Farmers' Perception of Effectiveness of Radio Programmes in Promoting *Fadama* Agricultural Policy in Lavun Local Government Area, Niger State

AGBOOLA, Abdulhameed Kayode[1] and KOLO, Muhammad Idris[1]

[1]Department of Information and Media Technology, School of Information and Communication Technology, Federal University of Technology, Minna
a.agboola@futminna.edu.ng

Abstract

This study has investigated Farmers' perception of effectiveness of radio programmes in promoting Fadama agricultural policy amongst farmers in Chanchaga community in Lavun local government area of Niger State. The study used self-developed survey questionnaire to collect data from 109 Fadama beneficiaries in Lavun Local Governement Area of the State. The respondents were asked in the questionnaire as to whether they have a radio transistor of their own, listened and following the Fadama extension programme on the radio. The response rate was 95%. Overall findings show that the majority 91% respondents owned and listened to Fadama programmes on radio, while 68% of the respondents claimed that the programme is very important to them, whereas 83% of the respondents declared that the programme has improved their knowledge in farming. Also, 84% of the respondents said that the programme has been effective so far. The study concluded that radio is an essential channel in promoting agricultural development because it has been able to disseminate information on new technologies on farming, livestock and fishery among others. Also, information gets to the people at the grassroots and rural communities. Finally, the study recommends that number of weekly broadcast of Fadama programmes radio stations should be increased, at least twice in a week and that the Federal Government should create funds to sustain the Fadama programmes and the radio programmes used to disseminate the Fadama Agricultural extension services.

Keywords: Agriculture, agricultural extension, community radio, *fadama* and farmer.

Introduction

The world over radio has been identified and certified as the most popular and commonly used medium of mass communication to disseminate development information to rural communities. Radio is the most reliable communication medium which covers a broader area and can reach huge number of audiences. As a medium of mass communication, radio is cost effective, accessible, reliable, affordable, and portable in terms of transmission and portability. It is a transmitting channel with the ability to reach diverse people using different languages. Radio broadcasting was first introduced to Nigeria in 1932 as a relay system of the British Broadcasting Service (Sharma, 2008).

However, radio can be used to perform various functions such as educating the masses on dominant issues of socializing, entertaining as well as informing them through surveillance of government policies and activities concerning their well-being. The radio can also function as a medium of ensuring peaceful co-existence and promoting culture, various institutions and national subdivisions such as the agricultural sector (Baran, 2009).

Radio broadcast is fast and reaches out simultaneously to a larger audience. Regular broadcast of agricultural programmes on radio provides important information on new and modern farming methods to farmers. As the farmers take delivery of the new and modern farming techniques on radio and by applying these new techniques, gradually they bring positive changes in farming methods (Ekoja, 2003).

Radio can be a useful medium to educate farmers if it appeals to them with programmes having contemporary agricultural technologies designed and broadcast in their local dialect. However, it is important for farmers to comprehend the programmes and use the knowledge correctly (Mohammad and Hasbullah, 2010). Radio can provide vital information on agricultural practices. As rural farmers participate in radio programmes on modern agricultural technologies, they turn out to be more effective when they apply the information. Nakabugu (2001) states that radio enable farmers' opportunities to work together and interact with related establishments or authorities (extension workers, crop scientists, animal specialists, etc) through radio programme types such as talk shows, discussions, phone-in and on the spot broadcast.

Fadama Programme: A Synoptic Review

Fadama stands for promoting sustainable agriculture and poverty reduction through empowerment of famers in Nigeria. *Fadama* is a Hausa name for irrigable land commonly along major river systems especially low lying plains under laid by shallow aquifers. According to Umar (2012) it is called *Fadama* because of its ability to preserve water, ensure prosperous grazing land which provides propitious agro ecological condition even in the dry season. *Fadama* provides advantages for Nigeria farmers in the production of assortment of fresh and process lofty values of crops. In addition, serves as source of water for livestock during dry season. The Babangida administration in 1993 introduced the earliest National *Fadama* project (*Fadama* 1) to encourage improved irrigation technology under World Bank financing. It was designed to cover six states (Niger, Adamawa, Jigawa, Kebbi, Oyo and FCT).

