Impacts of Agricultural Development Programme (ADP) on Rural Dwellers in Nigeria: A Study of Isan-Ekiti

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Abstract

This study examined the reality of the impact of Agricultural Development Programmes on rural dwellers in Nigeria, using the people of IsanEkiti, Oye Local Government Area of EkitiState as case study. Therefore, it investigated if the programme has brought about increase in the production of foodstuff, income level of farmers, improved seeds, provision of pesticides, and fertilizer for farmers. The research method employed a survey study which involved the administration of questionnaire as the research instrument. A total of seven hundred and seventy three questionnaires were analyzed using descriptive statistics involving percentage frequency distribution, pictorial representation, graphical illustrations and regression approach. The study hypotheses were tested using multiple linear regression analysis and the empirical result reveals that Agricultural Development Programmes have significantly increased food production in the locality through increased provision of pesticides and improved seeds to farmers, establishment of new infrastructure and provision of fertilizers. The analysis of the evidence from the result however reveals that accessibility of credit by farmers has no significant effect on increased Agricultural productivity. The study therefore recommends that government should increase its effort in the area of Agricultural credit financing.

1. Introduction

Over the years, several agricultural programmeshave been introduced to reduce abject poverty among rural dwellers, mostly farmers, in sub-Saharan Africa (SSA). Some of these programmes include: United Nations Development Programme (UNDP), International Fund for Agricultural Development (IFAD), Agricultural Development Programmes (ADP), Food and Agricultural Organisation (FAO), and National Economic Empowerment and Development (NEED), The Directorate of Food, Roads and

Rural Infrastructure (DIFRRI), National Orientation Agency (NOA), National Accelerated Food Production Programme (NAFPP), Green Revolution (GR), Operation Feed the Nation (OFN), etc. (World Bank, 1993, World Bank, 1995a, World Bank, 1995b; World Bank, 1996; Hashmi and Sial 2007; IFAD 2001), but it seems that these efforts have yielded little or no impact on the rural population, as evident in the literature (Afolayan, 1997). Consequently, the rate of poverty in rural areaskeeps increasing steadily(Diamond, 1999; Handley et al., 2009; Gate 2014).

However, this study limits its scope to Agricultural Development Programmes (ADP), which aims at increasing food production for rural dwellers and raising the income level of small scale farmers by making provision for improved seeds, fertilizer, pesticides, credit facilities and infrastructural facilities (Ajayi and Ajala, 1997; Garba, 2000; Akpobo, 2007).The study focuses on its impact on rural dwellers in IsanEkiti, Oye Local Government Area of Ekiti State, Nigeria.

Since inception of ADP in the village, studies to assess the impact of these provisionson indigeneshave never been explored inthe literature. Thus, the probability of Agricultural Development Programmesresulting in increased foodstuff for rural dwellers is yet to be ascertained. Moreover, the likelihood of farmers having easy access to improved seeds, pesticides and fertilizer for farming has never been investigated. Equally very essential and related to the foregoing but yet to be examined is the probability of ADP granting farmers adequate access to credit facilities.

Apart from its academic worth to the body of knowledge, this study intends to discover if the existence of Agricultural Development Programmes has actually impacted on the rural population,in respect of food production and infrastructural facilities.Hunger and poor infrastructural facilities in rural areas have been associated with criminal activities and rural-urban migration(Asiabaka, 2010; Angus, 2010; Aworemi et al., 2011; BBC, 2012; International Monetary Fund, 2013; The Economist, 2014)in many societies. If the problem of food and infrastructural facilities are adequately addressed in rural areas, it could reduce the rate of stealing and rural-urban migration in Nigeria.

Other aspects of this study are: Literature review, methodology, result, discussion recommendation and conclusion.

1.1 Operational Definition of Terms

The following terms are defined as used in this article

Poverty- Poverty meansa state in which an individual, a group, or population lacks essential elements of life within their societies. These includelack of basic survival items like food, clothing, shelter, and health care, or the financial means to obtain these.Poverty is usually a phenomenon of rural dwellers in Nigeria.

Agricultural Development Programmes- Several programmes instituted by the government and world agencies to address the problem of poverty among rural dwellers in Nigeria.

