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# Impact of Government School-To-Land Agricultural Project on Rural Development in Rivers State, Nigeria

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### Abstract

The paper assessed the impact of government school- to - Land agricultural project on rural development in Rivers State, with specific emphasis on rural employment, livestock and food crop production and rural income generation. The simple random and purposeful sampling techniques are used in selecting 300 participants of the programme (farmers), programme coordinators, and members of host communities as respondents for the study. The simple per centage and chi-square statistical methods are adopted in data analyses and hypothesis testing. The results reveal that the school- to- land project has contributed to rural development. It was also discovered that the school –to – land project contributed to increases in the livestock and food production in the state. The paper however recommended the adoption of modern farming techniques and constant review of agricultural policies/programmes to avoid duplication of agricultural projects in the state.

Key words: Rural employment, rural income generation, rural development.

### 1. Introduction

Agriculture consists of human activity on primary production of livestock and cash crops, forestry, fishing and marketing of products. Agriculture has been embraced as the pivot for development. In the developing countries, it can promote the economy by releasing labour for the industries, increasing availability of food and expansion of domestic market for industrial goods. It raises the level of savings and capital formation while also earning foreign exchange from exports. Before the discovery of oil at Oloibiri in 1956, agriculture was the dominant contributor to the nation's GDP, accounting for about 92 per cent of the GDP. Nigeria neglected her strong agricultural base in favour of crude oil due to the oil windfall in 1974 (Awoseyila, 1997 p.29). Since then, agricultural production has been low as a result of its neglect, shift of emphasis to petroleum and use of traditional methods of farming among other factors. Although agricultural production has been low in recent years, it has remained an important sector in the economy in terms of export earning, employment and food security.

The same argument applies to the rural sector. One of the major social problems of the rural sector is poverty. It can be further argued that agriculture is the only sector of the economy that is directly linked to all major macroeconomic objectives of modern economies. Agriculture is one of the veritable tools for achieving full employment, economic growth, price stability, favourable balance of payment and equitable income distribution. As a provider of essential raw materials for most industries, it plays a critical role in the development of the manufacturing sector. This understanding constituted the basis for various efforts made by both Federal and State governments as well as the private sector in the planning and designing of agricultural policies /programmes and to ensure sustainable growth in the sector and enhance the capacity of the sector to play this designated role, (Evbuonwan et al, 2003) as quoted in Cookey and Ohale, (2005 p.43). Agriculture as a veritable tool for combating poverty and achieving economic growth in Rivers State and Nigeria in general, has continued to impact positively by ameliorating the sufferings of rural and urban dwellers through food sustainability, self-employment generation, etc.

The agricultural sector is made up of formal and informal sectors. The formal sector comprises government ministries of agriculture (Government Parastatals) whose sole responsibility is to initiate agricultural programmes and projects to fight hunger in the country while the informal sector are the donor agencies that have the passion to assist underdeveloped and developing nations in the area of financial assistance to undertake agricultural projects, with the aim of developing the agricultural sector to boost food production, (Olukoya, 2007 p. 84). Agriculture is a springboard from which a nation's development can take off. No doubt agricultural projects are usually sited in rural areas where there is availability of land and cheap labour (Oluwasanmi, (1996 p. 564). Oluwasanmi noted that agriculture has contributed immensely in boosting the GDP. Its impact on rural development is achieved through higher incomes for farmers, self-employment, increased livestock and food crop production, etc. In Nigeria, lack of continuity of agricultural projects is considered as an intrinsic characteristic of government agricultural programmes (Omereji, 2005 p. 202). In recent time, prospects of agricultural projects in Rivers State in particular, in terms of performance and profitability have remained

inconsistent especially in the area of employment, rural income generation and livestock and food crop production. This however, has been attributed to communal clashes over lands, land acquisition problems, lack of technological know-how, insecurity issues arising from communal clashes and the Niger Delta militancy. In view of the constraints, and associated politicization, duplication, policy inconsistency and non-sustainability of projects, it becomes imperative for us to take a position and update the performance of Rivers State School-to-Land (SLP) agricultural project as well as bring to focus the realities by evaluating the impact of the project on rural development, with specific emphasis on rural employment, livestock/ food crop production and income.

The paper is divided into four sections; the first section is the introduction while the second is the theoretical frame work/literature review. The third section discusses the methodology; the last section is the summary and conclusion.

