

Effects of Agricultural Extension Services on Farming Household Welfare in Surulere Local Government Area of Oyo State, Nigeria

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Abstract –

Agricultural extension agents are vital to farmers due to their dissemination of researchers findings to the Farmers. Therefore, this study, focused on effects of agricultural extension services on farming household welfare in Surulere Local Government Area. A multistage sampling technique was employed for the study. The first stage involved the purposive selection of Surulere Local Government Area. Specifically, the study examined the socio-economic characteristics of the rural households heads, access of farmers to extension services and the welfare status of household. in the study area. The second stage involved purposive selection of two blocks from the LGA rural areas. The third stage involved random selection of two villages from each of the selected blocks: and a total of 100 household heads were sampled. Data collected were analyzed using descriptive statistics and Two sampled t-test. The mean age of the respondents was 44.15 years. 34% of the respondents had extension service on information on agro-marketing. Also, 38% of the respondents had linkage with sources of credit. 90% of the respondents had information on improved agricultural technologies and linkage with agricultural insurance. Moreover, 94% of the respondents had linkage with sources of input. 2% of the respondents had above ₦250,000 per capital expenditure. It is concluded that most of the respondents had linkage with sources of input. However, they encounter poor dissemination of information on agro-marketing. The respondents had poor welfare. Therefore, the agricultural extension services of Agricultural Development Program (ADP) should be re-engineered towards better service delivery. Extension agents should disseminate information on agro-marketing adequately. Welfare of the farmers should be improved.

Key keywords- agro marketing, per capita expenditure, sources of credit, welfare.

I. INTRODUCTION

Agriculture is important to the Nigerian economy as it engages about 70% of the labour force and contributes 32% of Gross Domestic Product (GDP); small farms produce 80% of the total crops (Nigeria forum, 2014). However the sector is faced with a lot of problems which makes it difficult to optimise its

potentials. Some of the problems include poor marketing and distribution infrastructure, inadequate access to credit, and weak extension services. In an attempt to ameliorate the constraints, the Government established Agricultural Development Program (ADP). The role of agriculture in the welfare of rural Nigerians cannot be overemphasized. In the 21st century, agriculture remains fundamental to economic growth, poverty alleviation, improvement in rural livelihood, and environmental sustainability (Onwuka *et. al.*, 2017). To fulfill this mandate, agriculture has to advance beyond its present primitive state. It requires technological, organizational and institutional innovations. These innovations required for increased production/productivity are channeled through the extension delivery system. In Nigeria, the extension delivery system is largely a government establishment.

Nigeria's Agricultural extension service has been experiencing dwindling funding from government in the last three decades . This is very apparent in the sliding performances of the state wide ADPs. Attempts by governments in Nigeria to initiate agricultural programmes in order to achieve food security have failed mainly due to inadequate funding, and in some cases, lack of commitment in the implementation of such programmes (Agwu, 2010). Commitment to funding of programmes usually proves problematic as soon as external bodies discontinue with funding.

In Nigeria, the ADPs serve as the conduit between agricultural research institutions and farmers. While research institutes continue to generate relevant, appropriate, and affordable technologies, the capacity of extension organizations to effectively transfer them to the farmers has been impaired by inadequate and uncertain funding (Onwuka *et. al.*, 2017).

The resultant effects of poor funding of agricultural extension service are mass retrenchment of field extension workers, stagnation of both field and supervisory workers, low morale of staff, a wide gap

between agricultural technology generation and technology adoption, resulting in decreased agricultural production (Kidanemariam, 2015).

The most challenging policy issue facing the agricultural extension service today is to secure a stable source of funding (Agwu, 2010). The need for improved and expanded extension activities has led to a number of strategies for changing the way extension services are delivered. These alternative patterns call for a change in the financing and delivery of public services with the idea of the users charge emerging as one of the most probable steps in the adjustment programmes (Onwuka *et. al.*, 2017).

However, the present socio-economic conditions of the farmer are such that they cannot afford private extension services. Thus full commercialization of extension services is not possible at present since majority of Nigerian farmers do not have the capital base to pay fully for extension services. It is on this basis that the need for participatory (cost sharing) approach to financing agricultural extension services is advocated (Kidanemariam, 2015).

The objectives are to;

1. ascertain the socio-economic characteristics of therural households heads in the study area.
2. determineaccess of farmers to extension services in the study area.
3. Identify level of access of farmers to extension services in the study area.
4. examine the welfare status of household in the study area.

Hypothesis of the study:

H₀₁: There is no significant difference between household welfare with agricultural extension services and household welfare without agricultural extension services.

