



Influence of Developmental Strategies on Agricultural Development in Ilorin South Local Government Area of Kwara State, Nigeria

Komolafe, S. E., Akangbe, J. A., Ajibola, B.O. and Dairo, O. D.

Department of Agricultural Extension and Rural Development, University of Ilorin, Nigeria

Corresponding author email: kemmas04@yahoo.com

Abstract

Considering the importance of agricultural developmental strategies to agricultural and rural development and sustainable national development, this study examined the influence of selected developmental strategies on rural farmers to enhance sustainable agricultural development in Ilorin South Local Government Area of Kwara State, Nigeria. A total of 120 respondents were randomly selected for the study. An interview schedule was used to collect information from respondents. Statistical analysis uses include frequency counts, percentage, mean, Kruskal-Wallis one-way Analysis of variance (ANOVA) by ranks and Pearson Product Moment Correlation analysis.

The results of the study showed that higher percentage (80%) were full time farmers. About 30% had above 20 years of farming experience. Majority 70.85%, 65% and 51.67% were involved in NFDP, ADP and RBDA programs respectively. Perceived effects after their involvement includes; increase farm size (46.67%), increase in production (53.33%), increase in income (41.67%), inputs received (46.66%), access to credit facilities (44.60%). Lack of adequate fund was ranked first as constraints. Chi square analysis shows that gender, level of education and farming experience had significant relationship with their level of awareness ($P \leq 0.05$). Based on these findings, it was observed that NFDP, ADP and RBDA were the leading developmental strategies influencing agriculture in the study area. The study recommends among others that respondents should strengthen their farmers' groups by contributing some amount of money during meetings in order to overcome the challenges of inadequate funds that restricted their participation developmental strategies.

Keywords: Influence, developmental strategies, rural farmers, and sustainable development.

INTRODUCTION

Agricultural development strategies demarcate priorities for action toward enhanced agricultural and overall development. They are usually put forward by individual countries based on assessments of national needs. According to Nwaiwu *et al.*, (2013) Sustainable agricultural production systems involve those approaches to food production that ensures constant increases in productivity without compromising the chances of future generations to provide for themselves. In Nigeria, agriculture is the singular largest contributor to the well-being of the rural

poor, sustaining about 86 percent of rural households in the country (Akande, 2002). Agricultural and rural development effort has been inextricably tied to agricultural development as a pathway out of poverty.

Some of these programs include the following: Family Support Program FSP (1994), Family Economic Advancement Program FEAP 1995-1999 and scrapped in 2000, Small and Medium scale Industrial Development Agency of Nigeria SMIDAN (2000), Nigeria Agricultural cooperative and Rural Development

Bank- NACRDB (2000), now Bank of Agriculture, National Fadama Development Project – NFD (1992) Project which is been implemented in phases, National Special Program on Food Security – NSPFS (2003), and the National Economic Empowerment and Development Strategy – NEEDS (2004). While each of the above programs sought to improve food production, the Agricultural Development Programmes (ADPs) represented the first major practical demonstration of the integrated approach to agricultural development in Nigeria. The ADP is the implementation organ of the state ministry of agriculture and natural resources. It is semi -autonomous and focuses on the small farmer. It adopts the integrated rural development strategy in its operations (Jibowo, 2005). Ezulike (2000) reports that ADP has eliminated institutional bottle-necks and organizational problems and brought farmers in direct contact with research in diverse disciplines; encourage farmers; participation and has ensured that field trials are relevant to farmers' cropping systems and socio-economic circumstances. This is because extension education can provide basic knowledge, attitudes and skills necessary for the agricultural development of a society.

Mbarika (2002) suggests that development strategies can be adopted by countries, so that they can improve their telecommunication infrastructure and provide the internet for their local people. Koyenikan, (2008) also stated that cost sharing by the 3 tiers of government, support from development partners, the private sector, NGOs and farmers organizations could be used as a strategy for combating the problem of poor extension delivery. Oyelaran-Oyeyinka and Adeya (2002) had however reported that access to information sources tends to be correlated to income and socio-economic status. Although, agriculture remains an important sector of the Nigeria's economy with high potentials for employment generation, food security and poverty reduction, unfortunately these potentials have remained largely untapped notwithstanding the numerous programmes/policies of the past governments (Federal Government of Nigeria (FGN), 2008).

In light of the above, this study therefore seeks to investigate the influence of some

existing developmental strategies on rural farmers to enhance sustainable agricultural development in the study area.

