

Full Length Research Paper

Perception of Farmers on Agricultural Transformation Agenda Support Programme Phase -1 in promoting agricultural extension service delivery in Kebbi and Sokoto States State, Nigeria.

Yohanna J. Alhassan¹Sa,adu Umar²Gona Ayuba³

¹Department of General Studies Federal University Wukari, Taraba State, Nigeria.

E-mail Address: yjohnalhassan@gmail.com, Phone No: 08137206435

²Department of Agricultural Economics and Extension, Kebbi State University of Science and Technology Aliero, Nigeria.

E-mail Address: saadubirniny@gmail.com, Phone No: 080362440131

³Department of Agricultural Economics and Extension, Kebbi State University of Science and Technology, Nigeria.

E-mail Address: Alieroayubagona@gmail.com, Phone No: 08137206544

Accepted 14th June, 2019.

This study examined the perception of farmers on agricultural transformation agenda support Programme phase-1 in promoting agricultural extension service delivery in Kebbi and Sokoto states, Nigeria. A Multi stage sampling technique was employed to draw a sample of 480 respondents from sokoto and kebbi states comprising seven LGAs in kebbi and one LGA in sokoto state, respectively. A set of structured questionnaires were used to obtain information from the respondents. Descriptive statistics, and Likert scale were used for data analysis. The result of the study showed that majority (87.5%) and (86.3%) for both participating and non-participating respondents were male while (12.5%) of the participating and (13.8%) of the non-participating farmers were females respectively. The survey further identified that (65.4%), (76.7%) respondents respectively were provided with both method and result demonstration strategies. The study further revealed that ATASP-1 provided training to farmers on improved farming methodologies through mass extension programmes such as radio/ television program (58.8%) and group discussion (78.3%)..Likert scale analysis showed that (11.38%), (11.07%),(11.05%),(10.73),(10.09) perceived ATASP-1 to enhance agricultural output, improve farmers standard of living, enhance technology transfer, alleviate poverty and promote farmers capacity building respectively. It is concluded that ATASP-1 impacted positively on the livelihood of the participating farmers. It is recommended that provision of extension services to farmers in groups should be encouraged due to scarcity of AEAS, provision of more improved inputs like seeds of various crops, fertilizers and agro chemicals etc, provision of extension services through non-visits such as radio and television programmes should be intensified by ATASP-1, organizing refresher courses and in-service training for extension staff to equip them with modern skills to effectively disseminate improved agricultural technology to farmers.

Keywords: Perception, Farmers, Agricultural Transformation Agenda Support Programme Phase-1, Kebbi and Sokoto Stat

INTRODUCTION

The Agricultural Transformation Agenda (ATA) is aimed at making agriculture work for Nigerians especially rural farmers such that it becomes not just a development Programme but also an income generating activity. Agricultural Transformation Agenda was established in the year 2011 (Adeyemi, 2011). The transformation Agenda of the past administration was a policy package that proposes to reposition the economy by addressing issues of poverty, unemployment, insecurity and most particularly, the diversification of the entire economy from total dependence on oil to a significant reliance on non-oil to drive the economy. Transformation Agenda is a policy that revolves around good governance, power, security and development of non-oil sector such as manufacturing and solid minerals, investment in infrastructure, education and anti-corruption crusade (Adeyemi, 2011).

The aim of the transformation strategy is to achieve a hunger-free Nigeria through agricultural sector that drives income growth, accelerates achievement of food and nutritional security, generates employment and transforms Nigeria into a leading player in global food markets to grow wealth for millions of farmers. In order to achieve this vision, the usual approach to agricultural sector through structural and institutional changes. Fertilizer procurement and distribution, marketing institutions, financial value chains and agricultural investment framework were restructured. (Chigbu, 2013). The subsistence farmers were to be moved from their high poverty level to market oriented/market surplus facilitated by Nigerian Incentive-based Risk Sharing for Agricultural Lending (NIRSAL) into a commercialized system that would facilitate trade and competitiveness. This was expected to be achieved through the Growth Enhancement Support (GES) investment that is targeted at 20 million farmers at an estimated cost per farmer per year of 5,000 naira (Obasi, 2011). Transformation action plan for some priority agricultural commodities were focused in the six geopolitical zones of the country (Iwuchukwu, 2012). The commodities are rice, cassava, sorghum, cocoa, cotton, maize, dairy, beef, leather, poultry, oil palm, fisheries as well as agricultural extension. This was carried out

through the value chains of each of the commodities. For instance, rice transformation plan would involve massive local production of milled rice which will be aimed at substituting parboiled (imported) rice. The expectation is that with the advent of high quality lower cost milled rice, a significant portion of demand in the domestic rice market will shift from parboiled rice to milled rice. Commodity value chain encompasses the whole lot of activities from production, processing, distribution and marketing of specific traded commodity and identifies the main stakeholders involved at each stage, including research and development (FGN, 2011). The government embarked on Agricultural Transformation Agenda (ATA) as part of its effort to revamp the agricultural sector to ensure food security, job creation, diversify the economy and enhance foreign exchange earnings. In the on-going ATA, for farmers to utilize/apply innovation generated by the knowledge/technology generating sub-system, there must be an efficient technology transfer sub-system (Adeyemi, 2011).