II. METHODOLOGY

The study was carried out in Surulere Local Government Area, Oyo-State, Nigeria. Its headquarters is in the town of Iresa-Adu. It has an area of 23 km² and a population of 142,070 at the 2006 census (NPC, 2006).

Some of the towns in the local government are Iresa-Adu, Igbon and Iresa-Apa. The main economic activities of the residents of the towns that make up Surulere local government is farming. And the main produce from there farming activity is: Yam, Cocoa, Palm oil, Maize and Tobacco. A multistage sampling technique was employed for the study. The first stage involved the purposive selection of Surulere Local Government Area. The purposive sampling of Surulere was due to nearness of the LGA to the researcher, abundant of Farmers in the area among others. The second stage involved purposive selection of two blocks from the LGA rural areas. The third stage involved random selection of two villages from each of the selected blocks: and a total of 100 household heads were sampled.

Data collected were analyzed using descriptive and inferential statistics.

Descriptive statistics:

They are the mean, percentages and frequency distribution. These were used as tools to describe the socioeconomic characteristics of respondents, access of farmers to extension services, level of access of farmers to extension services and the welfare status of farming households.

Two sampled t-test:

Two sampled t-test was used to estimate the test of hypothesis.

III. RESULTS AND DISCUSSION

Socio-economic characteristics of respondents were presented in Table I below. 29% of the farmers were males: while the remaining 71% were females. Therefore, most of the farmers were males. The

dominant of males may due to their high involvement in farming. Since the males were more rugged than the females: males were dominant probably because of the tediousness of small scale farming in Nigeria. Small scale farmers uses crude implement such as hole, cutlass, hand towel, etc.

16 percent of the farmers' age were less than 31 years. 23 percent of the farmers' age were within 31 to 40 years. 21% of the farmers were within the age range of 41 – 50 years. Those who were above 50 years of age were 40%. The mean age of the respondents was 44.15 years. This implies that the farmers in the study were young and agile, who can adopt innovations on agricultural extension services.

6% of the respondents had no formal education, primary school leavers were 40%. The respondents that were secondary school leavers and tertiary school graduates were 42% and 12% respectively. This shows that most of the farmers had attended secondary school. The mean years of formal education of the respondents was 9.20 years. This was an indication that most of the farmers have completed junior secondary schools. This implies that the respondents may not adequately adopt new innovations on agricultural extension services.

Table I: Socio-economic characteristics of respondents

| Characteristics | Frequency | Percentage |
|-----------------|-----------|--------------|
| Gender | | |
| Male | 29 | 29 |
| Female | 71 | 71 |
| Age | | |
| Less than 31 | 16 | Less than 31 |
| 31-40 | 23 | 31-40 |
| 41-50 | 21 | 21 |

| | | |
|--------------|------------|------------|
| Above 50 | 40 | 40 |
| Total | 100 | 100 |

Mean = 44.15

Educational level

| | | |
|---------------------|------------|------------|
| No formal education | 6 | 6 |
| Primary | 40 | 40 |
| Secondary | 42 | 42 |
| Tertiary | 12 | 12 |
| Total | 100 | 100 |

Source: Field Survey, 2020.

Access to agricultural extension services were presented in Table II. 34% of the respondents had extension service on information on agro-marketing. Also, 38% of the respondents had linkage with sources of credit. 90% of the respondents had information on improved agricultural technologies and linkage with agricultural insurance. Moreover, 94% of the respondents had linkage with sources of input. These were indications that the respondents had appreciable access to agricultural extension services. However, poor dissemination of information on agro-marketing could hinder farmers' sales. The result of Amusat and Oladeji (2018) was not consistent with the findings of this study. They reported that information on current farm operation was the most accessible agricultural extension services to farmers in Nigeria.

Table II: Access to agricultural extension services

| Agricultural extension services | Frequency | Percentage |
|--|------------------|-------------------|
|--|------------------|-------------------|

**Information on improved
agricultural technologies**

| | | |
|-----|----|----|
| Yes | 90 | 90 |
| No | 10 | 10 |

Linkage with source of inputs

| | | |
|-----|----|----|
| Yes | 94 | 94 |
| No | 6 | 6 |

**Linkage with agricultural
insurance**

| | | |
|-----|----|----|
| Yes | 90 | 90 |
| No | 10 | 10 |

Linkage with sources of credit

| | | |
|-----|----|----|
| Yes | 38 | 38 |
| No | 62 | 62 |

Information on agro-marketing

| | | |
|-----|----|----|
| Yes | 34 | 34 |
| No | 66 | 66 |

Source: Field Survey, 2020.

