Fan and Zhang, 2004) have also revealed that investment in infrastructure is essential to increase farmers' access to input and output markets, stimulation of rural non-farm economy and vitalize rural towns. It also increases consumers' demand in rural areas and facilitate the integration of less favoured rural areas into national and international economies. In many communities in Nigeria, inadequate or low quality infrastructure has been known to have serious implication for welfare and persistence of poverty. Realizing the important role infrastructure would play in the development of Nigerian agriculture, government efforts over the years have been put into opening up the land and linking rural communities with the cities. The extent to which these have helped in increasing the productivity of rural farmers is a major area for research, which is the main focus of this study.

Research Questions

1. What are the socio-economic characteristics of the rural farmers?
2. What are the various rural services infrastructure available to the respondents?
3. What determines the effect of road condition on the income made by farmer?
4. What determines the effect of market infrastructure on the income made by farmer?

Objectives

The specific objectives are to:

1. Identify the socio-economic characteristics of the rural farmers
2. Identify various rural service infrastructure available to the respondents
3. examine the effect of road condition on the income made by farmers
4. examine the effect of market infrastructure on the income made by farmers

LITERATURE REVIEW

Rural infrastructure development, like irrigation, electrification, credit, roads and communication, regulated markets and agricultural research and extension are essential prerequisites for modernization and growth of agriculture in developing countries. The growth of agriculture, in turn, results not only in increasing the productivity and income of all categories of farmers, but also in providing greater employment to rural labour. The employment elasticity of agricultural growth was found to be positive and quite high in almost all states of India during the post-green-revolution phase. The direct effect of infrastructural investment can be in various ways. First, during the construction phase of infrastructural projects like roads, watershed development, construction of irrigation dams or powerhouses, the poor are provided employment and income-earning opportunities. Again, the most important contribution of transport is that of improving accessibility of socio-economic activities to the rural population and the rural poor and, to that extent, they benefit. The role of road construction for disaster management is universally recognized.

The availability of health infrastructure tends to reduce infant and child mortality, as well as fertility rates and leads to eradication of certain diseases (World Bank 1993). Health infrastructure contributes to growth in several ways: (a) reducing production costs; (b) permitting the use of natural resources as accessibility increases; (c) enrolment of children in schools; (d) freeing resources that would have been spent on treatment of prevalent diseases (World Bank 1993); (e) education, health and age of women at marriage, leading to a decline in birth rates, infant and child mortality rates; and (f) enhancing women's ability to improve their own life and status as well as the lives of their children. The impact of growth on the rural poor would depend on several factors like the type of infrastructure, the nature of services, and the location of the project. It also depends on the operating environment, such as market structures, the degree of imperfections and government regulations. For example, an irrigation project is likely to increase the productivity and incomes not only of the rich but also of the poor, small and marginal farmers. Thus, it has an indirect impact on poverty through growth of agriculture.

In the second round, it affects the landless labour by providing more employment in agriculture and later in the allied manufacturing and services sectors. Canal irrigation leads to a rise in the water table thus bestowing a benefit on the farmers living close to the canal. It may also result in environmental damage through increased salinity and degradation of soils unless accompanied by proper drainage. Transport project development leads to accessibility of services to all sections of population. It also creates employment

both during its construction as well as for its maintenance. Sustainable development will be obtained if jobs become available to the unemployed.

METHODOLOGY

Source of data and sampling procedure:

Primary data were collected for the purpose of this study using structured questionnaires. Participatory Development Approach was employed to evaluate and appraise the rural communities. Focus Group discussion was also used to collect information on infrastructural situation of the study area. Some of these include: socio economic and demographic characteristics, Infrastructure proxy variable (such as distance of getting to various infrastructure such as road, market stalls, storage facilities) and total production inputs and output quantities and their respective prices of crop farmers having access to good road, market facilities and farmers having access to bad roads and poor market facilities. A sample of five (5) Osun State Agricultural Development Programme (ADP) zones was purposively chosen so as to concentrate on the rural farmers having access to good and bad roads. It should be noted that all the local government have both bad and good road and this form a basis for the study. The listing of the crop farmers in the chosen zone was done with the assistance of the OSADEP Staffs.

The questions posed enable the compilation of two lists for each study location that is farmers that have access to good road and those that did not. These lists formed the frames from which separates samples of 180 farmers having no access to good road and 80 farmers having access to good road were chosen, by a simple random sampling technique. Cross-sectional data were collected from these samples in 2009/2010 cropping season. The analytical techniques in the data analysis include: descriptive statistics and regression analysis.

