INFRASTRUCTURAL PROVISION IN FARMING COMMUNITIES OF OYO STATE

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Abstract

Infrastructure has been defined by various people or authors of various books and from different perspectives. However, the provision of rural infrastructure can be seen as part of the public and public capital base providing the institutional environment in which agriculture operates. This implies that infrastructural constraints can lower or suppress the productivity level and slow down the rate of commercialization in agricultural sector. Therefore, the objective of this study is to assess the level of provision of infrastructures within the agricultural setting in Oyo State. All respondents were chosen using simple random technique. The data collected were analyzed through descriptive statistics, frequency counts, percentage and mode. The results showed that storage facilities are not provided, social infrastructure such as hospitals, maternity centers, health centers, and schools are poorly staffed and funded by the government. It was found that provision of infrastructures served as incentives for increased economic efficiency and productivity. It could be deduced from the study that the participation of the Local Government in the provision of infrastructures was high and commendable, while community and individual participation was low and both Federal and State Governments' participation were very poor.

Key Words: Farming Communities, Rural, Physical, Capital, Infrastructures and Provision.

Introduction

Todaro (1977) defined infrastructure as the underlying amount of capital accumulation embodied in roads, railways, waterways, airways and other forms of transportation and communication plus water supplies and public services such as health and education. Wharton (1967) defined rural infrastructure as "physical, capital and the institutions or organizations, both public and private which provide economic services to and which have significant effect directly or indirectly upon the economic functioning of the individual farm firm but which are external to the separate, individual farm firm".

Idachaba et al (1979) defined rural infrastructure as those forms of physical, social, human and institutional capital which enables rural residents to better perform their production, processing and distribution activities as well as helping to improve the overall quality of life.

In the light of these definitions, rural infrastructure can be seen as the part of the public and private capital base providing the institutional environment within which agriculture operates. The paper examines the level of provision of infrastructures and assesses the level of participation in the provision of infrastructures by different agents.

Theoretical framework

The bulk of agricultural produce comes from rural areas but their production is not meeting the population demand. This is so, because there are little or no infrastructures to give the farmers incentives to increase production and the little infrastructures available are not maintained and some are not functioning.

Ewa and Agu (1989) said that the infrastructures need to be provided or initiated, established and/or improved upon and that infrastructures can induce rural and agricultural development and practice. It was added that where they are lacking, it is almost impossible to expect rapid improvement in agricultural production. Idachaba (1985) gave the three major and

broad classes of rural infrastructures in Nigeria and their main components:

1. *Rural Physical Infrastructures*
The main components are:
i. Transportation facilities (federal, state, local government roads, railways bridges, ferry services, ports and footpaths);
ii. Storage facilities (silos, warehouses, cribs, open air facilities etc);
iii. Processing facilities (machinery, equipment, building, etc);
iv. Irrigation, flood control and water resources development (dams, irrigation and watering facilities, drainage systems etc);
v. Soil conservation facilities,
vi. Farm electrification.

2. *Rural Social Infrastructures*
The main components are:
i. Health facilities (hospitals, dispensaries, maternities and health centers etc);
ii. Education facilities (primary and secondary schools, teacher training colleges, technical schools, vocational schools, adult educational facilities etc);and
iii. Rural utilities (electricity and water supplies)

3. *Rural Institutional Infrastructures*
The main components are:
i. Co-operative societies, farmers' unions/ groups, community development projects made possible through rural self help institutions;
ii. Financial institutions (credit societies and institutions, banks, post office, saving banks etc);
iii. Agricultural research facilities (research sub- stations and experimental farms, demon-stration plots etc);
iv. Agricultural extension and training facilities;
v. Marketing, crop and animal protection services, and
vi. Postal and telecommunication facilities (post office, postal agencies, telephone etc)

Wharton (1968) classified infrastructure as:
(1) Capital intensive: this includes irrigation and public water supply facilities, transport, storage and processing facilities.
(2) Capital extensive: this includes extension education services, agricultural research, credit and financial institution, and
(3) Institutional infrastructures consisting of formal and informal education, legal, political and socio-cultural nature.

Another classification apart from Idachaba (1985) and Wharton (1968) was made by Essang (1974). He grouped infrastructure into two broad types on the basis of capital output ratio. These are:
(1) *High capital/ output ratio*: These are capital intensive infrastructural facilities such as transport, storage and processing facilities, irrigation structures and social overheads such as schools, clinics and hospitals.

(2) *Low capital/ output ratio*: These are capital extensive infrastructural facilities such as agricultural research, credit institutions, and marketing and agricultural statistics reporting services.

Rural infrastructures are the criteria for the success of public and private efforts aimed at accelerating agricultural and rural development. We cannot expect rapid development or substantial production of agricultural produce if the rural infrastructures are not provided, established or improved upon.