According to Olatunji (2014), the Transformation agenda sought to transform the Nigerian people into a catalyst for growth and national development. Under the transformation drive, government is expected to guide Nigerians to build an industrialized modern state that will launch the nation into the first 20 economies of the world by the year 2020 (FMARD, 2011).

The shortcomings of ATA and the improvements that were set to achieve the desired objectives led to the formation of ATASP-1 with the desire to achieve certain objectives. In achieving the desired objectives that ATA failed to achieve, ATASP-1 was established in 2015 to overcome the limitations of ATA which was part of the Federal Government of Nigeria's effort to revamp the Agricultural Sector, ensure food security, diversify the economy and enhance foreign exchange earnings. The Federal Ministry of Agriculture and Rural Development (FMARD), embarked on Agricultural Transformation Agenda support programme-1 with a focus on the development of agricultural value chains, including the provision of improved inputs such as seeds, fertilizer, increased productivity and production, as well as the establishment of Staple

Crop Processing Zones. It also aimed at addressing the reduction in post-harvest losses, improving linkages with industry with respect to backward integration, as well as access to financial services and markets. The Agricultural Transformation Agenda Support Programme-1 targets rural communities particularly women, youth and farmers associations as well as improving rural institution and infrastructure (FGN, 2015).

The Agricultural Transformation Agenda Support Programme Phase-1 is directly building on the short comings of ATA of previous administration. Agriculture is an important sector of the economy with a high potential for employment generation, food security and poverty reduction.

It is against this backdrop that the study examined the role of agricultural transformation agenda support programme phase-1 in promoting agricultural extension services delivery in Kebbi and Sokoto States, Nigeria. Specifically, the study:

1. Identify the socio-economic characteristics of the ATASP-1 participating and non-participating farmers in the study area.
2. Examine the nature of Agricultural Extension Services provided to the farmers in the study area through (ATASP-1
3. Examine the perception of participating farmers towards ATASP-1 Programme

METHODOLOGY

The study area

The research study was carried out in Sokoto and Kebbi States Nigeria. ATASP-1 is implemented as a pilot study in Seven Local Government areas of Kebbi State and one Local Government Area of Sokoto State. The LGEAs in which ATASP-1 is currently operating in Kebbi State, include (Argungu, Birnin Kebbi, Dandi, Suru, Bagudo, Shanga, and Ngaski) and Kware Local Government Area of Sokoto State in which ATASP-1 covers in the North-Western Zone of Nigeria. The choice of the study area was premised on the fact that it is among the Zones covered by ATASP-1 as a pilot study in the country.

Sokoto state was created in 1976 while Kebbi State was created out of the then Sokoto State in 1991. Both states lies in Northwestern region of Nigeria with capital of Kebbi State in Birnin Kebbi and Sokoto in Sokoto State. Kebbi State is bordered by Sokoto to the north and east, Niger to the south. Dosso region in the Republic of Niger to the Northwest and Republic of Benin to the west. Sokoto State shares its border with Niger Republic to the North, Zamfara State to the east, Kebbi State to the south-east and Benin Republic to the west (Sokoto State Government, 2006). While Sokoto State has a land mass of 25,973 square kilometers, Kebbi State has a total land Area of about 37,698,685 square kilometers. Based on projections from 2006 census figure, Kebbi State is estimated to have a population of 4,629,880 (NPC, 2006: projected to 2017). Sokoto State has a population of 427,760 based on 2006 census. While Sokoto is made up of 23 Local Government Areas, Kebbi State is made up of 21 Local Government Areas (LGAs). It has four emirate councils (Gwandu, Argungu, Yauri and Zuru) and has four Agricultural Zones namely Argungu, Bunza, Yauri and Zuru zones respectively, for ease of administration. Kebbi State falls between latitude $12^{\circ}46'N$ and $12^{\circ}27'N$ and longitude $4^{\circ}19'E$ and $4^{\circ}11'E$. Sokoto State lies approximately between latitude $11^{\circ}33,42',N$ and $13^{\circ}59,7',N$ and longitude $4^{\circ}9,36',E$ and $6^{\circ}45,33',E$. (NPC, 2006). Agriculture is the main occupation of the people of the two states especially in rural areas. Crops produced are mainly grains like Rice, Millet, Sorghum etc; animal rearing and fishing are also common agricultural activities that feature prominently in the two States. The weather of the States is often dry with lots of sunshine. The wet season last from May to October while the dry season lasts for the remaining period of the year. Mean annual rainfall is about 800mm- 1000mm. Temperature is generally high with mean annual temperature of about $26^{\circ}C$ and above in all locations of the states. This climatic peculiarity allows for meaningful investment in agriculture.

