RURAL DWELLERS PERCEPTION ON EFFECT OF INFRASTRUCTURAL FACILITIES ON LIVELIHOOD ACTIVITIES IN AKINYELE LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA.

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Abstract

Lack of basic infrastructural facilities has been one of the problems of rural poverty in Nigeria. Various programmes had been introduced by past and present administrations in Nigeria to provide these facilities in rural area. This study investigated rural dwellers perception on effect of infrastructural facilities on Livelihood Activities in Akinyele Local Government Area of Oyo State, Nigeria. Multi-stage sampling technique was used to selecting one hundred and twenty respondents from four major rural communities in the study area where infrastructural facilities had been provided. Data were analysed using both descriptive and inferential statistics. Rural dwellers major economic and social livelihood activities include farming, trading, food processing and membership of cooperative societies/town development associations. Infrastructural facilities available in the study area were road, market, primary school, secondary school, dispensary, maternity, electricity and water supply, of which their present conditions are poor. Majority of the respondents had an unfavourable perception on effect of infrastructural facilities on livelihood activities. Result shows a significant relationship between years of residency (r = 0.252, p. 0.005), present condition of facilities (r = 0.260, p = 0.004) and rural dwellers perception. The study there-fore conclude that provision of infrastructural facilities in the study area had no positive effect on the livelihood of inhabitants and recommend that infrastructural facilities in rural areas should be rehabilitated and beneficiary communities to participate in the rehabilitation process for sustainability of the infrastructures.

Keywords: *Rural dwellers, Perception, Infrastructural facilities, Livelihood activities.*

1. Introduction

In Nigeria, close to 80% of the population live in rural areas and are directly or indirectly involved in the use of land resources. Majority of these rural dwellers are facing several problems, which reduces their productivity. Some of these problems include environmental constraints, infrastructural deficiencies, marketing problems, technological constraints, institutional constraints, high cost of labour, inadequate agricultural incentive and lack of sustainable rural development programmes. According to Carney (1998) rural dwellers contribute significantly to the gross domestic product, especially in the developing nations of sub-Sahara Africa. But, over the years their contributions have dropped and are not sustainable. In Nigeria, before the discovery of oil,

rural dwellers, with farming as occupation contribute significantly to the economy of the nation through the export of cash crops like cocoa, groundnut, kola-nut and rubber.

Various policies had been formulated for rural development in Nigeria. Such programmes include Rural Development Projects, Directorate of Food, Roads and Rural Infrastructure, Local Empowerment and Environmental Management Programme (LEEMP), Second National Development Project (NFDP) as well as Community-based Agricultural and Rural Development Programme (CBARDP). However, majority of these programmes have had limited success in many cases because of structural support, change of government and non-recognition of diversity in the livelihood activities of rural dwellers across ethnic and ecological zones of Nigeria.

World Bank (1994) and Ekong (2003) asserted that rural infrastructures constitute a significant position in rural dwellers welfare and infrastructural development with complementary development programmes such as agricultural extension, education, health and nutrition. It is commonly believed that a move towards infrastructural provision is a move towards national development. Ekong (2003), explained that the spread of needed infrastructure and introduction of appropriate technology in rural areas would markedly improve rural economy and their output. This means that infrastructural development is sine-qua-non to improving the living standard of majority of the nation's populace. It is also expected to reduce social problems of urban centres such as inflations, congestion, diseases, etc. There are four basic contributions of infrastructure to rural development, namely production, income, employment and welfare. World Bank (1994) equally added that adequate and timely information though efficient communication system helps to develop rational consciousness in rural community and thus ensure political, economical and social stability. World Bank (1994) and Ekong (2003) are of the opinion that policy makers on rural development strategy must see rural dwellers as consumers and citizens equally entitled like their urban counterparts to amenities rather than be seen as mere producers of food and fibre needed for the urban economy. Therefore, policy makers and development workers should see infrastructural facilities as essential to livelihood of rural dwellers who produces the food and fibre requirements of the nation and that provision of the infrastructural facilities do assist in livelihood activities. This was corroborated by Evans (1990) that it will enhance livelihood of rural dwellers, in terms of demand for consumer goods, creation of non-farm jobs and employment diversification especially in small towns close to agricultural production areas.