The specific objectives are to:

- i. examine the demographic characteristics of respondents;
- ii. determine their level of awareness of respondents to developmental strategies;
- iii. determine the level of involvement of respondents with identified developmental strategies; and
- iv. examine the perceived effects of developmental strategies on farming activities of respondents.

The following null hypothesis was assessed:

HO₁: there is no significant relationship between socio-economic characteristics of respondents and benefits derived from developmental strategies

METHODOLOGY

The study was conducted in Ilorin South Local Governments Area of Kwara State, Nigeria. It headquarters is in the town of Fufu. It has an area of 174 km² and a population of 208,691 at the 2006 census (NPC, 2006). Major towns include Ilota, Fufu, Gaa-Akanbi, Kangile, Gaa-Osibi, Omode. Crops mostly grown in this area include maize, cereal and cassava.

The target population of this study consists of all adults both male and female residing in these rural communities. For the purpose of this study, five villages were chosen and they were Fufu, Ilota, Omode, and Kangile. A sample of 24 rural farmers were randomly selected from each of the five villages making 120 farmers in all the villages. The selection of developmental strategies was based on the existing programs and institutions available to farmers in the study area.

Data was collected through the use of a well-structured questionnaire and complemented with interview schedule from respondents who can neither read nor write between April to June of 2007. The questionnaire was divided into four sections A, B, C, and D. Each section contained questions relevant to objectives of the study. A pretest was also done to ensure that questions asked were relevant.

Data collected was quantitative in nature and was coded accordingly to facilitate easy analysis. Descriptive statistics used include frequency count, percentage and Kruskal-Wallis one-way Analysis of variance (ANOVA) by ranks was used. Pearson Product Moment Correlation (PPMC) analysis was used to assess the hypotheses stated above.

RESULTS AND DISCUSSION

Socio-economic Characteristics of Respondents

Results of data analysis in table 1 revealed that majority (94.17%) of respondents were male while the remaining 5.83% were female. This implies that farmers in the study area were predominantly male. This might be because farming activities had been known to be tedious work.

The results further shows that majority (40.83%) of respondent falls within the age range of 31 – 40 years, 24.17% within 41 – 50 years, and 17.50% within 21 – 30 years. This is an indication that most of the farmers in the study area can take decision to adopt an innovation or be a member of any developmental strategies of their choice. Also, majority (87.50%) of respondents was married, 2.50% were divorced, and 3.33% were widowed while only 6.67% were single.

As regards educational status of respondents, most (39.17%) of the respondents had no formal education; also, 25.83% had primary education, 18.33 had adult education, 10.0% had Quranic education, and 6.67% had secondary education. The level education of respondents implies that developmental strategies targeting agricultural development may need proper awareness of their programs objectives before they can adopt or be part of them.

About 80% of respondents were full time farmers while 20% were part-time farmers.

Results also shows that about 15% of the respondents had 6 – 10years of farming experience, 21.67% had 11 – 15years, 18.33% had 16 – 20years, while majority 36% had >20years. This result is an indication that farmers in the study area must have experienced different developmental programs aimed at developing agriculture.

Result also shows that most (60%) of respondents cultivated farm-size between 0.09 – 1.9(hectares), about (41%) had farm size between 2.0 – 3.9 hectares, only (5%) had farm size greater than 5.9 (hectares). This implies that most farmers in the study area were predominantly subsistence farmers and will probably be ready to be involved in any agricultural developmental programs that can improve their farm productivity.

Table 1: Socio-economic Characteristics of Respondents

<i>Demographic Characteristics</i>	<i>Frequency</i>	<i>Percentage</i>
Gender		
Male	113	94.17
Female	7	5.83
Age (years)		
<21	2	1.67
21 – 30	21	17.50
31 – 40	49	40.83
41 – 50	29	24.17
>50	19	15.83
Marital Status		
Single	8	6.67
Married	105	87.50
Divorced	3	2.50
Widow	4	3.33
Education Level		
No formal Education	47	39.17
Quranic Education	12	10.00
Primary Education	31	25.83
Secondary Education	8	6.67
Adult Education	22	18.33
Farming status		
Full – time	96	80
Part – time	24	20
Farming Experience (years)		
< 1	1	0.83
1 – 5	17	14.17
6 – 10	18	15.00
11 – 15	26	21.67
16 – 20	22	18.33
>20	36	30.00
Farm size (Hectares)		
0.09 – 1.9	72	60.00
2.0 – 3.9	41	34.17
4.0 – 5.9	1	0.83
>5.9	6	5.00

Level of Awareness on Selected Developmental Strategies

Result of data analyzed in table 2 revealed that majority (70.83%) of respondents were familiar with National Fadama Development (NFDP) Program, 17.5% knew about NFDP operation, while 11.67% only knew that the organization existed. As regards Agricultural Development Project (ADP), majority (82.50%) of the respondents were familiar with the program, 12.50% knew about ADP operation, while few (5%) only knew that the organization existed. The results further show that below average (49.17%) of the respondents were familiar with River Basin Development Authority (RBDA) program, 27.5% knew about RBDA operation, while (23.33%) only know that the organization existed.