Sample Size and Sampling Procedure

A multi-stage random sampling technique was employed. In the first stage, all the seven (7)

LGAs in Kebbi State and one (1) LGA in Sokoto State that constituted the pilot study locations i.e. eight (8) participating LGAs were used as the sampling frame for the study based on the fact that these eight (8) Local Governments constitutes the Local Governments that ATASP-1 is currently implemented in its pilot study. In the second stage, 3 Villages from each of the eight (8) Local Government Areas where ATASP-1 is implemented were selected giving a total of twenty four (24) Villages. In the third stage, ten (10) randomly selected Participating and non-Participating farmers each were drawn from the villages, thus making 240 participating and 240 non-participating farmers giving a sample size of 480 farmers for the study.

Data Analysis

Data collected was analyzed using both descriptive and inferential statistics. Descriptive statistics such as frequency distribution count,

Data Collection Procedure

Both primary and secondary data were used for the study. Primary data were obtained through field survey with the use of structured questionnaire designed in line with the objectives of the study. The copies of which were administered to the respondents selected for the study. Data collected included information on the socioeconomic characteristics of the participating farmers, perception of farmers towards ATASP-1, nature of agricultural extension services provided to farmers by ATASP-1 among others. Secondary data was collected from relevant text books, journals, seminar, conference articles, annual reports and other relevant materials.

percentages and ranking were used to analyze objectives 1and2 while objective 3 was analyzed using Likert Scale (LS).

RESULTS AND DISCUSSION

Table 1. Socio-Economic Characteristics of Participating and Non-Participating Farmers in ATASP-1 (n=240)

Variables	Participating Farmers	Non-Participating farmers
Gender		
Male	210 (87.5%)	207 (86.3%)
Female	30 (12.5%)	33 (13.8%)
Total	240	240
Age (years)		
20-30	47 (19.5%)	23 (14.5%)
31-40	63 (26.3%)	88 (36.7%)
41-50	81 (24.2%)	68 (28.4%)
51-60	29 (12.1%)	52 (21.7%)
Above 60	20 (8.3%)	9 (3.8%)
Total	240	240
Level of Education		
Qur'anic education	72 (30.0%)	71 (29.6%)
Adult Education	30 (12.4%)	22 (9.2%)
Primary Education	44 (18.3%)	69 (28.7%)
Junior Secondary Education	26 (10.8%)	30 (12.5%)

884. J. Agric. Econs, Extens. Rural Develop.

Senior Secondary Education	34 (14.2%)	27 (11.3%)
Tertiary Education	34 (14.2%)	21 (8.8%)
Total	240	240
Marital Status		
Married	202 (82.4%)	190 (79.2%)
Single	23 (9.9%)	24 (10.0%)
Divorced	7 (2.9%)	14 (5.8%)
Widow	4 (1.7%)	9 (3.8%)
Widower	4 (1.7%)	3 (1.3%)
Total	240	240
House hold size		
0-10	137 (57.1%)	143 (59.6%)
11-20	86 (35.8%)	82 (34.2%)
21-30	17 (7.1%)	15 (6.3%)
Total	240	240
Annual Income (₦)		
Less than 50,000	0 (0.0%)	6 (2.5%)
51, 0000---250,000	98 (40.8%)	140 (58.3%)
251, 0000---350,000	103 (42.9%)	40 (12.5%)
351,000----450,000	32 (13.3%)	37 (15.4%)
Greater than 450,000	7 (2.9%)	1 (0.4%)
Total	240	240

Source: Field Survey Data, 2018.

Table 2: Distribution of the respondents according to nature of agricultural extension services provided by ATASP-1 (n=240)

Nature of assistance	Frequency *	Percentage	Ranking
Farmer training	233	97.1	1
Supervision	202	84.2	2
Farm and Home visit	194	80.8	3
Group discussion	188	78.3	4
Result demonstration	184	76.7	5
Seminars	179	74.6	6
General meetings	164	68.3	7
Method demonstration	157	65.4	8
Radio and television programs	141	58.8	9
Informal contacts	82	34.2	10
Tours and field Trips	59	24.6	11
Office calls and personal letter	49	20.4	12
Cinema and video show	45	18.8	13
Posters, newspapers and folders	40	16.7	14
Leaflet and pamphlets	23	9.6	15
Models and charts	20	8.3	16

*Multiple responses were recorded

Source: Field Survey, 2018.