2. Literature Review
2.1 Rural Population

According to World Bank Group, (2014) rural population meanspeople living in rural areas as defined by national statistical offices. It is generally determined by calculating the difference between total population and urban population.Nigeria is predominantly rural and less than a quarter of Nigerians dwell in towns or urbanized settings (Abbass, 2010). Nigeria is the most populous nation in sub-Saharan Africa with a population of 140 million (National Population Census, 2007).As at 2013, the nation's population is estimated to be 158.4 million out of which the rural population is 78,528,437 (Olojede et al., 2013).

It is evident in literature that rural infrastructure has been neglected in Nigeria since the colonial era. According to Olojede, et al. (2013),this hasnegatively affectedthe profitability of agricultural production. For instance, lack of rural roads impedes the marketing of agricultural commodities, prevents farmers from selling their produce at reasonable prices, and leads to spoilage. Limited access of farmers to the above facilities,as noted above, cuts small-scale farmers off from sources of inputs, equipment and new technology. This keeps yields low returnsevery year to tackle the problem of hunger and lack in Nigeria.

Attempts to solve the above problems have been the concern of government over the years. This, among other reasons informed the creation of Agricultural Development Programmes in rural areas in Nigeria. However, the impact of the programmes on rural population in IsanEkiti has never been discussed in the academic literature. This study intends to fill this gap in knowledge.

2.2 Agricultural Development Programme: An Overview

The ADP approach was said to have been originally designed in Malawi, East Africa, to tackle the problem of poverty. The economic development in the rural areas of the country had been promoted through a strategy which focused on the contribution of improved technologies for food crops, enhanced delivery systems for agricultural extension and input supply, and improved infrastructure. A well-designed organizational structure with professional staff (hired intentionally) was employed to implement this concept.

The basic concept was transferred to Nigeria in 1974 with the establishment of the first three enclave projects in the Northern part of the country. This includes: Funtua, Gusau and Gombe Agricultural Development Programmes. The chosen project regions were agro-ecologically favourable areas in the northern part of Nigeria. They were located in the domain of several Local Government Council (LGCs) of Bauchi, Gombe, Kaduna and Sokoto States (Idrisa et al., 2010). The apparent success of these early projects prompted both the Federal Government of Nigeria and the World Bank to quickly replicate the Agricultural Development Programme model in other states. From 1975 to 1980, the number of projects grew from the original three to a total of nine enclave projects, which include Ekiti-Akoko Agricultural Development Project, out of which Ekiti-State Agricultural Development Programme was created. A Federal entity titled Agricultural Projects Monitoring Evaluation and Planning Unit (1975), reviewed in recent times(Akinbamowo2013) was created to support the Agricultural Development Programme projects.

2.2.1 Objectives of the Agricultural Development Programme
Basically, all Agricultural Development Programmes has one objective in common. It is to increase food production andfarm incomes for the majority of the rural households in the defined project regions, thus improving the standard of living and welfare of the farming population, with the hope of reducing abject poverty. It is on the basis of the above that *five hypotheses* have been formulated for this study.

2.2.2 Components of Agricultural Development Programme
Components of Agricultural Development Programmesaccording to the Commercial Agriculture Development Projects, (2013) are as follows-

2.2.2.1 The farm and Crop Development Component
This component was meant to introduce simple improved agricultural practices and improved seeds for the basic food crops (maize, sorghum, millet, rice, yam, cassava, groundnut, and cowpea). Through applied research, an improved extension system and a more efficient system of input procurement and distribution were introduced. Therefore, this study hypothesizes that: *(Hypothesis one)*

H_1: Agricultural Development Programmes significantly propel improved seeds for the production of basic food cropsin IsanEkiti.

2.2.2.2 Civil Works/Infrastructural Development
In the civil works and rural infrastructural components, all projects included the provision of feeder roads, the construction of the Farmers Service Centre (FSC) for input supply in the rural areas and the establishment of projects offices and staff houses.

2.2.2.3 Institutional Support and Training
The main institution building components of the project were directed at establishing or enhancing the capacity of the Agricultural Development Programmes themselves to implement the development

projects under the policy guidance and supervision of committees representing the State Ministries. Provision were also made, however, for training the staff of Local Government Areas (LGA) and all projects were to establish or strengthen the state-owned input supply companies which would manage and service the farm ServiceCentres (FSCs) (Chinasa, 2008).