Adeyemo and Abdullahi (1988) made their opinion known in the provisions of infrastructures that to shift the present peasant production to modern large-scale agricultural production requires increased provision or supply of basic infrastructures to the producing areas. Such infrastructures include good all-weather roads, pipe-borne water, electricity, as well as organized markets. It is still observed that provision of infrastructures of any kind type is very low in rural areas. In this regard, in the past years, governments of the developing countries have been making conscious efforts to improve the living conditions in rural areas. The World Bank has also been giving out loans to government of developing countries to execute projects relating to infrastructures for both rural and urban centres.

The provision of infrastructural facilities are essential for providing the nations marketed surpluses of food and fibre to diversify the country's foreign exchange earning as well as diversify the income generating capacities and gainful employment opportunities in the rural sector.

The prevalence of water-borne diseases all over Nigeria is an indication that all is not well with our water supply system in most of our rural communities. The provision of portable water can be said to be non-existent. The provision of clean and portable water for the citizenry is one of the basic indices of the level of development of any country. Many lives have been lost in relation to the provision of good and clean water. The statistics shows that 222 persons died from dreaded cholera in Taraba state, 5 from typhoid in Kano state. Oyo and Benue lost a total of 150 lives, while Bauchi state lost 336 lives and 600 souls were lost in the same year due to cholera epidemic.

The Federal Government of Nigeria is making all efforts to provide basic infrastructures for its people. There are programmes planned by the government, for example, RUWATSAN programme which is like most of the Directorate's programmes (DFRRI, FSP etc) in the provision of rural infrastructures.

Moreover, the perishability of most of farm products calls for good storage and better transportation facilities to enable farmers derive maximum benefit from their investments, and the consumer maximum satisfaction from the produce at the given cost due to improved marketing efficiency. Also, the price fluctuation of agricultural produce in areas where irrigation is not practiced is very much pronounced and requires the provision of storage facilities for food price stabilization.

Provision of infrastructures are part of integrated rural development strategy which combine the development of various areas of the rural society including agricultural, educational, health nutrition, rural electrification, rural water supply and cooperatives simultaneously.

Generally, what concerns man in rural community is his welfare and not just increases in nominal farm incomes. Hence provision of infrastructures in the rural areas and maintenance of the existing ones in the developing countries is very important.

Materials and methods

This study was conducted in Oyo State which is located in south-western Nigeria. The infor-mation needed were obtained with the aid of structured questionnaires that were designed to obtain information on the respondents' age, marital status, socio-economic factors, availability and performance of various infrastructures, level of community, private and government's participation in the provision of rural infrastructures and assessment of the existing infrastructures.

The respondents were chosen using simple random sampling and the data were analyzed using frequency counts, descriptive statistics, percentages and modes.

Results and discussion

The distribution of respondents according to their socio-economic characteristics is shown in Tables 1-3. It was revealed that 86% of the respondents 'ere of ages between 26 and *45* years and the modal age is between 26 and *35* years. At this age, the respondents fall within the active working class and in order to increase their effectiveness and productivity a lot of incentives are needed in terms of social amenities.

Table 1: Distribution of respondents age

Age (years)	Frequency	Percentage
Below 25	8	8
26-35	60	60
36-45	26	26
46 and above	6	6
	100	100

Source: Field Data

Table 2: Distribution according to sex and marital status

Sex	Single	Married	Total
Males	12	54	66
Females	13	21	34
% Males	18.2	81.8	100
% Females	38.2	61.8	100

Source: Field Data

Table 3: Distribution of household size

Household Size	Single	Married
1-5	76	76
6-10	16	16
11 and above	8	8
Total	100	100

Source: Field Data

The distribution according to sex and marital status as shown in Table 2 showed that about 18% were single and 82% were married among females. This implies that infrastructures such as maternity centres, hospitals and clinics should be provided and be made functional if one is in existence to cater for the expected increasing number of children since there were many married middle age than unmarried. In fact, the unmarried too would marry and give birth. Table 3 shows the distribution of respondents' household size. There was a prevalent large household size of 5 members per household which accounts for 76% of the respondents. However, 8% has 11 members per house which depicts the necessity to make life better through the provision of schools and other social infrastructures which are capable of transforming lives.

In addition it could be deduced that the study area is highly populated and to avoid rural-urban drift, there is need for the provision of infrastructures to meet the needs of the rural people and raise their standard of living.

The provision of infrastructures in the study area is shown in Tables 4-6. It is shown in Table 4 that 47% has access to good and tarred road while 53% has no access to tarred road. This suggests a high cost of transportation of agricultural produce. The distribution of sources of water in the area is shown in Table 5. It was observed that there was little or no pipe-borne water supply. However, well water serves as the major

source of water supply. There were even areas without both sources of water. These areas depend on rain and stream water.