Table 3: Likert's Type Scale Showing Positive and Negative Statements (n=240)

Attitudes	SA	A	UD	DA	SD	Total sum of attitudes	Average score	mean
1. ATASP-1 improves Agric output	184	54	0	0	2	11.38	4.7 (positive)	
2.ATASP-1 improves farmers standard of living	184	62	4	0	0	11.7	4.9 (positive)	
3.ATASP-1 improves technology transfer	155	77	6	2	0	11.05	4.6 (positive)	
4.ATASP-1 helps in alleviating poverty	129	102	4	2	3	10.73	3.7 (positive)	
5.ATASP-1 helps in reducing Agric losses	2	6	13	63	156	3.45	1.5 (Negative)	
6.ATASP-1 assist farmers to gain access to credit	4	7	4	45	170	3.02	1.3 (Negative)	
7.ATASP-1 does not improve farmers capacity	114	115	9	0	2	10.59	4.4 (positive)	
8.ATASP-1 does not provide training	69	108	46	3	14	9.35	3.9 (positive)	
9.ATASP-1 enhances improved farming techniques	158	72	6	2	2	11.04	4.6 (positive)	

Source: Field Survey, 2018

DISCUSSION

Table 1 shows the socio economic characteristics of the respondents on gender. The result showed that majority of the participating respondents with (87.5%) and non-participating respondents having (86.3%) were male, which is an indication that male dominated the agricultural workforce in the two states covered in North western zone especially in rural areas where agriculture is practiced on a subsistence level. While female with (12.5%) and (13.8%) relative percentages for both participating and non-participating respondents formed the minority in farming in the two states. The reason for greater number of male in the agricultural workforce could

be because of the traditions, norms, values and customs of the people in the study area where female are mostly under seclusion or cultural purdah which does not allow their full participation in most of the developmental projects such as ATASP-1. The findings is in line with that of Annan (2012) who supported that male usually form the majority in farming activities because of the fact that they are vested with the responsibilities of catering for their dependents such as provision of food for the households, finances for health care delivery and for educational pursuit. While female are known to be housekeepers, taking care of the children and other domestic chores. This

according to him will not allow their full participation in agriculturally inclined activities, however they mostly engage in backyard farming such as growing vegetables, processing of agricultural produce and keeping small ruminants at home and poultry birds.

The age structure of rural households reflects the level of dependency of older and younger members of the household and can influence its production decision as well as livelihood strategies (Annan,2012).Analysis of the socio-economic variables on age distribution of participating and non-participating respondents indicated that about 26.3% of participants and 36.7% of non-participants were between the ages of 31-40 years old while only 12.1% and 21.7% were above 50 years old from among participating and non-participating farmers respectively.

This result agrees with the view of Dakare (2014) who opined that certain socio-economic characteristics such as age assist in enhancing youth and women participation in IFAD Programme. According to him, the socio-economic and institutional characteristics of farmers significantly affects their decision to participate in the Programme. He pointed out age, education, access to market, membership of association, extension contact and access to credit as significant determinants of participation to the Programme. The result also showed that majority of the respondents belongs to the age bracket (31-40) years old (26.3%) and (36.7%) for both participating and non-participating respondents which means that majority belong to the active age group as only few (8.3%) and (3.8%) are above 60 years of age.

The findings is also in consonance with that of Koyeikan (2011) that the mean age of farmers in his study was 45 years and that of females were 40 years. Age is a factor that is very important in farming as a primary occupation since it requires people of age group that are energetic and are independent. This also agreed with the assertion made by Adeola (2010) that young people of ages between(20-35) tend to withstand stress, put more time in various agricultural operations and participate in programmes which can result to increased output. Young people are dynamic and willing to take risk connected with adoption of new agricultural technology which may explain the higher

propensity for participation in developmental projects and programmes such as ATASP-1.

Education is a veritable tool for attitudinal change of an individual. The result in table 4.1 shows that 30% participants and 29.6% non-participants had Qur'anic education. Then 12.5% and 9.2% for both the participating and non-participating respondents obtained adult education and 18.3% and 28.7% gained only primary school education while 10.8% and 12.5% respondents completed only junior secondary education as their highest level of education. The result also showed that 14.2% and 11.3% of the farmers obtained only senior secondary education as their highest level of education and 14.2% and 8.8% respondents schooled up to tertiary level of education. This means that most respondents had attained certain level of education. The low level of formal education from among participants affected their level of awareness and adoption of modern farming techniques. In contrast, the percentage of farmers from among non-participants with non-formal education is rather large, this could be a contributing factor to their lack of participation in ATASP-1. Asiabaka (2002) in his studies on Fadama III posited that education is an important variable that influences farmer's decision to participate in any Programme because of its influence on farmers awareness, perception, reception, rejection and/or the adoption of innovations that can bring about increase in production or reduced production risk. Education is important for easy understanding of improved methods of agricultural production and makes farmers more receptive to advice from extension agencies or be able to deal with technical recommendations that requires a certain level of numeracy and literacy. The findings also agrees with that of Ekpo (2004) who said that level of education may be able to positively modify people's behaviours. He added that education has a positive and significant impact on farmers efficiency in production and majority of both the participating and non-participating farmers does not possess formal education to guarantee the acceptance and adoption of new farming techniques introduced to them, as greater number of the respondents obtained only Qur'anic education for moral upbringing