2.2.2.4 Consultancies
The Agricultural Development Programmes relied heavily on expatriate consultants support in executive/functional position at the beginning.The rationale given for the unprecedented level of expatriate recruitment for the Agricultural Development Programmes was that the programmeswere large, food production had to be increased quickly, and Nigerian professionals who could manage and implement such programmes were either not available or could not be attracted into government service. However, this vie changed later, with the establishment of the Multi-State Agricultural Development Programmes, which were managed by indigenous personnel (Toluwase, 2004)

2.2.2.5 Project Outcome
The outcome of the projects can be appropriately analyzed under agricultural impact infrastructural development and institutional improvements.

2.2.2.5.1 Agricultural Impact
The projects planned to achieve production increase largely through crop yield increases by the use of improved technology and increased production inputs. The result of the trend analysis carried out on the area and yield data for 1982-1991 for Bauchi, Kano, Sokoto, Ilorin and Oyo-North Agricultural Development Programmes indicated that yields increased in millet, cassava and cotton in the BauchiState Agricultural Development Programme, Rice in Kaduna Agricultural Development Programmes, Cassava in Ilorin Agricultural Development Preogramme, yam and cowpeas in OndoAgricultural Development Programmes (World Bank, 1993; Aliero, 2008)

On the average yields have increased for all the major crops in Nigeria since inception of the ADPs compared with the period before the establishment of the ADPs. This is inconsonant with the extensive extension coverage by the ADPs. Between 1991 and 1995 alone, a total number of 36,012,000 farm families were covered while 1,130,700 Special Plots for Agricultural Training (SPAT) plots were established, and 8,894 on farm/station trials were carried out. Although there were some sole cropping of maize in more flavored areas, the projects had virtually negligible impact on changing the traditional mixed/relay crop system in the projects (Ojiako et al., 2007). This system has obvious advantages in allowing farmers to reduce production risks in the relatively difficult production environment, and hence any widespread adoption of a different system would have had to include not only increased production potential but also comparable risks aversion characteristic (Toluwase and Omonijo, 2013). Such an alternative system has yet to be developed. Given this, ***hypothesis two*** has been formulated as indicated below:

H_1: Agricultural Development Programmes have significantly resulted inincrease in the provision of pesticides for farmers for food production in IsanEkiti

2.2.2.5.2 Infrastructural Development Impact
2.2.2.5.2.1 Roads
The roads which have been rehabilitated or newly constructed through the ADPs in rural areas in Nigeria constitute approximately one sixth of the tertiary road network in the states or parts of the state concerned. The programme had significantly improved accessibility to large areas of the respective state. For instance, from 1991 to 1995 alone a total of 3.147.8km and 5.826.2km of road were constructed and rehabilitated respectively by all ADPs. Despite the rural roads being highly valued by the benefiting populations, they have not had desired effect on the LGAs or on the aptitude of the beneficiaries towards road maintenance and its associated costs.

2.2.2.5.2.2 Rural Water supply
This programme was impressive and exceeded its targets in most ADPs by an impressive margin; between 1991 and 1995 a total of 28.987.7 water points (earth dams, tubewells, wash bores and boreholes) were constructed. Their benefits would be realized in an improved level of human health and economic benefit, in time saved in water collection by rural women.

For the dam storage, which has a stock water objective, in Bauchi and Sokoto, insufficient accountwas taken of traditional cattle routes from Niger so that often-full use is not made of the investments (Reddy, 2013).The possibilities offered in fish culture in these water supplies have not been fully exploited. It is on this ground that *hypothesis three* stated below has been formulated.

H_1:   Agricultural Development Programmes significantly propel the establishment of new infrastructural facilities in IsanEkiti.

2.2.2.5.2.3 Roads Institutional Development
2.2.2.5.2.3.1 Roads Manpower Development
One of the most positive aspects of the ADPs was in human resource development. This was especially so in project staff, and to a much less extent in special target groups (pump attendants, etc. Between 1991 and 1995 a total number of 179,026 people were trained.

2.2.2.5.2.3.2 Commercial services
The state–owned input supply companies have generally not been able to develop into viable commercial organizations. This was parity attributed to their obligation to handle fertilizer distribution without a profit margin and to refinance its transport costs to FSCs, often without reimbursement. However, Ondo, Ekiti, Oyo, and Lagos states established Agricultural Input Supply Companies (AISC) from their commercial services programme because they were given a free hand to operate (privatization). It is on this ground that *hypothesis four* stated below has been formulated

H_1:   Agricultural Development Programmes have significantly resulted in the increase in the provision of fertilizer for farmers for the provision of food crops in IsanEkiti.