The major objectives of *Fadama* project is to improve the living condition of the people, reduce poverty, contribute to food security, boost agricultural production, add value for sustainable food production among small holders in rural areas. The government and NGOs have also adopted the instrument of mass media to promote rural community participation and with the ability of radio to reach diverse people, using different languages and because it is portable and easily carried about, less expensive, invulnerable to electricity and it has been adopted as a better media of achieving this aim, thus, this project seeks to ascertain the effectiveness of radio programmes in the promotion of *Fadama* Agricultural Policy in Rural Areas and its objectives is to see how radio has effectively influence people to participate in this programme.

As a very versatile medium, radio has been used in the promotion of various rural development policies such as health issues, agriculture and economic issues such as the National Health Insurance Scheme (NHIS), Sensitization of Local People on Malaria, Polio Eradication, Directorate for Food Road and Rural Infrastructure (DFRRI), National Agricultural Land Development Authority (NALDA) and Local Economic Empowerment and Development Strategies (LEED). All these laudable plans, strategy and policy were attempt to attain rural development in Nigeria, hence, all these programmes were disseminated through the radio.

International organizations like Food and Agricultural Organization (FAO), United Nations Children's Fund (UNICEF) and United Nations Educational Scientific Cultural Organization (UNESCO) have been using radio as a communication vehicle in relevant fields since 1960 to enhance development (Chapman, 2003). Over the past few years in Nigeria, Agriculture extension approaches and performances have been changing. Such changes are being determined on several factors, which include policy changes in politics, involvement of Non-Governmental Organizations in financing Agricultural development programmes that grew from Agricultural projects funded by World Bank. In 1994, the World Bank project began with the main purpose of ensuring increase in food production by attaining food sufficiency and enhancing food security.

However, Nwanchukwu and Ezeh (2007) said the current *Fadama* Project was bestowing advisory services to farmers. *Fadama* project is a World Bank assisted project aimed at reducing poverty among developing nations through the promotion of agricultural practices. It is championed by the Federal Government of Nigeria to reduce unemployment and ensure availability of food to sustained citizens through empowerment of farmers with proper training and provision of equipment to boost agricultural development in Nigeria and other developing nations across Africa. This study delves to probe on the perception of radio programmes in promoting *Fadama* agricultural policy amongst farmers in Chanchaga Community in Lavun Local Government Area, Niger State.

However, Chapman (2003) highlighted that the potency of radio as an extension instrument is extensively looked upon to slouch in its capability to reach uneducated farmers, provide them with appropriate information connecting all phases involved in agricultural production in the language they comprehend. The emphasis is that, radio as a device for agricultural growth and rural development should be able to bring positive changes in the life of the farmers by providing valuable information in the local languages spoken by the people in the community.

However, radio being the most popular gadget used for information dissemination and virtually every farmer has access to it, yet the use of appropriate local languages to disseminate information is still not completely realized because most of the farmers in Chanchaga community area are not literate and they commonly speak the local Nupe language, but barely speak little or no English language at all. It is against this backdrop that this study aims to investigate on farmers' perceptions of effectiveness of radio programmes in promoting *Fadama* agricultural policy in Chanchaga Community in Lavun Local Government Area, Niger State.

Therefore, the specific objectives are:

i. To determine whether radio disseminates programmes on *Fadama* project in Niger State.
ii. To determine the sources of farmers' awareness on *Fadama* programme in Niger State.
iii. To investigate the effectiveness of radio in disseminating information on *Fadama* programme to the farmers.
iv. To find out about the benefits of *Fadama* programme on farmers in Nigeria.

Significance of the Study

Several studies have been conducted on the effectiveness of radio as a medium of passing information and listener's perception of this information. This study will reveal the effectiveness of radio programme in promoting agricultural policy in rural areas in Niger State and Nigeria in general. This study will also provide the communication gap between the government and farmers in the rural settlement. Thus, it will also examine the use of radio as a communication tool in accessing the global market.