The survey found out that most (majority) of the respondents with (84.2% and 79.2%) for

both participating and non-participating respondents respectively were married. This implies that farmers interviewed in the study area have family responsibilities, which shows that majority were married and have children which will help in appreciable number of family labour supply to accomplish various farm operations. The significance of marital status in agricultural production and livelihoods activities can be explained in terms of the supply of agricultural family labour. It is expected that family labour would be more available where the household heads are married (Ogen, 2004).

This findings is in line with Solomon (2008) who opined that large household size assists more on farm and other household activities. However, only 9.6% and 14.2% for both the beneficiaries and non-beneficiaries were single and (2.9%, 1.7%, 1.7% and 3.8%, 1.7%, 1.3%) were either divorced, widows or widowers from among participating and non-participating farmers respectively.

The findings was corroborated by Daramola *et;al* (2013) who found out that majority of respondents (90% and 81%)for both the two groups respectively were married and that about 18% and 11% were either widowed or divorced from among participants and non-participants respectively.

The result in table 1 showed that about 57.1% of participants and 59.6% non-participants had between 0-10 people as household size, 35.8% and 34.2% had between 11-20 people as household size and 7.1% and 6.3% had between 21-30 people as their dependents. This implies that farmers in the study area might have advantage of family labour availability if many household members participate in farm work. However, the implication of large household size is that it will increase household consumption expenditure which will compete with production for limited financial resources within the household. This findings is in consonance with (Oyewole, 2009) who noted that size of household was associated with labour availability that can be used for different agricultural and non-agricultural activities.

The findings of the study showed that 40.8% participating farmers earn annual income of 51,000-250,000 and 2.5% non-participating respondents earn annual income of less than

50,000. 42.9% participants earn between 251,000-350,000 annually as income while 12.5% non-participating farmers earn between 251,000-350,000 annually. Furthermore, 15.8% and 15.4% participants and non-participants respectively earn an annual income of 351,000-450,000 and only 0.4% and 2.9% participating and non-participating respondents earn greater than 450,000. Meaning that the annual income of most farmers especially the participating farmers increased considerably as none of them earn an annual income of less than 50, 000. Although, comparatively the income of the two groups of the farmers is still very low. But with ATASP-1 in progress the income of many farmers is likely to increase as can be seen from the expansion in their farm sizes as a result of introduction of the Programme to them. Annan (2012) opined that annual income of farmers depends largely on the sizes of their farm lands, management practices employed and adequacy of precipitation received during the growing season. Surprisingly, many farmers own small land holdings and this determines to a greater extent their level of annual income

The study in table 2 revealed the nature of agricultural extension services provided to the respondents by ATASP-1 in the two states. The survey identified that 65.4% and 76.7% respondents were provided with both method and result demonstrations and only 34.6% and 23.3% of the respondents could not benefit from the two. This is in line with documentary findings of Annan (2012) that when method demonstration and result demonstration is carried out, a large proportion of farmers tend to be educated because it involves a step-by –step procedure from a learned and expert agent which provide a remarkable difference when compared to farmers traditional method of production. The major focus of extension services delivered to farmers by AEAs was agricultural technology transfer. Even though, infrastructural facilities were provided in some of the participating communities and Programme performance evaluated.

The survey also identified that 80.8%, 97.1% and 84.2% respondents respectively were visited by AEAs both at home, on the farm and were trained on different skills and improved farming techniques. Similarly, they were regularly supervised by the AEAs to ascertain whether the

new farming techniques introduced to them was judiciously been put to use. However, only a negligible percentage of the respondents constituting 19.2%, 2.9% and 15.8% could not receive AEAs at home and on the farm and could not receive any training and were not supervised by the AEAs. It is pertinent to note that table 4.3 clearly revealed that ATASP-1 focuses majorly on farm and home visit, farmer training and regular supervision of agricultural activities so as to enhance better, improved and sustained productivity of agricultural produce.

From table 2, respondents indicated that through regular visits and trainings by ATASP-1 staff their needs and problems were addressed by the AEAs and this has led to improved productivity of most of the staple food crops cultivated in the two states, e.g. rice and sorghum. It can also be deduced from the table (4.2) that 25.4%, 78.3% and 24.6% respondents received/benefited from seminars, group discussion and tours and field trips while 74.6%, 21.7% and 75.4% respondents respectively were not able to benefit from seminars, group discussion and field trips which are organized at regular intervals by ATASP-1 staff and their AEAs.