2.2.2.5.2.3.3 Cooperative Groups
The BauchiState Agricultural Development Programmesupport for the cooperative credit scheme and the loan-in-kind scheme for cooperatives in Oyo havefavourable results. In both cases focus was on organized groups rather than individuals and on market conformity in the pricing of the services provided. With the group orientation targeting was made possible, social control worked against defaulting .and delivery or services became less costly for the respective organizations. With thenear-marketconformity in pricing, the sustainability of services provided could be guaranteed, thus also working toward broader social and economic impact and enhanced equity. The group formation concept within the Women In Agriculture (WIA) (Oladejo, et al., 2011) and other beneficiary user's association has enabled these groups to embark on laudable projects, which benefited them as individuals, groups as well as the community. A total of 12, 097 Women in Agricultural groups (WIA) were formed between 1992 and 1995.

Where the adoption of technology promoted or facilitated by the projects (e.g. in improving seedcrop husbandry measures, post-harvest practices) has led to increased productivity in most cases; this impact could be expected to continue in the near/medium term. There is some concern, however, about the traditional mixed/relay cropping system in Nigeria due to the increasing challenge of the "striga" weed problem, and similarly, intensive development of the fadama has nematode and other pest challenges, and is faced also with emerging marketing problems, both of which indicate a need for diversification into additional high value crops.

While the sustainability of the rural water supply investment looks secure, this is not the case with the road and building infrastructure investments because of lack of a system for necessary up keep and maintenance.

The Agricultural Development Programmes appear to have strong support to continue as agricultural development implementing agents in the states. This however, has not been translated into support in budgetary funding, so that most Agricultural Development Programmes have experienced serious funding constraints when Bank loan support decline.

The constrained budget situation gives some priority to a critical review of the respective roles and functions of the regular state ministry Departments and the Agricultural Development Programmes. This is necessary to ensure the most cost effective services and to minimize overlapping functions and wastage of scarce budgetary resources.

One option is to restrict the role of the Agricultural Development Programmeson needed functions, which cannot be done efficiently by the private sector, by organizations representing beneficiaries, by non-government organizations or by the regular State or Federal departments. This involves the shedding of components such as seed multiplication to the national seed service, tractor service and input supply to the private sector, credit to credit institutions. Functions should include implementation of services functions which are considered critical to development such as revamped, cost-effective in-house extension services, monitoring the states development programmes, and a strong emphasis on the socio organization aspects of development. Essential to this restructuring would be the retention of a semi-autonomous status by the Agricultural Development Programmesand a limited number of well-qualified staff receiving a benefit package which is superior to regular state civil service employers to achieve high performance in these specialized functions (Toluwase, 2004)

A review of the concept of the World Bank assisted agricultural development projects in Nigeria from 1975 to date revealed that the objective of the ADPs and the strategies adopted were in consonance with what is contained in both the (Human Development Report, 2002; World Development Report, 2003)

The Agricultural Development Programmeconcept has put the rural small holder sector at the center of government agricultural development strategy.Considering the fact that agriculture constitutes about 40 per cent of Nigeria's Gross Domestic Product (GDP), employs almost three-quarters of Nigerians and is yet to be substantially modernized, the ADP system should be sustained so as to continue to reap the two fold benefit of developing the agricultural sector and alleviating poverty in the rural sector.

That the World Bank loan has terminated does not mean the ADP system should be terminated. The loan has put in place the basic structure and institution necessary for delivery of critical services to the small holder farmers for increased agricultural production in all the state of the federation. With some reorganization at the state and federal levels and committed funding the Agricultural Development Programmesare sustainable. The policy of deduction of state contributions at source should continue and should be extended to local governments. And for effectiveness they should continue to be autonomous, bad experiences in the past, which tend to hamper efficiency should be avoided for instance Frequent changes in state government political leadership and Agricultural Development Programmes management staff affected decision making down the line resulting in delays during project implementation. Dwelling on the above, *hypothesis five* has been formulated as indicated below:

H₁: Agricultural Development Programmes have significantly propelled the accessibility of famers to credit facilities in IsanEkiti, for the provision of food crops.

2.3Ekiti State Agricultural Development Programme

According to Toluwase, (2004) Agricultural Development Programmes started in August 1981 covered five local Government Areas of the old OndoState namely EkitiNorth, East, Central, AkokoNorth and South. In 1989, the programme was embraced by the whole state that is it become a state wide programme and then renamed as OndoState Agricultural Development Programme till October 1, 1996 when Ekiti State was created out of the old OndoState and this gave birth to the present Ekiti State Agricultural Development Programme with its Headquarters in IkoleEkiti.

