

Farmers' Assessment of the Effects of Duration on Awareness and Participation In Agricultural Projects In Nigeria.

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ABSTRACT

The study identified the duration of various agricultural projects implemented in Nigeria and investigated the level of awareness of the projects by the farmers, determined the stage attained by the farmers in the adoption curve prior to conclusion of the project and determined the level of participation of farmers.. Through a multistage random sampling technique, two geo political zones (North Central and South West) were studied. This was done by random selection of two states in each geo-political zone. Kwara and Niger states were selected for North Central while Oyo and Ogun states were selected for South West geo political zone. This was followed by random sampling of 50 farmers from each state, making a total of 200 respondents. Data were collected by means of structured interview schedule and analyzed by frequencies, percentages and Pearson Correlation statistics. Results of the study indicated that the average age of the farmers was 60.4 years. Also 37.5% of the farmers spent over 40 years in farming. The results also indicated that most of the projects were short lived. Consequently a good proportion of the farmers could not participate in the projects on account of short duration. A significant relationship was established between duration of project and awareness ($r = 0.75$, $P = 0.05$) as well as between project duration and participation ($r = 0.68$, $p = 0.05$). Consequently, a good proportion of the farmers could not participate in many of the projects. It was therefore concluded that duration of agricultural project implementation played an important role in creation of awareness and farmers' participation. Therefore, it was recommended that policy makers should take note of these factors in deciding project implementation period in Nigeria.

KEY WORDS: Agricultural Project, ADP, Implementation Farmer

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INTRODUCTION

In spite of the present domination by petroleum as the country's major foreign exchange earner, agriculture has been and still remains the bedrock of Nigeria's economy. The sector currently accounts for about 41% of the Nation's Gross Domestic Product (GDP) and 88% of the non oil foreign exchange earnings. It employs about 70% of the active labour force, provides raw materials for the agro industrial sector and a proportion of the staple food consumed by the Nigerian population (Adamu, 2005).

However, the sector has not fulfilled the expectations of the farmers as most of them are still wallowing in abject poverty and hunger. The African Development Bank (ADB, 2002) reported that most Africans, especially the rural dwellers (mostly farmers) earned income of less than US \$ 1 dollar per day. In addition the level of food intake by most Africans, Nigerian inclusive, is below the recommended level of 2440 kilo calories and 65 grams of protein per person per day (FAO, 2001). The low level of income and food intake became worrisome to both national and international governments. In pursuance of ameliorating these social menaces (poverty and hunger), the Millennium Development Goals (MDGs) was put together by not less than 150 Heads of Government with the desire to raise the quality of life of all people of the world by ensuring that all the member states adopted development pattern that would improve the quality of lives but also add essential values to those lives. In this respect the MDGs set targets to all its Specialized Agencies, of which UNDP was assigned with the responsibility of human development and poverty reduction agenda with an objective of halving extreme poverty and hunger by 2015.

Consequently, in Nigeria, the Federal Government initiated developmental road map named National Economic Empowerment Development Strategy (SEEDS) while all the states of the federation developed a similar road map tagged States Economics Empowerment Development Strategy (SEEDS). Also the Local Government Authority implemented Local Economic Empowerment Development Strategy (LEEDS). In pursuance of these initiatives, the Federal Government of Nigeria in collaboration with other tiers of government initiated and

implemented agricultural projects across the country specifically to combat problems of inputs supply, land preparation and technology demonstration. The projects include National Accelerated Food Production Project (NAFPP, 1972-1975), Operation Feed the Nation (1976-1979), Green Revolution (1980-1983), Food for All (FFA, 1984-1985), Directorate of Foods Roads and Rural Infrastructure (DFRRI, 1983-1988), National Agricultural Land Development Agency (NALDA, 1990 to date), Tractor Subsidy Scheme (TSS, 1982 to date), Roots and Tubers Expansion Project (RTEP, 2001 to date), Special Programme for Food Security (SPFS, 2002-2007), National Fadama Development Project (NFDP, 1993 to date). It is unfortunate to note that with the implementation of these projects, food production growth rate in Nigeria is 2.4% while the population growth rate is 3.6%. This created a gap of 1.2% between population and food production growth rate. The United Nations Population Fund (2002) reported that farm output for grains must increase by 40% in order to reduce food importation which the National Bureau of Statistics (2004) put at N187.7, N203, N305, and N900 billions in 2001, 2002, 2003, 2004 respectively. This trend has not changed. Sayyaid (2008) reported that Federal Government of Nigeria spent a total of N1.3 trillion in 2007 alone to import rice which represented 25% of nation's import bill.