Descriptive statistics:

Descriptive statistics (mean, frequency table, percentages).

Regression Analysis:

Multiple regression analysis was employed to find the relationship between the farmers' income and their access to road and market infrastructures in the study area. Backwards stepwise regression procedures was used to knock out variable that contribute less or form high multicollinearity with one another. The dependent variable is regressed on all K independent variables. If any variables are statistically insignificant, the one making the smallest contribution is dropped (i.e. the variable with the smallest sr ,

which will also be the variable with the smallest T value). Then the K - 1 remaining variables are regressed on Y, and again the one making the smallest contribution is dropped. The procedure continues until all remaining variables are statistically significant.

This is implicitly presented by equation

$$Q = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, U_i) \dots (2)$$

Where

Q = Farmers income (₦)

X₁ = Age of farmers (years)

X₂ = Sex of farmers. Dummy male=1, female=2

X₃ = Experience (years)

X₄ = Educational Level (years)

X₅ = Years of Experience (years)

X₆ = Farm size (ha)

X₇ = Road condition (good=1, bad=0)

X₈ = Labour (Mondays)

X₉ = Storage facilities (good=1, bad=0)

X₁₀ = Storage Cost (₦)

X₁₁ = Transport Cost (₦)

U_i = Error term assume to have a zero mean and constant variance.

A separate production function was fitted to each category of farmers as well as pooled data.

Different forms of production such as linear, Semi-Log and double log (Cobb-Douglas) was tried and the final choice of production function for economic analysis was based on conventional economic statistical and econometric criteria (Koutsoyiannis, 1981).

RESULTS AND DISCUSSION

Table 1 presents the distribution of respondents by demographic characteristics. The bulk of the respondents (81.5%) are married regardless of the category of respondents. The implication of this is that, there is likely to be more family labour available for farm work. However, majority of respondent farmers are older than 45 years. This is the active age when farmers can carry out the physical rigor of farm activities. This has implication for agricultural production because farm work requires physical energy and strength. Education status shows that the average number of years spent in school by the respondents is (8 years) that is they had primary education and more. Education has an important implication particularly for the adoption of new technology and practice (Akinbile and Ndaghu, 2000). In all, most of the households have at least 7 members which are higher than the national average for all respondents. The national average household size is 5 (NBS, 2007). The size of the household is an important variable especially in a situation where

human power is a major source of power for carrying out farming activities.

Table 1: Mean value and standard deviation of socio-economic characteristics of the respondents.

<i>Variables</i>	<i>Description</i>	<i>Farmers with good roads(80)</i>	<i>Farmers without Good roads(180)</i>	<i>Pooled Data(260)</i>
Y				
X ₁	Farmers income	₦78,754.56 (34432.13)	₦63,652.03 (39562.51)	₦71,203.30 (36997.32)
X ₂	Age (years)	46.36 (7.86)	47.46 (8.23)	46.91 (8.90)
X ₃	Sex M=1,F=0) M	64 (80%)	146 (81%)	210
	F	16 (20%)	34 (19%)	50
X ₄	Marital Status M	75 (94%)	173 (96%)	248
	S	05 (6%)	07 (4%)	12
X ₅	Education (years)	8.64 (3.01)	7.86 (7.36)	8.25 (5.19)
X ₆	Experience (years)	17.36 (5.86)	18.46 (6.42)	17.91 (6.14)
X ₇	Farm size (Ha)	2.85 (1.53)	2.59 (1.64)	2.72 (1.59)
X ₈	Labour (mandays)	19.64 (4.56)	18.78 (5.32)	19.21 (4.90)
X ₉	Transport cost (₦)	₦4,275.00 (44.20)	₦7,827.00 (46.80)	₦ 6051.1 (45.5)
	Family size	6 (2.23)	8 (2.124)	7 (2.177)

Source: Data Analysis, 2010
Standard Errors are in brackets.