The main objectives of the EkitiState Agricultural Development Programme as contained in its Annual Report (1997) are as follows:-

    i.   To increase the availability of the locally produced food to the consumers at bearable prices.

   ii.   To improve the quality of rural lives so as to reduce rural – urban migration

  iii.   To provide social and farm support service such as farm inputs, credit facilities and rural roads.

  iv.   To increase the productivity of small scale farmers in the rural communities and therefore apparently increasing their income. All these will gear towards reducing the poverty level

The EkitiState Agricultural Development Programme, according to Toluwase (2004)comprise two zones namely: Zone 1 and Zone 2. Zone 1 comprises the following eight local Government Areas: Ijero, IdoOsi, Moba, Ilejemeje, Oye, Ikole, Efonand EkitiWest (AramokoEkiti) as the Zonal Headquarters. Zone 2 also comprises eight Local Government Areas. They are Ikere Local Government Areas which services as the Zonal Headquarters. Others include Ado, Irepodun / Ifelodun, Gbonyin, Ise/Orun, Emure, Ekiti South-West and East Local Government Areas. Each of the Local Government Areas of the State represented a block and these make up the eight blocks per zone. Each of these blocks contains 8 cells. The cells are under the Village Extension Agents (VEAS)and each cell is divided into 8 groups headed by the contact farmer. This is due to the unavailability of the VEAs, some blocks had less than 8 cells.

The activities of EkitiState ADP cover the entire state, with activities performed in the area of extension services, though the demonstration of research result to farmers, the extension agents' liaise between the research and the farmers and they also brought back farmers problems back to the research station for possible solution. Rural Institutional Development (RID) major activities is to encourage farmers to form cooperative association most unit furnished farmers with information on inputs, market, assist farmers to get loan from financial institutions (Obetta and Okide, 2011).

Through the EkitiState ADP Agricultural Technical Service Department, research findings are made adaptable to the environment before being taken to famers for adoption. The extension agents demonstrated this through Small Plot Adoption Technique (SPAT) directly on the farmer's farm, this is to convince the farmers for immediate adoption.The seed multiplication service provides healthy seeds such as Cowpea, maize, pepper, vegetable, citrus, cashew, and cocoa seeds for the farmers in the state.

The activity of Agriculture Engineering Services ranges from mechanization of farms. Construction and maintenance of feeder roads, organizes workshop for the maintenance of equipment, agro-processing machinery fabrication and equipment hiring such as tractors, Sheller's bulldozer and low-loaders.

The problem confronting EkitiState ADP ranges from inadequate extension officers at all levels, lack of working tools and equipment such as raincoat, rain booth, lape, scale and vehicles. Also, ADP in the state is facing the problem of lack of fund to undertake adaptive research of innovations for their adoption, lack of incentive and staff training (Iwuchukwu and Igbokwe, 2012).

Some of the efforts embarked upon to solve some of the pertinent problems facing the organization include request to the state government for increased subvention since the organization is not a credit generating one. The organization also limits its operation / activities to available resources and equipment.

The EkitiState ADP had been sustained through sponsored programmes enjoyed in recent times. The programmes include Root and Tuber Expansion Project (RTEP) and Special Programme for Food Security (SPFS). These programmes had sustained ADP activities with the farmers and keep them continuously in contact.

3. Methodology
3.1 Study Design

Cross sectional survey design was adopted for this study. Thus, Opinion of a cross section of the people in the area of study was sought for the study.

3.2 Study Area

The study was carried out in IsanEkiti, in OyeLocal Government Area of the present Ekiti
State.IsanEkiti is located on Lat. $7^0.55^1$ and Long. $5^o.19^1$ respectively.

Figure 1: Map of IsanEkiti

Source: Adapted from the Map of EkitiState, (2014).

On the West and East, IsanEkiti is bounded by IpereEkiti and IlafonIsanEkiti respectively,
while on the North and South, the Town is bounded by AyedeEkiti and OraEkiti respectively.

IsanEkiti is rich in Ceramic (ball) clays and Kaolinite clays. These materials are useful in the
production of Abrasive, Plastics, Ceramics ware, Pharmaceuticals,Textiles, Fertilizers, White tiles,
Insulator Wares Pencils.