The infrastructural institutions provide both economic and social services to rural dwellers as well as influence their standard of living. Rural infrastructure can be defined as those forms of physical, social, human and institutional capital which facilitate farm and non-farm production. Many programs had been recently developed and implemented in Nigeria to provide rural infrastructural facilities that will

enhance the livelihood activities of rural dwellers among which are Local Empowerment and Environmental Management Programme, Second National Fadama Development Project and Community-based Agricultural and Rural Development Programme. The Second National Development Project (NFDP II), otherwise referred to as "Fadama II" is a follow up to the first project which lasted from 1992 to 1998. NFDP II started in 2004 with a project period of 6 years, with the objective of sustainably increasing the incomes of fadama users, through empowering communities to take charge of their own development agenda and by reducing conflict between fadama users. The project used a demand driven approach whereby all user of fadama resources were encouraged to develop participatory and socially inclusive local development plans (LDPs) (World Bank, 2003). Community Based Agricultural and Rural Development Programme is a 7-year programme assisted by International Fund for Agricultural Development in Jigawa, Katsina, Kebbi, Sokoto, Yobe and Zamfara States. The general objective of the programme is to improve the livelihoods and living conditions of rural poor, with emphasis on women and other vulnerable groups. Local Empowerment and Environmental Management Project (LEEMP) is a 10-year programme that envisages the strengthening of local government structures through an emphasis on local government capacity building and community empowerment. Therefore, this study assessed rural dwellers perception of effect of Infrastructural facilities on their livelihood activities in Akinyele Local Government Area of Oyo State where Fadama II and Local Empowerment and Environmental Management Projects has been interpreted. The study addressed the following questions:

- What are the livelihood activities of rural dwellers in the study area?
- What are the infrastructural facilities available and their present condition in the study area?
- What is the respondents' perception of the effect of present infrastructural facilities on their livelihood activities?

2. Methodology

2.1. *Data and collection*

The study area is Akinyele Local Government Area (LGA) of Oyo-State. Akinyele Local Government is located within the longitude of $3^0$45E – 4^0 0E and latitude 3^0 15N – 7^0 3^0N and on altitude of about 225 above sea level. Five local government areas bound the Local Government Area in the north, Lagelu in east and Ibadan North-East Local Government Area in the south bounded the LGA.

The soil type falls into red brown and laterite groups which is good for cultivating cash crops like cocoa, palm tree, kolanut, and food crops such as cassava, maize, yam, cocoyam and plantain. They also keep livestock and are involved in collection of non-timber forest products.

The population of the study includes rural dwellers in Akinyele Local Government Area of Oyo-State. The study area is a predominant Yoruba speaking area with other ethnic groups (Hausa, Fulani, Igede, Ibo being in the minority). Baales and Chiefs who are custodian of the people's tradition head most of the rural communities.

Multi-stage sampling was used in selecting the hundred and twenty respondents for the study. Seventeen (17) major rural communities constitute Akinyele Local Government Area but four communities were purposively chosen because they had participated in both Fadama II and Local Empowerment and Environmental Management Programmes. These communities had been benefiting from rural infrastructural development programmes of these two projects. These communities were Pade, Onidundu, Ijaye and Iroko. From each of the communities, respondents were proportionately selected for interview from the list of members of each Fadama Users Group (FUG) and Community Development Association (CDA) in the selected communities.