### 2. Theoretical Framework/ Literature

This study is predicated on the theory of Dual Sector Model propounded by Lewis (1954). It is a theory of development in which surplus labour from traditional agricultural sector is transferred to the modern industrial sector whose growth over time absorbs the surplus labour, promotes industrialization and stimulates sustained development.

In the model, the traditional agricultural sector is typically characterized by low wages, and abundance of labour, and low productivity through a labour intensive production process. In contrast, the modern manufacturing sector is defined by higher wage rates than the agricultural sector, higher marginal productivity, and a demand for more workers initially. Also, the manufacturing sector is assumed to use a production process that is capital intensive, so investment and capital formation in the manufacturing sector are possible over time as capitalists' profits are reinvested in the capital stock. Improvement in the marginal productivity of labour in the agricultural sector is assumed to be a low priority as the hypothetical developing nation's investment is going towards the physical capital stock in the manufacturing sector.

Since the agricultural sector has a limited amount of land to cultivate, the marginal product of an additional farmer is assumed to be zero as the law of diminishing marginal returns has run its course due to the fixed input, land. As a result, the agricultural sector has a quantity of farm workers that are not contributing to agricultural output since their marginal productivities are zero. This group of farmers that are not producing any output is termed surplus labour since this cohort could be moved to another sector with no effect on agricultural output. Therefore, due to the wage differential between the agricultural and manufacturing sectors, workers will tend to transit from the agricultural to the manufacturing sector over time to reap the reward of higher wages. If quantity of workers moving from the agricultural to the manufacturing sector equals the quantity of surplus labour in the agricultural sector, regardless of who actually transfers, general welfare and productivity will improve.

Agriculture is the process of producing food, feed, fibre and other desired products by cultivation of certain plants and the raising of domesticated animals (livestock). Agriculture is also known as farming. According to Adegbola et al, (1974), it is the preparation of plant and animal products for man's use. The practice of agriculture has remained at the subsistence level before government involvement. One way of looking at agriculture is to see it as a specific activity and profession among many. In this view, agriculture is part of culture, but although this is not wrong, it is also not sufficient for understanding the existential, ethical and aesthetic values involved in agriculture. The complementary and, more fruitful view is to regard agriculture as a form of culture. The claim is, then, that agriculture, in various ways, gives rise to meaning and values, articulates the world in certain ways and provides insights into existentially important questions. Agriculture is not only a profession but also a way of life and includes a way of perceiving and thinking about things. The emphasis is, in other words, on certain basic similarities between agriculture as practiced in different countries. In phenomenological terminology, agriculture constitutes a life-world, Amend and Karanga, (2007 p. 68)

According to Danso et' al (2002 p. 91) rural development relates not only to a sustained increase in the level of production and productivity by all rural dwellers, including farmers, and a sustained improvement in their wellbeing, manifested by increase in per capita income and standard of living, but also leads to a sustained physical, social and economic improvement of rural communities. In order to achieve the broad goals of agriculture on rural development, the Nigerian government need to focus on specific objectives. While the attainment of specific agricultural goals encompasses the provision of adequate food, fibres and industrial raw materials, employment and foreign exchange generation, the goals of rural development embrace in addition a systematic improvement of the other institutional, physical and social infrastructures in such rural communities. Rural agriculture to a large extent makes productive use of land not fit for construction. This reviews the employability of labour for effective use of arable land.

It is a fact that longer-term strategy on agriculture must focus on the provision of basic infrastructure. They observed that continued progress require rapid employment in the agricultural sector, this will create postive impact on demand for goods and services in the rural sector. A strategy that is effective at reducing rural poverty

in developing nations.

In Rivers State, the agricultural sector is dominated by, not just the poor but the 'poorest of the poor'. These are high risk individuals or groups that are predominantly illiterates (Cookey, and Ohale, 2005 p. 47). In view of this, several agricultural projects have continuously been initiated or adopted as a follow-up to Federal Government effort to boost performance of the agricultural sector by the Rivers State government.

The School-to-Land Programme was established by Edict No. 4 of 1985 by the Rivers State Government and formally launched the same year. It was one of the measures taken by the Rivers State Government to help check the rising trend of unemployment amongst the youths. It is an Agricultural Training Institute charged among others with the responsibility of intensive on-the-job-training of:

- (i) young secondary school leavers of Rivers origin in modern agricultural practices.
- (ii) encourage the young school leavers to take to agriculture as a viable profession.
- (iii) train the young farmers in processing of grains
- (iv) production of food crops and livestock for local consumption.