Agriculture is the main occupation of the people of IsanEkiti and it provides income and
employment for more than 75% of the population. Some other persons in the village engage in
business in order to cater for their families. The main cash crops are cocoa,coffee, kolanut, cashew and
oil palm. Other tree crops popular in the area are: citrus fruits, coconut, mango, sugar-cane,guava and
pine apple.Because of the conducive climatic condition, the town enjoys luxuriant vegetation. It also
boasts of various species of timber that provide raw materials for wood based industries. Some of the
arable crops found in the village are: yam, cocoyam, cassava, maize, plantain/banana, rice, beans,
pepper, tomatoes and varieties of vegetables (Ekiti-Land of Honours, 2014).

IsanEkiti is one of the beneficiaries of Agricultural Development Programmes, which the World
Bank (2001), instituted to be a "permanent" institution for rural infrastructural development and agricultural
services among rural dwellers in Nigeria. However, nothing is known in the literature concerning the effect
on rural dwellers in IsanEkiti. Therefore, this study is conducted to address this gap in the literature.

3.3 Population of Study and Sample Size

The people of IsanEkiti represent the population of this study. The population of the people of
IsanEkiti census was forty-nine thousand eight hundred and eighty seven (49887)as at 2007 (National
Population Commission, 2006). Out of this figure, Seven hundred and seventy-three (773)
respondents' were randomly selected for the study.

3.4 Instrument of Data Collection

A questionnaire was used to collect information from the respondents. The instrument contains two
sections (A and B). Section A comprises of four (4) questions while section B contains three (3)
questions.The questions in each section were closed ended questions with five options indicated below:

Strongly agree	5
Agree	4
Undecided	3
Disagree	2
Strongly disagree	1

Respondents were asked to select the best option as applicable to each question.

3.5 Sampling Techniques

The multi-stage sampling technique was used to select respondents for the study. It is on this note that IsanEkiti was divided intoforty (40) streets. Houses on each side of the streets were numbered and 30 households were randomly selected. Proportional sampling techniques was used to select seven hundred and seventy-three (773) respondents form these households. Thus, each household produced respondents based on its population.

3.6 Validation and Reliability of Instrument

This study employed the use of experts in the field of study to validate the instrument used. In the light of this, copies of the instruments were sent to eight experts. Their comments and suggestions were used to adjust the instrument before distribution to the target population. In respect of its reliability, this study usedcronbach's Alpha to test the reliability of responses gathered from respondents, see *Table 4*. From the result estimated study model the Cronbach's Alpha (0.99) for this study indicates a highly reliable result.

3.7 Data Analysis and Statistical Test

Frequency tables, simple percentage and charts were used to analyse data relating to socio-demography while 2-way ANOVA was used to test the six hypotheses formulated.

4. Result

Table 1:   Age of Respondents

S/N	Age Categories	Frequency	%
1	16-20	56	7.3
2	21-25	81	10.5
3	26-30	98	12.7
4	31-35	105	13.6
5	36-40	174	22.5
6	41 and above	259	33.4
Total		**773**	**100**

Source: Field work 2014

Dwelling on Table 1, majority of the respondents in this survey were 41 years and above, which is represented with 33.4%? This was followed by respondents between the age of 36 and 40 with 22.5%. Respondents from 31-35, 26-30 and 21-25 represent 13.6%, 12.7% and 10.5% respectively while respondents from 16-20 represent the least with 7.3%. This is an indication that older people in the sample were more than the young ones. This is further represented in Figure 1 for proper clarifications.

Figure 1: Age Composition of Respondents
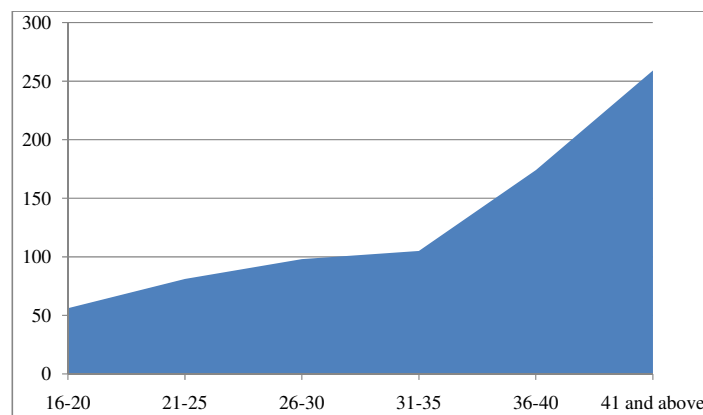
Source: Field Work, (2014)