Table 4: Distribution of roads

Local Govt. Area	Types of Roads	Number of Respondents		Percentage
		Yes	No	
Afijio	Tarred	12	-	36.4
Ogbomoso North	Untarred	-	21	63.4
Iseyin	Tarred	18	-	52.9
	Untarred	-	16	47.1
	Tarred	17	-	51.5
	Untarred	-	16	48.5
Total	-	47	53	

Table 5: Sources of water supply

Local Govt. Area	No of Respondents		
	With only pipe-borne water	With only well water	With both
Afijio	10	33	2-
Ogbomoso North	-	23	-
Iseyin	9		-
Total	19	81	2

Source: Field Data

Table 6: Distribution of health facilities

Local Govt. Area	Number of respondents with	
	Maternity Centre	Private Clinic
Afijio	2	15
Ogbomoso North	-	8
Iseyin	1	5
Total	3	28

Source: Field Data

In the case of electricity, all respondents depended on Power Holding Company of Nigeria (formerly National Electric Power Authority) for their source of power supply. When there is outage of power, *95%* used other means such as candle, hurricane lantern, and rechargeable lantern. However, *15%* has generating plant as their other means of power supply.

The health facilities distribution is shown in Table 6. There were only three maternity centres and twenty-eight private clinics in the study area. The implication is that there was a very low provision of health facilities and this in turn has adverse effect on the welfare and general output of the respondents.

There were seven banks in the study area. The services of the bank which include credit facilities was enjoyed by only 48% of the rural people. Both primary and secondary schools were provided adequately but the provision of tertiary institution(s) is not in existence. However, *45%* claimed that the existing schools were properly staffed and funded.

Market in the context of this study refers to a place where buyers meet with the sellers. It was found most, 86% have market place around them but *65%* had their earnings increased by its provision. This implies that provision of market places in the rural areas could be an impetus to improvement in standard of living.

The provision modern storage facility was not in existence as 22% of the respondents stored their agricultural produce under the roof of their houses. 16% stored in baskets and 62% of the respondents did no have any means of storage facilities. This is the reason for wastage of produce, glut in the market, and price fall during harvest and scarcity during off-season.

The participation of the respondents in the provision of infrastructures is very low either through community (cooperative societies) or private bodies (individuals). The data collected showed that 79% of the respondents credited the participation of the community in the provision of infrastructures.

The agents of provision and the number of respondents who enjoyed the provision of various types of infrastructure are shown in Table 7. Local Government as an agent of provision has the highest impact on the lives of the rural people in meeting their needs. The result also shows that there were insufficient provision of infrastructures highlighted, low level of government, community and private (individual) participation in infrastructural provision and even a lower percentage of the respondents enjoyed the existing infrastructures. However, the result showed that all the respondents claimed that the provision and maintenance of infrastructures will improve welfare and increase the earnings of the rural people.

Table 7: Distribution of Respondents and Agent of Provision of Infrastructures

Types of Infrastructures	Provision Agents and Number of Respondents Who Enjoyed					
	Federal Government	State Government	Local Government	Community	Private	Total
Road	01	13	75	11	01	100
Water Supply	01	28	48	01	22	100
Health Facilities	-	03	02	-	28	33
Banks	-	05	-	02	-	07
Markets	-	-	08	06	-	14
School (prim. & Sec.)	01	82				100
Storage Facilities	-	-	-	-	-	-

Source: Field Data

Conclusion and recommendation

Based on the results of this study, it could be concluded that modern storage facilities such as silos, warehouses, etc. are not provided. Social infrastructures such as schools and maternity centres are not properly staffed and funded. Hospitals are not provided and new infrastructures are not provided. The participation of local government in the provision of these infrastructures is highly commendable. However, the participation of the Federal and State Governments, community and private (individual) in the provision of infrastructure is very low and poor.

Provision of infrastructures serves as an incentive to increasing economic efficiency and productivity. In view of this, it is recommended that Local Government Authorities should bear the burden of the provision of infrastructures since they are the closest arm of government and the needs of the rural people are best known to them. Also, government at all levels should have a substantial amount set aside for the provision, maintenance and upgrading of infrastructures and this policy should not be tampered with if there is a change of government. The community and private individuals should maintain, upgrade and complement government efforts in infrastructural provision.

A careful look should be taken by governments and stakeholders, in that increases in food production and the attainment of some measure of food self-sufficiency do not necessarily translate into increases in farm income for the rural majority, unless most or all infrastructures highlighted are produced. Also increases in food production do not necessarily translate into increases in rural welfare if basic needs are lacking i.e. infrastructures.

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