2.2. ***Measurement of variables***

The dependent variable is rural dwellers perception of effect of infrastructural facilities, while the independent variables are personal characteristics, livelihood activities, infrastructural facilities available and their present condition. The variables were measured as follows:

Livelihood activities**:** Livelihood activities were operationalized as both economic and social activities that respondents were involved. Respondents were asked to indicate their livelihood activities from the list of economic and social activities of rural dwellers from literature. Availability of infrastructural facilities was measured by presenting to respondents a list of infrastructural facilities for sustainable livelihood from literature and asked to indicate those available on a 2 point scale of Yes (1) and No (0). Present condition of infrastructural facility was measured on 3-point scale of good (3), fair (2) and poor (1).

Perception of infrastructural facilities: Respondents were presented with 30 statements on their perception of effect of infrastructural facilities on their livelihood activities on a 5-point scale of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. This was scored 5, 4, 3, 2, 1 for positive statements and 1, 2, 3, 4, 5 for negative statements. After item analysis only 23 statements were used in final analysis.

Personal characteristics: Personal characteristics that were investigated include sex, age, marital status, education attainment and number of years of residency.

2.3. *Analytical method*

Descriptive and Inferential statistics were used in analyzing the data. Descriptive statistics include frequency count, percentages and mean, while the inferential statistics include chi-square (x^2) and Pearson Product Moment Correlation (PPMC).

3. Results and discussion

3.1. *Livelihood activities*

Analysis of the livelihood activities rural dwellers engage is presented on Table 1. Result of the analysis shows that respondents were more involved in trading (51.7%), crop farming (49.2%) and crop/food processing (34.2%) as their major economic livelihood activities. Other economic activities include livestock farming (11.7%), butchering (7.5%), carpentry (14.2%), civil servant (10.8%) and mechanic/okada riding (commercial motocycle) (6.7%). It was observed during the field study that respondents were involved in more than one economic activity. This corroborates Olawoye (2002) that rural dwellers were involved in several livelihood activities as a means of poverty reduction. This observation also collaborate the findings of Carney (1998) and World Bank (2003) that rural dwellers economic activities are diverse. Rural dwellers social activities were measured by their membership and participation in various types of social groups existing in rural areas. These social groups include cooperative (credit and thrift), community based organization, town development union, age group association, informal work exchange, informal savings group and market association. Result shows that (78.3%) majority of the respondents' were involved in society such as cooperatives and other informal groups, including informal work exchange, informal savings group, social clubs, associations which are semi formal in nature. This observation collaborate the findings of Okali *et al*. (2000) in their study of rural-urban interaction in southeastern part of Nigeria. They observed that social groups that enhance both economic and social relationship which exist in urban centres are now being found in rural settlements, but not as formalized as those in urban centres. The implication of this observation is the important role of social groups in rural transformation in the country.

Table 1
Distribution of Economic and Social Activities of Respondents

Activities*	Frequency	Percentage
Crop farming	50	(49.2)
Livestock farming	23	(19.2)
Cow selling	14	(11.7)
Butchering	9	(7.5)
Crop food processing	29	(24.2)
Carpentry / Bricklaying / Tailoring	17	(14.2)
Trading	62	(51.7)
Civil servant	13	(10.8)
Okada riding	8	(6.7)
Cooperative	94	(78.3)
Community Based Organization (CBO)	49	(40.8)
Other Social Groups like Informal Savings, etc.	94	(78.3)

*Multiple response.

3.2. ***Infrastructural facilities and their conditions***

Infrastructural facilities in this study include basic amenities that are required for economic and social development of individuals within a community. Result on Table 2 shows that basic infrastructural facilities which can promote rural economy were available in most of the communities visited in the study area. The result shows that facilities such as public transport (65.0%), local market (64.2%) were adjudged good by the respondents while both secondary and primary schools (42%, and 41%) were adjudged fair. Roads (70%), dispensary (68%) and electricity (92%) were adjudged by respondents to be in a poor state.