Table 2:   **Level of Education**

S/N	Level of Education	Frequency	%
1	No Formal Education	356	46.1
2	Primary school	242	31.3
3	Secondary School	138	17.9
4	Graduates	37	4.7
Total		**773**	**100**

Source: Field work 2014

Table 2 indicated the educationalbackground of respondents, in which illiterates represent the majority with 46.1%. This was followed by respondents who had primary education with 31.3%. Respondents with secondary education represent 17.9%. Graduates in the sample represent the minority with 4.7%. This is presented in the form of a bar in *Figure 2* for more clarifications.

**Figure 2:** Level of Education of Respondents
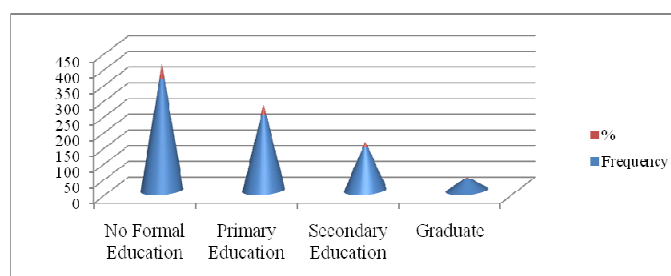
Source: Field Work, (2014)

Table 3:   Occupation of Respondents

S/N	Occupation Categories	Frequency	%
1	Farming	521	67.4
2	Civil Service	23	2.9
3	Missionary	04	0.5
4	Artisan	99	12.8
5	Unemployed	97	12.5
6	Business Persons	29	3.7
	Total	**773**	**100**

Source: Field work 2014

Table 3 above presentedthe respondents occupation, with farmers representing the absolute majority with 67.4%. This was followed by artisans with 12.8%. Closely related to that is unemployed (both graduates and illiterates) with 12.5%. Business persons in the sample were 3.7%. Civil servants in the study represent 2.9% while the missionary represents the least with 0.5%.

Figure 2: Occupation of Respondents
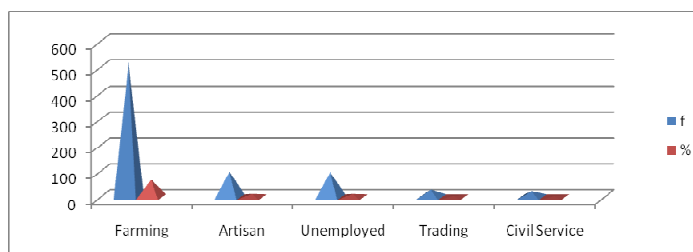
Source: Field Work, (2014)

Table 4:   Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.990	.991	6

Source: Fieldwork (2014)

In this study cronbach's Alpha has been employed to test the reliability of the responses gathered in this study. Cronbach's Alpha is the most popular method of examining reliability. The calculation of Cronbach's Alpha is based on the number of items (i.e. the number of questions on a questionnaire) and the average inter-item correlation. A high correlation between the different items of measurement will indicate they are measuring the same thing as there will be only small values for the error. A low correlation will indicate that there is a lot of error and the items are not reliably measuring the same thing. Cronbach's Alpha ranges from 0 for a completely unreliable test (although technically it can dip below 0) to 1 for a completely reliable test. From the result estimated study model the Cronbach's Alpha (0.99) for this study indicates a highly reliable result.

Table 5:   Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.982[a]	.964	.964	.290

Dependent Variable: Agricultural Development Programme has actually led to the increase in the production of food stuff in IsanEkiti

The R-square measures the percentage changes in the dependent as explained by the variations in the exogenous factors. A closer observation of the model summary result (table 5) shows that 96.4 percent changes in the dependent variable increase in food production is being explained by the total variations in increased activities of the Agricultural development Programme in IsanEkiti.

4.1 Testing of Hypotheses

The following five hypotheses formulated to guide the process of this article were tested as indicated in Table 5

Hypothesis One.

H_1:   Agricultural Development Programmes significantly propel improved seeds for the production of basic food crops in IsanEkiti.

Hypothesis Two

H_1:   Agricultural Development Programmes have significantly resulted in increase in the provision of pesticides for farmers for food production in IsanEkiti

Hypothesis Three

H_1:   Agricultural Development Programmes significantly propel the establishment of new infrastructural facilities in IsanEkiti.