Theoretical Framework

This study is anchored on Diffusion of Innovation Theory as first projected by Rogers in the early 1960s. It is explained as the process in which an innovation is conveyed by means of selected channels over time amongst members within a given community. The word 'Innovation' refers to a new concept, technique or practice while the word 'Diffusion' refers to the process of expanding an idea within a target group. Rogers further states that diffusion is a social type of communication process, in that messages transmitted are intended to convey new ideas, provide information and promote social change. The key elements of diffusion process include the innovation communicated through a channel over a period of time and among members of a given social system. For an individual of group of people to adopt new innovations, they have to be conscious of various stages to include awareness stage, influence stage, choice stage, endorsement stage and execution stage (Daramola, 2003). The theory originated from Law University, USA in 1943, is based in the assumption that innovation could either spread or diffuse (Daramola, 2003).

Daramola (2003, p.65) defines diffusion as "a process by which new ideas are communicated to members of a social system." These include ideas, practice, behaviours, attitude or knowledge to be diffused to members of the social system. The term diffusion in the context of development and underdevelopment is viewed as the process by which an idea or innovation is communicated through certain channels (Onabajo, 2008). In fact, Diffusion of Innovation is all about the spread of information that is perceived as fresh concepts. It is concerned with whether the ideas are finally adopted or rejected and not just how information is received and passed as stressed by the two step flow (Aina, 2003). It equally addresses what social change the new ideas have caused. Rogers and Shoemaker (1971) defined Social change as "the process by which alteration occurs in the structure and function of a social system" (cited in Aina, 2003, p.190).

According to Edari (1976) as cited in Ogai (2003) the diffusionist theory is used to explain the process through which less privileged societies may attain development. The diffusion of innovation paradigm is the first widely accepted modal in terms of agricultural development. The theory maintains that the media have crucial roles to play in the process of transmission of innovations, because they (media) create awareness among a large number of people at the same time. Diffusion theory lays emphasis on how people process and accept information.

The theory is useful for explaining how *Fadama* project is an idea initiated by the Federal Government of Nigeria and as such the effect of the idea depends on how the target audience (rural farmers) conceived and put to use these ideas, hence, the diffusion theory is a frame work towards ensuring the effectiveness of radio programmes in promoting *Fadama* agricultural policy in rural areas especially the farmers who need to know how to use the various new farming technologies

brought to them. They need to understand how the technologies can help them improve their farming which would lead to improvement in their lives, the need to understand government intention if any meaningful thing could be achieved from the idea. This solely depends on how the government can navigate their ways in the minds of the people by explaining in clear terms the different new ideas brought by *Fadama* project through the use of radio channel.

Concept of Fadama Agricultural Extension Programme

Agricultural extension approaches and performances in Nigeria have been changing over and over in recent years. "Several factors such as political policies, changes in economic policies, involvement of Non-governmental organizations in funding Agricultural programmes among others are determinants in offering agric extension services" (Oladele 2004, p.6). At present in Nigeria, advisory services are mostly made available by Agricultural Development Programme which developed from the project financed by World Bank since 1994. With significant successes recorded in improved agricultural practices in 1995, Federal government approved its approach thereby integrated it into new Agricultural development programme. Activities of the ADP are mostly cared for by Federal and State Government while provision of advisory functions remained within Agric extension workers (Oladele, 2004).

The Agricultural Development Programme has sustained the utilization of traditionally determined approach characterized by poor financing which is less effective. This weakness has likely narrowed the impact of ADP on Agricultural practices and development of rural areas. Despite the short comings, NGOs kept offering advisory functions and funding agricultural development services. In Nigeria, the Agricultural sector has contributed immensely to the growth of the economy than other sectors after oil. Agricultural production contributes about 40% of the Nigeria's Gross Domestic Product; employs about 65% of the total population. Obtainable data indicates that in 1997, there was a boost in food production from 54.76million grains to 57.70 million grains in 2001. There was modest growth rate from 4.25% in 1997 to 4.5% in 1999 and 4.7% in 2001 (Ozor, 2009). Thus, agricultural sector hosts a challenge in sustaining the boost in agricultural production by means of eradicating the pragmatic shortfall.