More so, about (55%) of respondents only knows that the program existed. Majority of respondents (56.67%) of the respondent were familiar with Bank of Agriculture (BOA)

program, 40% knew about BOA operation, while few (3.33%) only know that the organization existed. Few percentage (4.17%) of respondents were familiar with Small and Medium Scale Industrial Development Agency of Nigeria (SMIDAN) program, 18.33% knew about SMIDAN operation, while majority (77.5%) only knew that the organization existed. Majority (86.67%) of the respondents knew National Special Program on Food Security (NSPFS) program existed; about 13.33% know about NSPFS operations, while none (0%) of the respondent indicated they were not familiar with the program. This result supports the report by Arokoyo, (2009) that even with policy in place, none of the three tiers of government has had the commitment and the will power to date, to implement the tenets of the document with respect to the financing and provision of an effective and efficient agricultural extension service in Nigeria.

Table 2: Level of Awareness on Selected Developmental Strategies

<i>Strategies</i>	<i>Familiarity level</i>		<i>Operational level</i>		<i>Existence</i>	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
NFDP	85	70.83	21	17.5	14	11.67
ADP	99	82.50	15	12.50	6	5
RBDA	59	49.17	33	27.5	28	23.33
BOA	68	56.67	48	40	4	3.33
SMIDAN	5	4.17	22	18.33	93	77.5
NSPFS	0	0	16	13.33	104	86.67

Level of Involvement of Respondents in Developmental Strategy

Result in table 3 shows that majority (85%, 78%, 62%, and 59%) of the respondents were involved in NFDP, ADP, RBDA, and BOA respectively. Small percentage (6% and 1%) of the respondents also indicated that they were involved in SMIDAN and NSPFS respectively.

Majority (81.67%) of the respondents indicated they were involved in developmental

strategies in groups, only 1% indicated involvement to be individual. About (40%) of respondents further indicated mode of participation were through farmers group. Also, 23.33% respondents' mode of participation was through cooperative. This result corroborate Ifabiyi (2014) that all farmers benefitting from Lower Niger River Basin branch of RBDA in Kwara state were member of water user association.

Table 3: Level of Involvement of Respondents in Developmental Strategy

<i>Strategy</i>	<i>Frequency(*)</i>	<i>Percentage</i>
STRATEGY		
NFDP	85	70.83
ADP	78	65.0
RBDA	62	51.67
BOA	59	49.17
SMIDAN	6	5.0
NSPFS	1	0.83
KIND OF INVOLVEMENT		
Group	98	81.67
Individual	1	0.83
No response	21	17.50
Total	120	100
AREA OF PARTICIPATION		
Directly with the government	0	0
through cooperative	28	23.33
Farmers group	49	40.83
Regular meeting	20	16.67
Recommended practice	2	1.67
No response	21	17.5
Total	120	100

* = Multiple response

Influence of the selected developmental Strategies on farm size

Data illustrated in table 4 revealed that the percentage of respondents cultivating farm size between 0.09 hectares to 1.9 hectare increased from 43.33% to 46.67% as a result of their involvement in developmental strategies. This is an indication that the selected developmental strategies did not focus only on commercial farmers but also on small scale farmers.

With involvement in developmental strategies, percentage of respondents cultivating farm size between 2.0 hectares to 3.9 hectares increased

from 16.67% to 30.0%. Percentages of respondents cultivating farm size between 4.0 hectares to 5.9 hectare increased from 25.0% to 36.67% as a result of their involvement in developmental strategies.

With involvement in developmental strategies, only (0.83%) respondents indicating no previous farming experience were able started with above 5.9 hectares of farm size. This implies that selected developmental strategies did not focus only on existing farmers but rural dwellers who are interested to go into farming were also empowered.