#### The goals are:

- (i) to train a new breed of small-scale farmers and thus create opportunities for, and encourage selfemployment of young secondary school leavers in agriculture, particularly in the areas of crops, fisheries and livestock production.
- (ii) to operate and promote modern agricultural practices thus contribute to increased production of food and fibre
- (iii) to provide essential inputs and support services as a loan package to eligible young farmers after their training.

The project which took about 3,429.5 hectares of land was located in different communities in the state namely; Bunu-Tai, Iriebe, Kpaa, Egbeke/Nwuba and Bori. Other communities are Agbeta, Okordia, Sagbama, Ogbia and Bukuma, (Tamuno, 2009). The project presently, has three (3) existing farms namely: Rumuodomaya 5 hectares, Kpaa 350 hectares and Bori New Town (Wiiyaakara) 450 hectares (ADP, 2009).

However, in 2008, Rivers State Sustainable Development Agency (RSSDA) acquired Egbeke/Nwuba and Bunu Tai School-to-Land farms with the head office relocated from Port Harcourt Aba road to ADP farm at Rumuodomanya in Obio/Akpor Local Government Area. From its inception, the programme has made some Impact in the leaving standard of the rural poor, thus the need investigate the impact of the programme on employment generation, income and poverty level in Rivers state.

### 3. Methodology

The study was conducted in Rumuodamaya in Obio/Akpor local government area, Bori New Town and Kpaa in Khana local government areas of Rivers state, Nigeria. The study used primary data only. A Cross-sectional data collected on 100 participating farmers in each of the three host communities in Khana and Obio/Akpor Local Government Areas of Rivers State. This brought the total to three hundred (300) selected respondents.

The simple random and purposeful sampling technique was used to collect data through the use of a three-type Likerts scale fashion structured questionnaire. T The questionnaire contained questions that sought to address issues on rural employment, livestock and food crop production, rural income generation and provision of infrastructural facilities as selected development indicators.

## 4. Method of Data Analysis

Descriptive and inferential statistics were adopted in analysing the performance of government school-to-land agricultural project on rural development in Rivers State. The simple percentage was adopted in analysing the data while Chi-square was used in testing the hypotheses to determine the association between agricultural projects and rural development. This helped in weighing the relative importance in the views of different categories of people on the performance of the school-to-land project.

### 5. Data Presentation and Analysis

One hundred (100) questionnaires were administered to participating farmers and community leaders in each of the three selected host communities to school-to-land projects. This brought the total questionnaire administered to three hundred (300). One hundred and seventy (170) questionnaires were retrieved Kpaa (64), Bori New Town (55) and Obio/Akpor (51).

## TABLE 1: ANALYSIS OF RESPONSES TO QUESTION ON RURAL EMPLOYMENT GENERATION **BY SLP PROJECT**

|                  | Very great extent | Great extent | No extent      | Total |
|------------------|-------------------|--------------|----------------|-------|
| Responses        | -                 | 12 (8.05)    | 158 (161.94)   | 170   |
| % Responses      | -                 | 7 (4.74)     | 93 (0.90)      | 100   |
| Weighted Average | -                 | 0.8 (7.0)    | 146.9 (140.69) | 147.7 |
| Total            | -                 | 19.8         | 397.9          | 417.7 |

Testing hypothesis 1. (Ha<sub>1</sub>: A significant relationship exists between government agricultural projects and increase in rural employment).

Using Chi-square (X<sup>2</sup>) with the formula;  $X^2 = \frac{\Sigma(O-E)^2}{E}$ 

The test was conducted at 95% confidence interval and 0.05 significant levels.

Where  $X^2 = Chi$ -square

fo = Observed value

fe = Expected frequency determined by (row total, total and grand total).