Level of access to agricultural extension services were presented in Table III. The respondents perceived high access to agricultural extension services: which includes; information on improved

agricultural technologies (50%), linkage with source of inputs (40%), linkage with agricultural insurance(27%), linkage with sources of credit (11%) and information on agro-marketing (3%). These were indications that most of the respondents had information on improved agricultural technologies.

Table III: Level of Access to agricultural extension services

| Agricultural extension services | Frequency | Percentage |
|--|------------------|-------------------|
| Information on improved agricultural technologies | | |
| High | 50 | 50 |
| Middle | 30 | 30 |
| Low | 10 | 10 |
| No Access | 10 | 10 |
| Linkage with source of inputs | | |
| High | 40 | 40 |
| Middle | 36 | 36 |
| Low | 18 | 18 |
| No Access | 6 | 6 |
| Linkage with agricultural insurance | | |
| High | 27 | 27 |
| Middle | 52 | 52 |

| | | |
|---------------------------------------|----|----|
| Low | 11 | 11 |
| No Access | 10 | 10 |
| Linkage with sources of credit | | |
| High | 11 | 11 |
| Middle | 07 | 07 |
| Low | 20 | 20 |
| No Access | 62 | 62 |
| Information on agro-marketing | | |
| High | 03 | 03 |
| Middle | 09 | 09 |
| Low | 22 | 22 |
| No Access | 66 | 66 |

Source: Field Survey, 2020.

In Table IV welfare status were presented. 26% of the respondents had less than or equal to ₦50,000 per capital expenditure. Also, 64% of the respondents had ₦ 50,000.01 to ₦ 150,000.00 per capital expenditure. 8% of the respondents had between ₦ 150,000.01 to ₦ 250,000.00 per capital expenditure Moreover, 2% of the respondents had above ₦250,000 per capital expenditure. These shows that the respondents had poor welfare.

Table IV: Welfare status

| Per capita expenditure (₹) | Frequency | Percentage |
|-----------------------------------|------------------|-------------------|
| Less than or equal to 50,000 | 26 | 26 |
| 50,000.01-150,000.00 | 64 | 64 |
| 150,000.01-250,000.00 | 8 | 8 |
| Above 250,000.00 | 2 | 2 |
| Total | 100 | 100 |
| Mean = 84,265.74 | | |

Source: Field Survey, 2020.

The null hypothesis stated that, that, there is no significant difference between household welfare with agricultural extension services and household welfare without agricultural extension services. Table V revealed the analysis of the difference between household welfare of farmers with or without extension services. There is 5% significant difference between welfare of respondent with information on improved agricultural technologies and welfare of respondent without information on improved agricultural technologies. Also, there is 1% significant difference between welfare of respondent with linkage with agricultural insurance and welfare of respondent without linkage with agricultural insurance. Thus, the null hypothesis that there is no significant difference between household welfare with agricultural extension services and household welfare without agricultural extension services in the study area was rejected.

Table V: Analysis of Difference between household welfare of farmers with or without extension services

| Characteristics | Welfare of farmer | Welfare of farmer | of Difference | t-value |
|------------------------|--------------------------|--------------------------|----------------------|----------------|
|------------------------|--------------------------|--------------------------|----------------------|----------------|

| | with extension services | without extension services | | |
|---|--|---|-----------|-----------|
| Information on improved agricultural technologies | 47899.94 | 88306.39 | -40406.44 | 2.3122** |
| Linkage with sources of inputs | 59867.30 | 86976.68 | -84265.74 | 1.5286 |
| Linkage with agricultural insurance | 79274.67 | 162459.20 | -83184.51 | 3.9508*** |
| Linkage with sources of credit | 86968.05 | 82609.49 | 4358.56 | -0.3934 |
| Information on agro-marketing | 84837.90 | 83971 | 866.90 | -0.0764 |

*** 1% level of significance and ** 5% level of significance

Source: Field survey, 2020.

IV. CONCLUSIONS

Most of the respondents had linkage with sources of input. However, they encounter poor dissemination of information on agro-marketing. The respondents had poor welfare.

V. RECOMMENDATIONS

The agricultural extension services of Agricultural Development Program (ADP) should be re-engineered towards better service delivery. Extension agents should disseminate information on agro-marketing adequately. Welfare of the farmers should be improved by training the farmers on adoption

and practice of improved agricultural technologies. Also, farmers should be allowed to have access to soft loans.

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