Table 4: Farm size with and without involvement in developmental Strategies

<i>Increase in farm size</i>	<i>Without involvement</i>		<i>With Involvement</i>	
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
0.09 – 1.9	52	43.33	56	46.67
2.0 – 3.9	20	16.67	36	30.00
4.0 – 5.9	30	25.0	44	36.67
>5.9	0	0.00	1	0.83
No response	0	0.00	1	0.83
Total	120	100	120	100

Perceived Benefits from Developmental Strategies

Result of data analyzed in table 5 shows that majority (53.33%, 41.67%) have experienced increase in agricultural production output and income respectively. This is the reflection of increase in farm size as indicated in table 4. As regards transfer of technology, only 5% showed an improvement in that aspect. This brings to notices that selected developmental strategies may not include programs to improve technology of farmers in the study area.

Majority (46.67%) of respondents have experienced change in attitude and behavior. It means that selected developmental strategies may have included value re-orientation in their programs. This aspect of developmental issue is important as it brings about sustainable

development to whatever development that had been delivered to people. Improvement in condition of living had also been experienced by 40.83% of the respondents. Only 3.33% of respondents indicated that they did not experience any progress. This category of farmers might be part of few respondents who do not benefit from selected developmental strategies.

Areas in which farmers have benefitted from selected developmental strategies include; provision of farm input, improve farm practices, free clearing of farm land, allocation of farm plot, and access to credit facility as indicated by 46.66%, 13.14%, 6.10%, 8.45%, 44.60% of respondents

Table 5: Perceived benefits from developmental strategies

<i>Benefits</i>	<i>Frequency</i>	<i>Percentage</i>
Increase in production	64	53.33
Increase in income	50	41.67
Technology transfer	6	5
Total	120	100
<i>Progress recorded</i>		
Change in attitude and behavior	56	46.67
Improved condition of living	49	40.83
No progress	15	33.33
Total	120	100
<i>Areas benefitted</i>		
Input received	56	46.66
Improved practices	28	13.14
Free clearing of farmland	13	6.10
Allocation of farm plot	18	8.45
Access to credit facilities	95	44.60
Total	120	100

Effectiveness of Selected Agricultural Developmental Strategies

Result of Kruskal-Wallis one-way Analysis of variance (ANOVA) by ranks of effectiveness of selected agricultural development strategies in table 6 shows that National Fadama Development Project was ranked first, Agricultural Development Project

2nd, River Basin Development Authority 3rd, Bank of Agriculture 4th, Local government Economic Empowerment Development Strategy 5th, Small and Medium scale Industrial Development Agency Nigeria 6th, and National Special Program on Food Security was ranked 7th.

Table 6: Ranking of Selected Developmental Strategies in order of Effectiveness

<i>Programs</i>	<i>Mean</i>	<i>Rank</i>
NFDP	76.00	1
ADP	56.67	2
RBDA	55.00	3
BOA	48.33	4
SMIDAN	24.25	6
NSPFS	12.34	7

Perceived constraints of Respondents in Benefitting from Agricultural Development Strategies

Result of Kruskal-Wallis one-way Analysis of variance (ANOVA) by ranks of constraints of respondents in benefitting from selected agricultural development strategies in table 6 shows that lack of adequate fund to be first, this implies that the selected strategies may demand for high payment for extension

services. Results further indicate that inadequate government assistance was ranked 2nd, lack of good leadership among farmers' group 3rd, Poor organization structure of developmental strategies 4th, Illiteracy on the part of members 5th, Poor government policy 6th, and restrictive cultural and traditional belief 7th. These results corroborate Akangbe (2014) that intelligence was one of the factors most considered among cooperative farmers for selecting leaders.

Table 7: Constraints of Respondents in Benefitting from Agricultural Development Strategies

<i>Problems</i>	<i>Cumulative</i>	<i>Mean</i>	<i>Ranking</i>
Lack of good leadership	186	2.07	3
Inadequate government assistance	135	1.50	2
Poor organization structure	215	2.39	4
Illiteracy of the part of members	225	2.50	5
Poor government policies	241	2.68	6
Restrictive cultural and traditional practices	250	2.78	7
Lack of adequate fund	106	1.09	1

Null hypothesis: there is no significant relationship between socio-economic characteristics of respondents and benefits derived from developmental strategies

Pearson Product Moment Correlation (PPMC) analysis in table 8 shows that age level of education, farming experience, farming status and farm size were significantly related to benefit derived from agricultural developmental strategies. Only gender of respondents was

found to be unrelated statistically. It means that increase in as farmers' level of involvement in agricultural developmental strategies increases, farmers' farm size, increase in production outputs, increase in income, access to credit facilities, improve condition of living, inputs received, and improved practices also becomes high.