Hypothesis Four

H_1:   Agricultural Development Programmes have significantly resulted in the increase in the provision of fertilizer for farmers for the provision of food crops in IsanEkiti

Hypothesis Five

H_1:   Agricultural Development Programmes have significantly propelled the accessibility of farmers to credit facilities in IsanEkiti, for the provision of foodstuff.

Based on the result obtained from investigations, hypothesis 1 is rejected while the remaining hypotheses are accepted.

Table 6:   Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	.011	.020		.558	.577
Agricultural Development programme has brought about an increase in the access of farmers to credit facilities in IsanEkiti?	.035	.025	.035	1.379	.168
Agricultural Development Programme has led to the establishment of new infra-structures in IsanEkiti?	.503	.026	.517	18.994	.000
In IsanEkiti,Agricultural Development Programmes have brought about an increase in the provision of improved seed for farmers	.093	.029	.080	3.260	.001
In IsanEkiti, Agricultural Development Programmes have brought about an increase in the provision of Fertilizer for farmers	.335	.032	.286	10.528	.000
In IsanEkiti, Agricultural Development Programmes have brought about an increase in the provision of Pesticide for farmers	.085	.029	.082	2.966	.003

Source: Field Work, (2014)

a. Dependent Variable: Agricultural Development Programmes have actually led to the increase in the production of food stuff in IsanEkiti?

Table 7:   ANOVA[a]

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2704.564	5	540.913	6439.796	.000[b]
	Residual	101.214	1205	.084		
	Total	**2805.779**	**1210**			

The result emanating from the ANOVA in*Table 7* above shows that the estimated model (with the F-statistic=6439, sig. = 0.0000) is statistically significant at 1 percent level of significance. This implies that the included exogenous variables significantly support the model and therefore could be regarded significantly different from zero. With this result, we proceed to the analysis of the co efficient estimated as it could considered statistically reliable and free from estimation bias.This is as shown in table 6 above;

5. Discussion

The analysis of the result shows that all variables of the Agricultural development programmes indicate a significant influence on increased food stuff production in IsanEkiti state except for increases access of farmers to credit facilities in the area. This further implies that increases in establishment of new infrastructures in IsanEkiti, provision of improved seed for farmers, increased provision of fertilizers and pesticides to farmers will further significantly increase food stuff production particularly in IsanEkiti and in Nigeria generally. Specifically, analysis of the co-efficient estimates of the responses (**table 3 above**) shows a direct significant relationship between establishment of new infrastructure and increase in food stuff production given the estimated co-efficient result r=0.517, sig. = 0.0000 significant at 1 percent level. This shows that a 100 % infrastructural development implementation will significantly increase food production by 52 %.

The provision of improved seed for farmers by the Agricultural production Programmes indicates a significant positive impact on increased production of food stuff. This shows that there is positive link between improved seed provision and higher agricultural productivity. A critical analysis of the result shows that a full provision of improved seed has the potential of food production by 8 % confirmed statistically significant at 1%.

There is a significant effect of fertilizer provision for farmers on increased food stuff production as evidenced from the result which indicates that increasing fertilizer provision for farmers by 100 % will significantly improve food production by 28.6 % while increase in the provision of pesticides for farmers reveals a significant effect of 8.2 % on agricultural productivity at 1 % level of significance. On the contrary access to credit facilities by the farmers in IsanEkiti suggests no significant effect to food stuff production, this further stresses the need for greater attention to be given

to provision of credit facilities to encourage the farmers in food and agricultural products production in IsanEkiti and other parts of the country by the Agricultural Development Agencies.

For the sake of emphasis, the establishment of ADP in IsanEkiti prompted the construction of the road that links IsanEkiti with Ado Ekiti (the capital city of EkitiState). It seems to have helped farmers mobility to and fro farm and to also convey their food stuff to the market. Furthermore, Although contrary to(Agber et al., 2013; Gate 2014) who submit that poverty and lack has been on the increase in rural areas, respondents in the present study submitted that there was increase in the provision of foodstuff for the rural population, probably because the study was conducted between July and September, when foodstuff such as yam, maize, okro were being harvested by farmers.

6. Recommendation and Conclusion

Based on the result presented above, this study suggests proper attention of government on the provision of credit facilities to farmers. Given the above, this study concludes that provision of credit facilities will enable farmers to produce foodstuff in abundance for the rural population.

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We (authors) declared no potential conflicts of interest with respect to the research, authorship and publication of this article

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