Degree of freedom = (m - 1)(n - 1), Contingency table = (3 - 1)(3 - 1)Table = 2(2) = 4

The Chi-Square calculated =  $X^2_{cal}$  = 17.891,  $X^2_{tab}$  = 9.49 Since  $X^2$  calculated is greater than  $X^2$  tabulated we reject that School-to-Land project have contributed to rural employment and accept that the project has not contributed to rural employment. The implication is that the school-to-land project have not impacted employment, income or poverty of the rural dwellers.

| TABLE 2: | ANALYSIS    | OF  | RESPONSES | ТО | QUESTION | ON | LIVESTOCK | AND | FOOD | CROP |
|----------|-------------|-----|-----------|----|----------|----|-----------|-----|------|------|
| PRODUCTI | ON BY SLP P | RO. | JECT      |    |          |    |           |     |      |      |

|                  | Very great extent | Great extent | No extent   | Total |
|------------------|-------------------|--------------|-------------|-------|
| Responses        | 161 (164.27)      | 7 (4.49)     | 2 (1.21)    | 170   |
| % Responses      | 95 (96.63)        | 4 (2.64)     | 1 (0.71)    | 100   |
| Weighted Average | 152.95 (148.04)   | 0.2 (1.09)   | 0.02 (1.09) | 153.2 |
| Total            | 408.95            | 11.2         | 3.02        | 423.2 |

Ha<sub>2</sub>: Government agricultural projects have contributed to increase in livestock and food crop production.

$$X^2 = \frac{\Sigma(O-E)^2}{E}$$

The Chi-Square calculated =  $X_{cal}^2 = 4.766$ ,  $X_{tab}^2 = 9.49$ The  $X^2$  calculated is less than  $X^2$  tabulated, we accept that Government Agricultural School-to-Land project has contributed to increase in livestock and food crop production.

### TABLE 3: ANALYSIS OF RESPONSES TO QUESTION ON INCREASED INCOME FOR RURAL **DWELLERS**

|                  | Very great extent | Great extent | No extent      | Total |
|------------------|-------------------|--------------|----------------|-------|
| Responses        | 3 (2.014)         | 4 (2.420)    | 163 (165.38)   | 170   |
| % Responses      | 2 (1.185)         | 2 (1.423)    | 96 (97.28)     | 100   |
| Weighted Average | 0.06 (1.860)      | 0.08 (2.235) | 156.4 (152.73) | 157   |
| Total            | 5.06              | 6.08         | 415.4          | 427   |

Ha3: There is significant relationship between agricultural projects and increase in rural income.

Using Chi-Square statistical tool,  $X^2 = \frac{\Sigma(O-E)^2}{E}$ The Chi-Square calculated =  $X^2_{cal} = 6.2674$ ,  $X^2_{tab} = 9.49$ The  $X^2_{cal}$  calculated is less than  $X^2_{cal}$  is less than  $X^2_{cal}$ .

The  $X^2$  calculated is less than  $X^2$  tabulated, we accept that government School-to-Land project has not contributed to increase in rural income.

#### 6. Conclusion and Recommendations

The study established that the absence of selected rural development indicators such as – rural employment, livestock and food crop production, increase in rural income generation, has impacted negatively on the leaving standard of the rural dwellers. The failure of agricultural projects may have been a critical respnsible for the high rate of unemployment and poverty in Rivers State.

Considering the findings of this study, attainment of the potential of the agricultural sector depends on the implementation of the following recommendations;

- (i) Adoption of modern farming techniques Modern Farming techniques and general agricultural practices should include the use of improved seeds and the application of recommended chemicals to curb the devastating effects of pest and diseases. Observations made during this study revealed that most participating farmers were seen using traditional method of farming because they are not thought how to apply new techniques in their new line of farming and the agricultural extension service agents could not maintain regular visit to teach them on new techniques.
- (ii) Constant review of agricultural Programmes and Policies to Avoid duplication of projects there is the need for constant review of agricultural programmes and policies to help discover where non-functional projects are located. It is necessary not to duplicate such government efforts. Most communities host more than two non-functioning government agricultural projects. It is proper to revitalize non-functional agricultural projects than locating additional project(s) on virgin land in the same community or replace non-functional projects with new ones. For instance, Rivers State Sustainable Development Agency (RSSDA) projects in Egbeke/Nwuba and Bunu-Tai are located in the non-functional sites of School-to-Land Project (SLP). Where such assessment is not done, communities will constantly be denied arable lands for cultivation in the name of new projects.
- (iii) Periodic retraining of farmers Apart from making agriculture an importance course in our tertiary institutions, retraining of farmers should be adopted to constantly put the farmers on alert against any crop diseases that may arise. It will also help the government to know when most farmers engaged in government agricultural projects are demised or have abandoned plots of land allotted to them to avoid possible existence of idle hectares of land. For instance, in Bori New town (Wiiyaakara) and Kpaa School-to-Land Project sites, several hectares have been abandoned by farmers for urban cities without the knowledge of supervising agencies. Therefore, retraining will also serve as a roll call.

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