Nwanze (2005) reported that Nigeria has the potential to reduce her rice importation bill to 5% if rice farmers adopted planting of good quality and improved varieties of rice seeds with application of 200 kilograms of fertilizer per hectare. Furthermore USAID (2005) reported that a rice farmer in Nigeria is capable of realizing 5.4 tonnes/hectare. This level of production was unattained due to under utilization of inputs. It was reported that most Nigerian farmers used about 10 kilograms of fertilizer/hectare (Ingawa, 2005). This affected yield and level of income. In addition many of the projects were adjudged as failure either due to top down approach, poor resource allocation and many of the projects were short lived. It is desirable to investigate farmers' assessment of the effects of duration on awareness and participation in agricultural projects implemented in Nigeria.

OBJECTIVES OF THE STUDY

The general objective of the study was to investigate the perception of farmers' perception of duration to awareness and participation in Agricultural Projects implemented in Nigeria.

The specific objectives of the study were to.

- a. Identify the duration of agricultural Projects implemented in Nigeria.
- b. Investigate the level of farmers awareness of the agricultural projects.
- c. Determine the position of farmers in adoption of curve prior to the conclusion of the projects.
- d. Determine the level of participation of farmers in the projects.

HYPOTHESES

1. There is no significant relationship between duration and participation of farmers in agricultural projects in Nigeria.
2. There is no significant relationship between duration and awareness of farmers in agricultural projects in Nigeria

METHODLOGY

The target population for the study was members of All Farmers Association of Nigeria (AFAN). The Study used a multi Stage random sampling technique. Stage one involved a random sampling of geo-political zones in the country. Out of six geo-political zones in the country; two of them were randomly selected. These include North Central and South West zones. Second stage involved a random sampling of two states in each of the geo-political zone. Consequently, Kwara and Niger States were selected from North Central while Ogun and Oyo States were selected from South west zone. The third stage involved random selection of farmers from the membership list of AFAN in each state. In this respect, fifty farmers were selected per state. A total of 200 farmers were selected as respondents for the study. Data were collected by means of structured interview schedule and analysed by means of frequencies, percentages and Pearson Correlation Statistics.

RESULTS AND DISCUSSION

The result of the study as indicated in Table 1 showed that members of All Farmers Association of Nigeria (AFAN) were made up of aged farmers with 47.5% of them above 60 years of age. The average age of the farmers was 60.4 years. Furthermore 16% of the farmers did not possess any formal education, while over 70% of them possessed one form of formal education (Primary School, Secondary School, Diploma certificate and University education). It was this educational background of the farmers that might have influenced their membership of AFAN. This is in agreement with Sharada (2000) who reported that schooling provided externality benefits by increasing farm output, shifting production frontier outwards while Tiwari et. al. (2005) listed education as one of the important indicators of socio-economic status. Possession of any form of formal education has the advantage of assessing information on government initiatives on agriculture through radio, television, internet and print media which in turn may lead to participation in such programmes. The result also indicated that 37.5% of the farmers spent over 40 years in farming. Based on this, it is inferred that a good proportion of the respondents were in a position to express their perception on the various initiatives of the government in agriculture in the last 30 years. The result also indicated that 84% of the respondents possessed GSM set while 11% of them were computer literate. Therefore it is evident that majority of the respondents cannot on their own access agricultural information through the internet.

Table 1: Distribution of farmer based on their gender, marital status, level of education and years of farming experience.

Characteristics	Frequency	Percentage
Age(in years)		
<30	8	4
31-40	17	8.5
41-50	27	13.5
51-60	53	26.5
61-70	60	30.0
Above 70	35	17.5
Grade:		
Male	168	84
Female	32	16
Marital status		
single	-	-
divorced/separated	10	5
widowed	12	6
Married	178	89
Educational level attained:		
No formal education	32	16
Primary school	48	24
Secondary school	38	19
Diploma certificate	22	11
Higher Diploma certificate	32	11
University Education	28	14
Years of Farming Experiences:		
<10	7	3.5
11-20	21	10.5
21-30	40	20
31-40	57	28.5
40 above	75	37.5
Acquisition of ICT skill	22	11
Non acquisition of the skill	178	89
Possession of GSM Set	172	86
Non- possession of GSM Set	28	14

Source: Field Survey, 2011.