Rural Service Infrastructures available for use to the Respondents in the Study area

Table 2 shows the presence of infrastructural facilities as viewed by the respondents. 30.0% are of the opinion that there is presence of tarred road, 70.0% of them noticed its absence; 80.0% and 20.0% affirm the presence and absence of telecommunication. All the respondents witnessed lack of pipe borne water; 75.0% of the respondents confirm lack of electricity while 25.0% are of reversed opinion; 95.0% of the sampled population of the farmers revealed absence of post office. It is also revealed that 76.7% of the respondents have no access to banking activities in their area. Majority of the respondents (60%) establish the lack of Market stalls while 40% have access to market stalls; in addition, 90.0% do not have a warehouse while just 78.3% confirms the presence of agro-processing machines while 21.7% lack the machine. Lastly, 58% confirms the presence of health centers in the study area while 46% lack access to health facilities. The predominant population of the sampled farmers viewed the presence of the infrastructural facilities as being fair. The weak rural infrastructures including roads, water supply, housing, communication, adequate and comfortable transportation means etc., affects both the corporate and informal private sector more adversely in various ways. The key constraint is that it limits the integration of the rural with the urban markets which in turn seriously hinders accessibility to inputs and services and increases costs. It also makes cost of business in urban cities expensive. Thus in turn encourages over concentration of industries and firms in urban cities, leading to over congestion, too much pressure on existing infrastructure and other social vices. Poor roads and transport have equally held back industrial distribution in different rural areas. This has affected the ability of many small industries to be sited in those areas. Indeed several rural communities in Nigeria differ in the nature and degree of their needs (Okafor, 1985). Every community may not need the same thing. It is therefore necessary

for the government to be sensitive to the different ecological situations and seek to develop the communities along a direction the rural people can well appreciate.

Table 2: Distribution of the Respondents by Presence of Infrastructural Facilities

Infrastructural Facilities	No	Yes
Tarred road	182 (70.0)	78 (30.0)
Telecommunication	52 (20.0)	208 (80.0)
Electricity	195 (75.0)	65 (25.0)
Pipe Borne Water	60 (100.0)	0 (0.0)
Post office	247 (95.0)	13 (5.0)
Bank	199.42 (76.7)	60.58 (23.3)
Market Stalls	156 (60.0)	104 (40.0)
Warehouse	234 (90.0)	26 (10.0)
Agro-processing Facilities	109.2 (42.0)	150.8 (58.0)
Health Centre	119.6 (46.0)	140.4 (54.0)

Sources: Field Survey, 2010

Distribution of the Respondents by condition of the available Infrastructural Facilities

Table 3 reveals the distribution of the respondents by the present condition of the infrastructural facilities. 35.8% were of the opinion of the fair condition of the facilities, 7.7% view the facilities as being good while 56.5% agreed they are all in bad conditions.

Table 3: Distribution of the Respondents by condition of the available Infrastructural Facilities

Level of Presence	Frequency	Percentage
Bad	147	56.5
Fair	93	35.8
Good	20	7.7
Total	260	100.0

Sources: Field Survey, 2010

Distribution of the Respondents by Presence of Market Infrastructures

Table 4, shows the presence of market infrastructures in the study area, 20% of the respondents are of the view that there are good market shops while 70% have no access to good market shops, 70.0% have access to electricity while 30.0% lack electricity.

Table 4: Distribution of the Respondents by Presence of Market Infrastructures

	No	Yes
Electricity	182 (70.0)	78(30.0)
Market Stalls	156 (60.0)	104 (40.0)
Good road Network	176.8 (68)	83.2 (32)
Good Market Shops	208(80)	52 (20)
Market Pipe Borne Water	145.6(56)	140.4(54)
Police Station	140.4(54)	145.6 (56)

Sources: Field Survey, 2010

Conditions of the available Road Facilities

Three types of road access within rural areas can be distinguished within these data. These are: (i) no vehicular access; (ii) dry season only access; and (iii) all weather access. No vehicular access means that the pathways through which the village is normally reached cannot accommodate conventional motorized vehicles. This does not necessarily mean that the village is completely isolated from commodity trade. It may still be able to accommodate some forms of transport. These include human powered vehicles such as shoulder poles, backpack frames, handcarts and bicycles, animal-powered devices such as carts and sledges and possibly two-wheeled motorized vehicles such as motorcycles.

Dry season only access roads consist predominantly of unpaved roads that are accessible to conventional motorized vehicles during the dry season but not necessarily throughout the year. During the wet season, such roads

will at times be impassable. At other times, vehicles will be required to use alternative routes that may facilitate passage but would result in higher transport costs due to a change in travel distance, road roughness, and speed. This category includes most, but not all, earth and gravel road surfaces.

Finally, all weather access roads can be used by conventional motorized vehicles during the dry and wet seasons. In other words, unlike dry season access roads, these roads would not be subject to frequent closure as a result of flooding during the wet season. This covers almost all paved roads.