It can be seen from the results that a good number of the respondents were enlightened through seminars, group discussion and field trips and that has enabled respondent's air their views on the successes and failures of the Programme. Similarly, respondents were enlightened on new ways and techniques of enhancing agricultural productivity thereby leading to improved standard of living. Seminars, group discussion and field trips assist to a greater extent in updating the knowledge of farmers and providing new knowledge associated with modern farming techniques.

The survey also revealed that apart from the visits by the AEAs, other forms of extension services were provided to the respondents in varying degrees in the two states. These include 8.3%, 20.4, 16.7%, 9.6%, and 58.8% average percentages of respondents who received agricultural extension services from the AEAs through non-visit. Above percentages received the services through models and charts, office

calls and personal letters, posters, newspapers and folders, Radio and television extension programmes and leaflets and pamphlets. While 91.7%, 79.6%, 83.3%, 41.3% and 90.4% could not experience extension services through models and charts, office calls and personal letters, posters newspapers and folders, Radio and Television programmes and leaflets and pamphlets.

The results further indicated that there is a large patronage of radio and television programmes by the respondents in the two states due to the possibility of many of the respondents owning radio sets whereas the patronage of models and charts, office calls and personal letters, posters newspapers and folders, leaflets and pamphlets extension programmes by the respondents were very low in the study area this might be due to the low level of education of most of the respondents as greater percentage of them obtained only Qur'anic education. Similarly, greater percentage does not receive extension programmes through the above print media due to inadequate extension field staff to reach out to the most remote villages.

The Study also unveiled that 68.3%, 18.8% and 34.2% respondents received extension services through general meetings, cinema and video shows and informal contacts organized by the AEAs at regular intervals while 31.7%, 81.3% and 65.8% who were the majority does not receive extension services through general meeting, cinema and video shows, and informal contact. General meetings and informal contact could assist in exchanging ideas, views, opinions and problems related to farming between the AEAs and farmers as such, solution to their problems and needs are promptly provided. However, majority does not benefit from such. This could be due to shortage of AEAs in the zone. Cinema and video show enable respondents to see for themselves the programmes organized by ATASP-1 and AEAs staff on new farming programmes and innovations but greater percentage does not have access to it. This is attributed to the fact that the Programme (ATASP-1) is faced with limited equipment, financial resources, man power and mobility to reach out to the most remote villages to organize such Programme.

Table 3 showed that Likert's type scale was adopted to examine the attitude /perception of respondents towards ATASP-1.

For positive statements, the computation was:

Strongly agreed	=	5
Agreed	=	4
Undecided	=	3
Disagreed	=	2
Strongly disagreed	=	1

While for negative statements, the computation was as follows:

Strongly agreed	=	1
Agreed	=	2
Undecided	=	3
Disagreed	=	4
Strongly disagreed	=	5

Sum of attitude score of respondents

(a)	$(184 \times 5) + (54 \times 4) + (0 \times 3) + (0 \times 2) + (2 \times 1)$	=	11.38
(b)	$(182 \times 5) + (62 \times 4) + (4 \times 3) + (0 \times 2) + (0 \times 1)$	=	11.7
(c)	$(155 \times 5) + (77 \times 4) + (6 \times 3) + (2 \times 2) + (0 \times 1)$	=	11.05
(d)	$(129 \times 5) + (102 \times 4) + (4 \times 3) + (2 \times 2) + (3 \times 1)$	=	10.72
(e)	$(2 \times 5) + (6 \times 4) + (13 \times 3) + (63 \times 2) + (156 \times 1)$	=	3.45
(f)	$(4 \times 5) + (7 \times 4) + (4 \times 3) + (45 \times 2) + (170 \times 1)$	=	3.2
(g)	$(114 \times 5) + (115 \times 4) + (9 \times 3) + (0 \times 2) + ((2 \times 1)$	=	10.59
(h)	$(69 \times 5) + (108 \times 4) + (46 \times 3) + (3 \times 2) + (14 \times 1)$	=	9.35
(i)	$(158 \times 5) + (72 \times 4) + (6 \times 3) + (2 \times 2) + (2 \times 2)$	=	11.04

Average mean score

$$\text{Average mean score} = \frac{\text{Total sum of attitude score}}{\text{Total number of respondents}}$$

Most important positive of negative (attitudinal) statements

$$\begin{aligned} \text{The mean score} &= \frac{\sum fxi}{N} \\ &= \frac{5+4+3+2+1}{5} \end{aligned}$$

Then an arbitrary number of 0.5 was added to 3.0 to obtain 3.5 while 0.5 was subtracted

From 3.0 to obtain 2.5 for negative statements. Hence, the important positive statements were all those from 3.5 and above while the negative statements were those below 3.5 and from table 4.8 the positive statements are:

- ATASP-1 enhances agricultural output (11.38)
- ATASP-1 Improves farmers standard of living (11.07)
- ATASP-1 improves technology transfer to farmers (11.05)
- ATASP-1 helps in alleviating poverty (10.73)
- ATASP-1 helps in farmers capacity building (10.59)
- ATASP-1 helps in providing training to farmers (9.35)
- ATASP-1 enhances better and improved farming techniques (11.04)

While the negative statements are:

- ATASP-1 helps in reducing agricultural losses (3.45)
- ATASP-1 assist farmers gain access to credit (3.20)

The findings of the study in table 3 showed that farmer's perception towards ATASP-1 programme are that: ATASP-1 enhances agricultural output; ATASP-1 improves farmer's standard of living; ATASP-1 improves technology transfer to farmers, it also helps in poverty alleviation, helps in farmers capacity building, provides training to farmers, and enhances better and improved farming techniques for positive statements. While for negative statements, ATASP-does not help in reducing agricultural losses, ATASP-1 does not provide credit facility to farmers.

They generally have good attitude towards ATASP-1. In the case of ATASP-1 does not provide credit to farmers, could be attributed to the factors associated with low income status of the farmers which might lead to loan default, some of the farmers may not have collateral security to guarantee loan security, the bureaucratic processes involved in loan procurement could also be the reason for ATASP-1 not providing loans or not linking farmers to sources of credit facility. On the issue of ATASP-1 assisting farmers in reducing agricultural losses, was that most of the losses farmers were faced with were pre-harvest and post-harvest in nature, some of which may not be averted because some came from pest and weather conditions. Some losses were as a result of use of local processing equipment.

Conscious understanding of farmers towards ATASP-1 varies according to their level of education, years of experience in farming and willingness to accept and adopt new technologies introduced to them. Many farmers easily understand the rationale behind any new innovation and hence accept and adopt the technology. However, many do not easily comprehend the motives behind the introduction of new technologies and hence become skeptical to accept and utilize the new innovations.

This is in line with the findings of Ayatse (2010) that most of the new agricultural policies and programmes in Nigeria enhance technology transfer to farmers and hence, the traditional practices gradually become phased out and replaced with modern and improved technologies. Based on what can be seen in the table, it is true that ATASP-1 enhance better and improved farming techniques through the provision of

improved agro-inputs, training, supervision, monitoring and evaluation of the farmer's performances on farm work. Demonstration plots were sited at strategic location in farmer's communities to achieve this

CONCLUSION

The study examined the perception of farmers on Agricultural Transformation Agenda Support Programme Phase-1 in Promoting Agricultural Extension Service Delivery in Kebbi and Sokoto States, Nigeria. The age distribution, Marital status, household size and farming experiences of the two groups of farmers (participating and non-participating) showed a lot of similarities. However, the farm size of participating farmers especially during ATASP-1 was observed to be generally bigger than those of the non-participating farmers. The main source of information utilized was predominantly ATASP-1 staff, friends and radio, while there was no much regard for contact farmers by the participants than was accorded to ATASP-1 L.G.A. Extension. Statistical analysis showed a lot of difference of the two groups of farmers. ATASP-1 participating farmers had a higher income level and mean output than the non-participating farmers by a wide margin. The study found out that respondents perceived ATASP-1 to have improved their overall agricultural productivity and hence improved standard of living and/or livelihoods

The research study concludes that effective organization of Agricultural extension services by ATASP-1 in the zone could transform traditional Agriculture into a modern one for improved living standards of rural people. The study has also revealed that a mere provision of Agricultural extension service by ATASP-1 may not transform traditional Agriculture without adequate training, monitoring and evaluation provision of improved agro-inputs and frequent supervision of farmers by the coordinating staff and their AEAs

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made on ways to improve the situation.

i. Non-formal education providers should be empowered and the facilitators equipped by ATASP-1 to give education to the rural farmers. This is to increase the knowledge and skills of the farmers before or while receiving the extension services. In this way, the AEAs would have little difficulties in the dissemination of the agricultural technology to farmers.

ii. Quick intervention by government in providing utility vehicles and motorcycles to extension field staff should be made a top priority for the smooth delivery of extension services in the operational zone.

iii. Refresher courses and in-service trainings should be organized regularly by ATASP-1 for the extension field staff without waiting for donors and NGO's to finance them before they are organized. In this way, the AEAs would be equipped with modern knowledge and skills to effectively disseminate improved agricultural technology to farmers.

iv. Timely provision of incentives to extension staff should be encouraged by Federal Ministry of Agriculture and Rural Development (FMARD) and ATASP-1 in order to stimulate and motivate the AEAs to effectively deliver the services needed by them.