Table 8: Summary of PPMC analysis results showing relationship between socio-economic characteristics of respondents and benefits derived from developmental strategies

<i>Variables</i>	<i>r-value</i>	<i>p-value</i>	<i>Remark</i>
Gender	0.121	0.151	Not Significant
Age	0.233	0.000	Significant
Level of education	0.314	0.012	Significant
Farming experience	0.241	0.000	Significant
Farm status	0.452	0.013	Significant
Farm size	0.036	0.000	Significant

Significant at $p \leq 0.01$

CONCLUSION AND RECOMMENDATIONS

The study concludes that higher percentage above 70% farmers were aware and familiar to National Fadama Development Project (NFDP) and Agricultural Development Project (ADP). Also, their kind of involvement was in groups. Involvement in agricultural development strategies had increase respondents' farm size, production outputs, income, improved living condition, access to credit facilities and improved positive attitudinal change. Moreover, lack of fund was ranked to be the first constraint to respondents' involvement in developmental strategies.

Based on the findings, the study recommends that;

1. Respondents should strengthen their farmers' groups by contributing some amount of money during meetings in order to overcome the challenges of inadequate funds for their involvement in developmental strategies.
2. There is need for agricultural developmental strategies in the study area to reduce the cost of benefitting from their programs.
3. Government can as well monitor and enforce standards for service delivery of agricultural developments strategies and making the necessary information available to the public.

REFERENCES

- Akande, T. 2002. Making Agriculture Trade Work for Rural Development: Elements for a Development Orientaed agenda in the Context of WTO Negotiations A Presentation at the joint ICTSD/FES Roundtable on Agriculture and Sustainable Development, Geneva 2002, 2: 4.
- Akangbe J.A., Komolafe, S.E., Ajibola, B.O. and Abdul-Karim, I.F. 2014. An Assessment of Agricultural Cooperative's Leadership Style in Ilorin West Local Government Area of Kwara State, Nigeria. PAT, 10 (2): 193-202
- Arokoyo, T. 2009. An effective and functional extension service to maximize farmers' productivity. An invited paper presented at the National Conference on Agricultural Finance and the Role of Communication in Sustainable Development in Nigeria, Organized by PR Value Consulting, Murtala Muhamad Library Complex, Kano, Sept. 29th -30th, 2009
- Ezulike, T.O. 2000. On farm Adaptive Research (OFAR) Trial, Objective, Concepts. An Executive Paper presented in a workshop in Uyo AKs Nigeria.
- Federal Government of Nigeria (FGN), 2008. In Azih, I. 2011. A background analysis of the Nigerian agricultural sector (1998 to 2007) available at <http://www.manufacturingnigeria.com/index.php/analysis> Federal Government of Nigeria (FGN), (2008). National Food Security Program. Federal Ministry of Agriculture and Water Resources, Abuja, Nigeria. Federal Ministry of Agriculture and Rural Development (FMARD), (2011). Agricultural transformation agenda: we will grow Nigeria's agricultural sector. Draft for Discussion. Fertilizer Suppliers Association of Nigeria (FESPAN), (nd) Newsletter Volume 2 No 5.
- Jibowo, A.A. 2005. History of Agricultural Extension in Nigeria. Agricultural Extension in Nigeria. pp. 251
- Ifabiyi, J.O., Adesiji, G.B., Komolafe, S.E. and Ajibola, B.O. 2014. Irrigation Farmers Motivation for Participation in Social Networking in North Central Nigeria. Ethiopian Journal of Environmental Studies & Management 7(5): 572-580
- Koyenikan, M.J. 2008. Issues for agricultural extension policy in Nigeria. Journal of Agricultural Extension. 12 (2): 52-62.

- Mbarika, V., Musa, P. F., Byrd, T. A., and McMullen, P. 2002. Teledensity Growth Constraints and Strategies for Africa's LDCs: "Viagra" Prescriptions or Sustainable Development Strategies? *Journal of Global Information Technology Management*, (5)1.
- National Population Commission (NPC). 2006. Fact sheet for Nigeria Population Retrieved from URL: www/npc.org/population.htm Accessed on 15th June, 2012.
- Nwaiwu I.U.O., D.O. Ohajianya, D.O., Orebiyi J.S., Eze C.C. and U.C. Ibekwe, U.C. 2013.
- Determinants of Agricultural Sustainability in Southeast Nigeria-The Climate Change Debacle. *Global Journal of Agricultural Research*, 1(2): 1-13
- Oyelaran-Oyeyinka, B., and Adeya, C. N., 2002. Internet Access in Africa: An Empirical Exploration, Netherlands: United Nations University Institute for New Technologies.