Duration of Agricultural Projects Implemented in Nigeria

The result of the study as shown in Table 2 indicates that implementation of National Land Development Authority's activities lasted for over 23 years while the implementation of Tractor Subsidy lasted for 29 years. These two projects are on going. There is no research evidence to show standard duration of time for adoption of innovation. However Alao (1980) reported that adoption of modern poultry keeping took over 4 years in Western Nigeria, while that of application of fertilizer took a period of 12 years. During this period, the extension arm of the government kept on encouraging farmers to adopt the innovation.

Table 2: Duration of Agricultural Projects Implemented in Nigeria.

S/N	PROJECT	INTERVALS	NUMBER OF YEARS
1.	National Accelerated Food Production Project (NAFPP)	1972-1975	4
2.	Operation Feed the Nation (OFN)	1976-1978	3
3.	Green Revolution (GR)	1980-1983	4
4.	Food For All (FFA)	1984-1985	2
5.	Land Development Scheme (LDS)	1975-1980	6
6.	Directorate of Food Roads and Rural Infrastructure (DFRRI)	1985-1988	4
7.	National Land Development Agency (NALDA)	1988 to date	23
8.	Tractor Subsidy	1982 to date	29
9.	Root and Tuber Expansion Project (RTEP)	2001 to date	10
10.	Special Programme for Food Security (SPFS)	2002-2007	5
11.	National Fadama Development Project (NFDP)	1993 to date	9

Source: Field Survey, 2011.

Farmers Awareness of Agricultural Project Implemented in Nigeria.

The analysis of the result of the study as summarized in Table 3 indicated that 90 (45%) of respondents were highly aware of Land Development Scheme that was meant to assist the farmers on land preparation. The project lasted for a period of five years. However 142 (71%) of respondents were highly aware of Tractor Subsidy. The project was started about 29 years ago and it is on-going. Furthermore 105 (52.5%) of the respondents were highly aware of Root and Tubers Expansion Project (RTEP) which was initiated and implemented in the last 10 years. In addition 100 (50%) of the respondents were highly aware of National Fadama Development Project which was implemented in Nigeria in the last 9 years.

However the analysis of the result of the study as indicated in Table 3 shows that 20 (10%) of the respondents were highly aware of Food For All Programme which was implemented for two years while about 50 (25%) claimed non aware of the project. Similarly 33 (17.5%) and 29 that is 14.5% of the respondents were highly aware of OFN and Green Revolution respectively. OFN and Green Revolution lasted for 3 and 4 years respectively. It is inferred from the analysis of the result that the duration of agricultural projects is a factor in creation of awareness of a project which in turn can influence the farmers to move to other stages in the adoption curve (interest, evaluation, trial and uptake) of innovation.

Table 3: Determination of level awareness of agricultural projects implemented in Nigeria.

Projects	Level of awareness (N=200)					Non-Aware
	Highly Aware	Aware	Moderately Aware	Less Aware	Non-Aware	
National Accelerated Food Production Project (NAFP)	35	30	25	50	60	
Operation Feed the Nation (OFN)	33	35	25	45	62	
Green Revolution (GR)	29	42	25	39	65	
Food For All (FFA)	20	45	45	47	53	
Land Development Scheme (LDS)	90	60	30	18	2	
Directorate of Food Roads and Rural Infrastructure (DFRRI)	60	55	20	25	40	
National Land Development Agency (NALDA)	65	50	35	33	17	
Tractor Subsidy	117	55	15	10	3	
Root and Tuber Expansion Project (RTEP)	105	63	23	7	2	
Special Programme for Food Security (SPFS)	50	28	37	38	47	
National Fadama Development Project (NFDP)	100	50	17	13	20	

Source: Field Survey, 2011.

Farmers attained stage in the Adoption Curve of Agricultural Projects Implemented in Nigeria.