However, Adeyemi, Atsu, Ndagi and Aliyu (2007) reported that, Nigeria anticipated 69.9million hectares of land for cultivation, about 39.2million under permanent pasture with another 2.8million for cultivation every year, which entails a lofty cropping power with reverence to fertile soil. Forestry represents 26million hectares while produce contribute about 27% of the Gross Domestic Product, 3.3 % for livestock. Cocoa which contributes less than 0.5 % to the agricultural Gross Domestic Product is the major farm produce for export. Rural communities in Nigeria are split into seven ecological regions, the semi-arid, found in northern region, the savannah, found in northern and middle region, mangrove in Niger Delta, fresh water swamp in Niger Delta and low land rain forest found in the south. The agro ecological setting: (i). the traditional production system, which consists of soil holding not more than a hector with variety of food crops planted mainly for consumption usually found in all parts of Nigeria, and (ii). the enhanced irrigation production system, which encompasses advanced *Fadama* technologies, which make use of water logged area of crops and livestock rearing, as well mechanized and large scale commercial irrigation farming (Adeyemi *et al*, 2007).

Non-Agricultural sectors also play noteworthy part in rural source of revenue, which accounts for about half of rural household's total income that is they achieve a huge income from other portions rural activities, meaning they are engaged in small scale ventures such as manufacturing farm equipment/tools, buying and selling, handicrafts, transportations, food processing amongst others. The Federal government of Nigeria in October 2001 embraced new agricultural guiding principles to take the place of the one endorsed in 1989 (Adeyemi *et al*, 2007).

As hinted by Umar (2012) *Fadama* is a Hausa name for irrigable land shallow low-lying plains underlay by shallow aquifer found along major river systems, such lands are especially appropriate for irrigation, fish farming and traditional means of providing feed and water for livestock. These plains are located mostly in the northern parts of Nigeria and despite the amorous potential of this land, there have been a partial attempt to develop or utilize it. Thus, it is in the light of these potentials that the Federal Government partnered through support of rural people oriented agricultural growth programme known as *Fadama* Development Programme. In the early 1990s, the *Fadama* programme was designed to promote improved irrigation technology to be funded by the World Bank to encourage simple and low-cost farming system.

Umar (2012) mentioned that the national *Fadama* development project was borne out of the need to ensure all year round agricultural production using available *Fadama* resources in Nigeria. The approach was Community Driven Development (CDD) with prominence on social inclusiveness and empowerment of the rural people to take charge of their development agenda. The project focused on increasing users, sustainable income of *Fadama* users via empowerment in terms of capacity building, advisory services, acquisition of productive assistance and rural infrastructural development. The social impact of the project as contained in *Fadama* project implementation manual is that the project will afford *Fadama* users either groups or individuals, the practical or technical help and advisory services in enterprise development, sourcing and management of funds, in that way assisting the beneficiaries in increasing their productivity, open and generate more avenues to increase income.

To facilitate the training of anticipated 12,000 resource users in different skills, 522 staff of Agricultural development programme as well as local government field staff need to be trained in Community Driven Development approach. The component of the project that supports infrastructural development seeks to tackle the problems of 180km of rural road to be built and rehabilitated to ease movement of goods and services by rural people. This would result to development which will facilitate beneficiary's approach to social services, reduce labour in transporting essential farm produce to and from the markets. The construction of 750 boreholes would aid and control the water bearing rock (aquifer), by this, means guarantee of sustainable quality water supply. Also, it will provide enhanced public facilities to include safe-drinking water, building of drainages, toilet, advanced waste-disposal system at market places, by this means improving health values, reduction of water-borne disease and low morbidity rate with better labour productivity for the beneficiary's economic actions.