Table 2
Distribution of infrastructural facilities availability and their Recent conditions by respondents

Infrastructural Facilities	Availability		Present Conditions		
	Yes (%)	No (%)	Good (%)	Fair (%)	Poor (%)
Access road	120(100.0)	-	1(0.8)	35(29.2)	84(70.0)
Public Transport	120(100.0)	-	78(65.0)	42(35.0)	-
Local Market	109(90.8)	11(9.2)	77(64.2)	25(20.8)	18(15.0)
Primary School	20(10.0)	-	6(5.0)	49(40.8)	65(54.2)
Secondary School	83(69.2)	37(30.8)	27(22.5)	50(41.7)	43(35.8)
Dispensary / Maternity	96(80.0)	24(20.2)	19(15.8)	20(16.7)	81(67.5)
Electricity	119(99.2)	1(0.8)		10(8.3)	110(91.7)
Bore Hole / Water supply	78(65.0)	42(35.0)	4(3.3)	23(19.2)	93(27)

The reason that may be adduced for the observation in Table 2 is the presence of past government rural development programmes in the state, especially the Directorate of Food, Road and Rural Infrastructure (DFRRI), Rural Electrification Project (REP) and Universal Basic Education (UBE). Although these programmes/projects made available these facilities in the rural communities studied, no provision was made for their maintenance. The state or local government does not know who is maintaining the infrastructures after Federal Government had made provisions for them. The implication of this for the development of rural economy is the need to develop a maintenance culture which will involve the beneficiary communities. The present condition of these facilities will definitely not promote rural economy in a developing nation like Nigeria.

3.3. *Rural dwellers perception on the effect of infrastructural facilities*

Rural dwellers perception on the effect of infrastructural facilities was measured by presenting 30 positive and negative perceptional statements to respondents. Item analysis was conducted for each statement to select statements that discriminates. Twenty three statements were used in calculating individual perceptional score of each respondent. Analysis of the twenty three discriminating statements reveals that the highest and the lowest individual scores were 93 and 46 respectively, with a mean score of 70.0. Respondents with a score of between 46 and 70 were categorized as having an unfavourable perception, while respondents with scores between 71 and 93 as having a favourable perception. Indications are that having unfavourable perception suggests provision of infrastructural facilities affect livelihood negatively.

Perception in the study measures the psychological 'feeling' of respondents, whether availability or non availability of infrastructural facilities have contributed favourably (positive) or unfavourable (negative) to their economic and social activities.

Table 3
Distribution of Perception of Respondents on their Perception of Effect of Infrastructural facilities

Perception	Frequency	Percentage
Unfavourable (negative)	101	84.2
Favourable (positive)	17	14.2
No Response	2	1.6
Total	120	100.0

Result of analysis on Table 3 shows that majority (84.2%) of the respondents perceived that the infrastructural facilities in the study area had a negative effect on their livelihood activities. The reasons that can be accounted for this observation are the poor condition of these facilities. For example the poor access road will not promote rural economy because

respondents or rural dwellers will have to travel long distance or pay for high fee to transport themselves and their goods. This will have effect on their source of income. Likewise, the poor condition of the primary school buildings do make their children to either travel long distances to good schools or attend private primary schools paying fees which rural dwellers most of time cannot afford. Lack of regular power supply will not enhance agro-industry especially processing of agricultural products. Likewise, poor health facilities and lack of drugs will affect availability of farm labour.

The study went further to test if relationship exists between selected personal characteristics, present condition of infrastructural facilities and rural dwellers perception on effect of infrastructural facilities on livelihood activities. Therefore the following hypotheses were tested and the results are presented on Table 4:

H_0: There is no significant relationship between selected socio-economic characteristics and respondents' perception of effect of infrastructural facilities on their livelihood activities.

H_1: There is no significant relationship between respondent's assessment of present condition of facilities and their perception of the effect of infrastructural facilities on their livelihood.