The analysis of result as shown in Table 4 indicates that 75 or 62.5% of the respondents who were aware of Operation Feed the Nation got to the interest stage of adoption curve when the project was concluded within two years of implementation. Similarly 50 (50%) of respondents who were aware of Green Revolution reached the interest stage of adoption curve when the project was concluded within 4 years of implementation. However 150 (74.3%) of the respondents that were aware of Roots and Tubers Expansion Project got to the adoption stage within 10 years of implementation. In addition 65(43.3%) of the respondents that were aware of Land Development Scheme got to the adoption stage within six years of implementation. It is inferred that the longer the period of implementation of Agricultural Project the more the time available to farmers to appraise the project in order to move forward along the adoption curve (awareness, interest, evaluation, trial and adoption).

Table 4: Farmers stage in the Adoption Curve for the Implemented Agricultural Programme.

Programmes	Farmers attained stage in the Adoption Curve					N-200		
	Dates of Implementation	Awareness	Frequency Interest	Evaluation	Irial	Adoption		
NAFPP	1972 1975	85	55	37	13	10		
OFN	1976 1978	120	75	5	-	-		
Green Revolution	1980 1983	110	50	27	21	2		
Food For All(FFA)	1984 1985	63	50	-	-	-		
Land Dev. Scheme	1975 1980	150	137	123	80	65		
DFRRI	1985 1988	120	110	105	30	25		
NALDA	1990 to date	120	90	82	60	55		
Tractor Subsidy	1982 to date	193	190	187	100	75		
RTEP	2001 to date	175	150	145	142	130		
SPFS	2002 2007	120	112	50	47	45		
NFDP	1991-2011	165	160	130	112			

Source: Field Survey, 2011.

Participation of farmers in Agricultural Projects Implemented in Nigeria

The analysis of result of the study as indicated in Table 5 shows that 109 (54.5%) of the farmers were highly involved in Roots and Tubers Expansion Project, implemented so far for about 10 years. Similarly 69 (34.5%) of the respondents were highly involved in NALDA which was implemented for almost 23 years. Over 50% of the respondents were involved in Tractor Subsidy which was implemented for almost 29 years. The result of the study indicated that 6(3%) of the farmers were highly involved in NAFPP which was implemented within a period of 4 years. In addition about 5% of the respondents were highly involved in Operation Feed the Nation which was implemented within a period of three years. The Food For All (FFA) project highly involved 4 (2%) of the respondents. The project was implemented within 2 years.

It could be inferred that short duration projects did not attract the participation of many farmers compared with long duration projects. Farmers generally are risk averse and require time to evaluate the satisfaction derivable from a project before attempting to trial the project.

Table 5: Participation of Farmers in Agricultural Projects Implemented in Nigeria.

Project	N=200				
	Highly involved	Involved	Moderately involved	Low involvement	Not involved
NAFPP	12	15	53	69	51
OFN	9	27	39	54	71
Green Revolution	8	13	27	63	89
Food For All (FFA)	4	3	7	33	153
Land Development Scheme	62	57	23	17	41
NALDA	69	41	33	35	22
Tractor Subsidy	102	63	35	-	-
RTEP	109	61	25	5	-
SPFS	113	52	23	12	-
NFDP	102	62	30	6	-
DFRRI	5	9	20	109	57

RESULT OF THE HYPOTHESES

The result of the test of hypotheses established a significant relationship between duration and awareness of agricultural project ($r = 0.75, p = 0.05$). Every other thing being equal, the longer the implementation period of an Agricultural Project, the higher the chances of many farmers to be aware of the project. Similarly a significant relationship was established between duration and participation ($r = 0.68, p = 0.05$). Farmers need time to move from awareness to interest, evaluation, trial and adoption of innovations (Rogers, 1983). Therefore policy makers, project initiators and donors should appreciate these findings and incorporate them in agricultural project design and implementation in Nigeria.

Table 6: Pearson Correlation analysis for significant relationship between duration, awareness and participation in agricultural projects in Nigeria.

Variable	r	P	Remarks
Awareness	.75	.000	Significant relationship exists
Participation	.68	.000	Significant relationship exists

Source: Field Survey, (2009)

P=0.05 level

CONCLUSION AND RECOMMENDATION

The study has shown that project implementation duration has an influence on the awareness as well as participation of farmers in the project. Most of the Agricultural Projects implemented in the country were short lived. In most cases the farmers were in the interest or evaluation stages of adoption curve when the projects were concluded.

The various tiers of government in Nigeria, Non Governmental Organization, External Donors should take note that for farmers to participate in agricultural project designed to improve on their productivity the implementation period should be long enough to allow farmers to appreciate the satisfactions derivable from the projects. This will influence their participation in the project.

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