Regression Analysis of Variance Estimation of Income among Farming Household

The result of the estimated model was summarized and presented in Table 5. Result from semi-log was selected as lead equation based on the magnitude of R, the significance of F-value, the t-values and the appropriateness of the signs of the regression coefficient. The coefficient of determination was 77.5%. This implies that the independent variables explain at least 77.5% of the variability in dependent variable on effect of rural road and market infrastructure of farming household in the study area. The regression estimate shows that, the coefficient of variable number of time plying the road, household size, number of stores were significant but assumed negative signs that neglected the a priori expectation.

The coefficient of age is statistically significant at 5%, and has positive effect on profit made by the farmers. The coefficient of household size and number of times plying the road are statistically significant at 5% and have negative influences on profit. This indicates much dependence of the large household size on the farmers output also, the higher the number of times the farmers use on the road the more the transportation cost. Educational level of the farmers is statistically significant at 5% and has positive effect on profit made by the farmers since educated farmers are more like to make use of new innovation brought to them by extension agent for farming improvement. The coefficient of road condition although significant, had negative effect on profit made. This was as a result of high transportation cost incurred by the farmers. It is obvious that low quality roads impose costs on people living far from market

Centers. But for people facing very high transport costs arising from inadequate roads, markets cannot be accessed except at very high cost. Bad roads are clearly an obstacle to attaining the potential benefits from market-based economic reform. The coefficient of storage facility was significant and had positive relationship with the farmers income, this indicate the importance of market infrastructure in the localities. Most of the farmers produce that were not sold in time due to poor storage facilities got destroyed especially the perishable goods coupled with the effect of bad road with high transportation cost. The coefficients of farm size had positive relationship with the farmers income while the coefficients of the number of stores acquired had a negative relationship with the farmers income.

Table 5: Result of the Regression analysis

Variables	Coefficients	t-ratio	Sig.
Constant	10.427	10.092	.000
Age	3.116E ⁻⁰²	2.572	.013*
Household size	-.151	-2.276	.027*
Education	4.193E ⁻⁰²	2.049	.046*
Storage facility	.187	1.091	.060**
Road condition	-3.47	1.866	.068**
Farm size	.155	6.037	.000*
No of times plying the road.	-205	-3.437	.001*

Source: Field Survey, 2010

R²= 77.5

F= 14.022

*Significance at 5%

**Significance at 10%

Test of Hypothesis

From the paired sample correlation test, it could be deduced that availability of tarred road, occupation, and distance from market and condition of road to the market are correlated with annual income. They are all statistically significant at P<0.01 (1% level of significance). This signifies that if there is availability/non availability of tarred road it will either increase or decrease the annual income. Also, the condition of the road leading to the market and

the distance of the farm from the market can affect the annual income positively or negatively. In the same vein, the other occupation which the farmers engage in can also increase or decrease the farmer's annual income.

Table 6: Paired Sample Correlation

Variables	t-value	df	Probability
Available Tarred Road and Annual Income	-11.467	59	0.000*
Occupation and Annual Income	-11.467	59	0.000*
Distance of farm to Market and Annual Income	-11.467	59	0.000*
Condition of road to Market and Annual Income	-11.467	59	0.000*

CONCLUSION AND RECOMMENDATIONS

Based on the findings, it is recommended that, firstly provision of road and market infrastructure will improve the income of the rural households in the rural areas and will reduce rural-urban migration. Also provision of good and tarred roads linking the rural areas to the urban areas will reduce the rate at which perishable agricultural products turn bad thereby reducing wastefulness of the farmers' output. Market infrastructure also acts as a means of providing safety for the farmers' produce.

Cost of transportation, is a direct function of status of rural road networks and it has been employed in this study as a measure of underdevelopment. There is therefore needful by public and private to make construction and rehabilitation of rural roads and transportation the first point in any developmental agenda, this would result in reducing the cost transportation of goods and passengers. This will tend to increase the share of farmers in the final realization of farm produce, therefore increasing their welfare leading to a sustainable development.

Hence, communities can come together or communal effort can be applied to develop their areas. In addition to this, local government areas should be empowered to develop their localities by maintaining the existing roads as well as opening new ones to facilitate easier movement of farm produce to the markets at a reduced cost.

There is lack of and/or absence of well-articulated rural infrastructure development plans and priorities, since after the establishment of DFFRI and its subsequent abandonment there is no articulated rural development policy framework which has the issue of public-private partnership in rural development. To this extent, government needs to reactivate DFFRI as it is a veritable rural development policy framework for rural infrastructural provision.

For Nigeria to combat food crisis and food insecurity and rural urban migration and have a sustainable development, policies targeted towards rural infrastructural development most especially rural

roads should be formulated because bulk of farm produce still comes from the rural areas.

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