Table 4

Chi-square and Pearson product Moment Correlation test of Hypothesis 1

Selected Socio-Economic Characteristics	Chi-square (X^2)	PPMC (r)	Df	p-value	Decision
Sex	1.290	-	2	.525	Not significant
Marital status	0.913	-	3	.822	Not significant
Educational status	8.017	-	4	.119	Not significant
Age	-	0.105	4	.254	Not significant
Years of Residence	-	- 0.252	4	.005	Significant

PPMC test for Hypothesis 2	r- value	p – value	Decision
Present condition of infrastructural facilities vs. respondents perception	0.260	0.004	Significant

Table 4 indicates that there is significant relationship between years of residency and perception of respondents. This indicates that the number of years of residency plays a crucial role in respondents' perception on the effect of infrastructural facilities on livelihood activities.

Respondents must have experience a positive effect at the inception of the infrastructures, but due to lack of maintenance instead of contributing positively to their livelihood it is negative. The r-value that is negative means that as the number of years of residency increases the number of respondents that perceived unfavourable or negative effect increases. The table also shows that relationship exists between present condition of infrastructural facilities and respondents perception. This result further confirms hypothesis 1 that is their assessment of infrastructural facilities informs their perception. This means, the facilities had effect on their livelihood activities. This result confirms findings of Olawoye (2002) and Okali *et al*. (2001) that present conditions of infrastructural facilities provided by past administration across ecological zones of Nigeria do not promote transformation of rural economy.

4. **Conclusion**

The level of infrastructural development is a significant determinant of the ability of rural dwellers to improve their productivity and standard of living. The present poor condition of most of the infrastructural facilities is a constraining factor for ensuring sustainable livelihoods for the rural population in the study area. The study assessed the livelihood activities; infrastructural facilities available and present condition of these facilities; and perception on the effect of infrastructural facilities on livelihood activities of rural dwellers in Akinyele Local Government Area of Oyo-State. It also, test if relationships exist between selected personal characteristics, present condition of infrastructural facilities and perception on the effect of infrastructural facilities on livelihood activities in the study area. As World Bank (1994) reports, "infrastructural investments can deliver major benefits in economic growth, poverty alleviation and environmental sustainability". The report goes on the caution, that this can only be achieved "when it provides services that respond to effective demand and does so efficiently". This report has taken these issues into account in conducting the study and in presenting the results.

The following are recommendations that are likely to bring about sustainable development and further expansion of livelihood activities of dwellers in the study area:

- Reform in the policy of rural development to contain rehabilitation and maintenance. This will enable and facilitate rural environment for the spread of diverse rural economy.
- Need for government and non-governmental organization to recognize the need for sustainable infrastructural development programmes that will not change as government changes.
- The need for development workers/practitioners to work with and not for beneficiaries of development programmes for sustainability and maintenance.

- Rural development policy makers to recognize diversity in the livelihood activities of rural inhabitants and not only recognizing their farm production activities.

References

Carney, D. (ed). (1998). Sustainable Rural Livelihood. What constitutions can we make? London Department for International Development.

Ekong, E. Ekong (2003). Rural Development in Nigeria. An Introduction to Rural Sociology. Dove Educational Publishers, Uyo, Akwa-Ibom State.

Evans, H.E. (1990). Rural-urban linkages and Structural Transformation. Report INUTI, Infrastructure and urban Development Department, The World Bank, Washington DC.

Idachaba, F.S. (1995). Rural Infrastructures and Nigeria Rural Development. Rural Infrastructures in Nigeria, Federal Department of Rural Development, pp. 4 – 11.

Okali, D., Enoch, O. and Olawoye, J.E. (2001). The case of Aba and its Regions, south Eastern Nigeria. Rural-urban Interaction and Livelihood Strategies, Working Paper 4, London: International Institute for Environment and Development.

Olawoye, J.E. (2002). Giving Voice to the rural Population. Inaugural Address presented at the University of Ibadan, on April 11.

World Bank (1994). World Development Report 1994. Infrastructure for Development, Washington D.C.

World Bank (2003). Project Appraisal Document: Nigeria – Second National Fadama Development Project, Washington D.C.