v. Extension service providers and FMARD should promote the use of indigenous, participatory and training and visit extension services approaches. This stems from the fact that these approaches possess high degree of farmer's involvement in the extension services Programme and activities so as to make the services timely, relevant and responsive to the farmer's needs. Federal Ministry of Agriculture and Rural Development through ATASP-1 staff should provide more accommodation facilities for all the AEAs in the communities they operate. By so doing, the AEAs would be able to visit their clients at regular intervals and as scheduled.

vi. The government through Federal Ministry of Agriculture and Rural Development should put adequate measures in place to procure and supply the required logistics requested by ATASP-1 coordinating staff for the proper execution of extension programmes and activities. This is needed to help address the problems of shortage of essential logistics needed to ensure mass and intensive extension service delivery.

vii. Various stakeholders including farmers should be involved in planning, decision making and execution of the extension programmes this will encourage full participation and adoption of new technologies.

viii. Monitoring and evaluation of extension programmes should be intensified by ATASP-1 staff so as to encourage effectiveness of the AEAs in the delivery of extension service

REFERENCES

- Adeola, G.G. (2010) *"Agricultural Development Programmes and Food Security in Nigeria (1970-2004)"* in Ogiji, P (ed.) *the Food Basket Myth. Implications for Food Security and Agricultural Reforms in Nigeria*. Makurdi: Aboki Publishers.
- Adeyemi, M.C. (2011). *Delivery of Agricultural Extension Services to Farmers in Developing countries*. Ghana, Green House Publishers. Pp 34-38.
- Annan, (2012). *The Role of Agricultural Extension Services in Agricultural Transformation for Rural Poverty Reduction*. An MSc thesis submitted to the department of architecture and Planning, Kwame Nkrumah University of science and technology Ghana. Pp. 4-7
- Asiabaka, C.C. (2002). *Agricultural Extension: A handbook for developing practitioners*. River State: Molsystem United Services. Pp.53-56
- Ayatse, O.F. and Akura, I.I (2010) *"Agricultural Programmes and Rural Development in Nigeria: A Revisit of Agricultural Programmes in Nigeria between 1999-2007"*. In Egbo, E.A. et al (eds) *Rural and Community Development: Critical Issues and Challenges*. Onitsha: Austino Publishing Company.
- Chigbu, K. C. (2013). *Analysis of Alternative Extension Approaches to Technology Transfer in Developing Countries*. Nsukka, University of Nigeria Press. Pp.14-16
- Dakare, R.M. (2014) *"The Effects of Agricultural and Rural Development Policies in*

- Nigeria” in Ojiji, P. (ed.) *the Food Basket Myth: Implications for Food Security and Agricultural Reforms in Nigeria*. Makurdi: Aboki Publishers. Pp.52
- Daramola, A.S. et al (2013) *Agricultural Export Potentials in Nigeria*. In Colier, P and Pattillo, C (Ed) *“Economic Policy Options for a Prosperous Nigeria*. Ibadan: Palgrave Macmillan Publishers. Pp.20-23
- Ekpo, A.H. and Egwaikhide, F.O. (2004). “Export and Economic Growth: A Reconsideration of the Evidence”. *Journal of Economics and Management Vol 2, No. 2, Pp. 57-73*.
- Federal Government of Nigeria (FGN), (2011). National Economic Empowerment and Development Strategy (NEEDS), National Planning Commission, Abuja, Nigeria.
- Federal Ministry of Agriculture and Rural Development (FMARD), (2011). National Fadama II Project, Abuja, Nigeria.Pp.10
- Iwuchukwu, J.C. and Igbokwe, E.M. (2012).Strategies for Achieving Policy Sustainability in Nigeria. *Journal of Law, policy and Globalization*. Vol.5, (1) Pp. 20-21.
- Koyeikan, M.J. (2011). “Issues for Agricultural Extension Policy in Nigeria”. *Journal of Agricultural Extension*. Vol 12 (2) Pp.42-47
- National Population Commission (NPC), (2006).Abuja, National Population Census.Pp.21
- Obasi, I, N. and Oguche, D. (2011). Innovative Programmes in Rural Development: An *Evaluation of the Better life Programme using the APBs framework*. In: Eboh EC, C.U. and Ayichi D. (eds.) *Rural Development in Nigeria: Concepts, Processes, and Prospects*. Enugu: Auto Century publishing company. Pp.73 – 85.
- Ogen, O. (2004). “Agricultural and Economic Development in Malaysia. A Viable Model for Nigeria”. *Journal of Economics and Finance Vol 6 (1) Pp.34-36*.
- Olatunji, S.O. (2014), Monitoring and Evaluation of Agricultural Extension Programmes. In; Nwachukwu I. and Onuekwusi G. (Eds). *Agricultural Extension and Rural Sociology*. Enugu: Snap Publishing Press Ltd.Pp.51-52.
- Sokoto State Government (2006).National Population Census. Abuja Nigeria.Pp.34