The acceptance of the *Fadama* technologies by farmers enabled them to increase production by more than 300%. Assessment of the *Fadama* 1 project shows that the understanding of the project reimbursements was held back as a result of a number of short comings in the design and execution of the project. These short comings include (a) Lack of participation from project client during project preparation hence it was restricted to crop production, paying no attention to

value addition of processing and marketing activities of the downstream. (b) Ignoring *Fadama* Resources users with the government satisfaction of its achievement in the *Fadama* I project (c) Its approach to ADP and the support in expanding the scope of successes of *Fadama* 1 by International Development Association of the World Bank. This idea gave birth to *Fadama* II project (Ozor, 2009, p.32).

Following the successful implementation of *Fadama* I project, *Fadama* II was initiated as a follow-up around 1993-1999. In 2004 *Fadama* II was introduced and implemented in Adamawa, Taraba, Bauchi, Gombe, Kaduna, Kebbi, Niger, Lagos, Ogun, Oyo and Imo States. It employed the instrument of Community Driven Development (CDD) approach.

Adeyemi *et al* (2007) noted that "it is a bottom-up tactic, which is a contradiction of top-bottom tactic employed in *Fadama* 1 project." In 2003 according to World Bank, the main objectives of *Fadama* II project include: (a) the provision of marketing infrastructure, improving mechanisms of conflicts resolution, creation of rural non-farm enterprises and (b) sustainable boost of beneficiaries' income by at least 20 % and cheering participation. The basis of community base plan is the vigorous participation of the community in the project design and execution.

Mustapha (2004) stated that the non-participation of the beneficiaries of the projects in the design and implementation can head to bad projects plan, less cost effective and untimely delivery of inputs and equitable distribution of project reimbursement. In order to address problems with respect to beneficiary's participation in *Fadama* II project, the determinant and phases of project development need to be understood. Also, in upgrading more extension services in developing nations, free approach activities could be adopted. 10% of the cost of the advisory services was contributed by *Fadama* II; the experience from *Fadama* II in implementation of a user free demand driven method is likely to serve as a high-quality study for government in designing policies for puting into practice more extension services in Nigeria including other developing nations.

The *Fadama* II project employed actions are demand driven advisory; the beneficiaries considered the requisites that are of interest to the successful achievement of their associate projects. The advisory services were made available through public and private services, 10% of the cost was paid by the beneficiaries while the project paid 90% of the cost. Emphasis on pluralistic advisory services in *Fadama* II project provided a perfect base for the sustainability of the service and the associate project.

The early successful World Bank assisted projects provided accumulative impacts, which attest to the heftiness of small scale and the farmers based approach to *Fadama* growth in an environmentally responsive manner with intent to sustainably add to the income of *Fadama* clients, the *Fadama* III project was introduced at the end of the *Fadama* II project. It aims to assist in reducing rural poverty, boost food security as well contributes to the success of the Millennium Development Goals (MDGs). A secondary objective of the project is conflict reduction which would be affected through the local development plans when the strategy to be adopted is within the positive list of activities admissible in the project. The *Fadama* III project ended in 2015 and *Fadama* IV Additional Financing is ongoing.

Overtime, since the inception of *Fadama* project, the government has been adopting different strategies in encouraging publics to participate in the project. This public especially the

rural dwellers who are the primary target needs to be well informed and educated on the value and importance of the project and one of the strategy used by the government is the mass media and the radio broadcast medium in particular.

According to Miller (1998) "radio is a medium of communication can be listened to at one's privacy, either at home, car, office or room and it is habitually the preferred choice for those in search of information on culturally taboo topics such as HIV/AIDs or STDs." It is a formidable tool for sensitization and awareness creation including public mobilization, such as, the *Fadama* project. The *Fadama* project is a community based project which requires a great volume of awareness and sensitization from the initiator to the target audience who are mostly local residents. The Federal government in recent times has adopted different strategies to bringing proper awareness to the public and mobilizing them to key into the project and the radio medium has not been left out. The first *Fadama* programme on radio appeared in 1992.

The *Fadama* radio programmes was meant to empower and encourage rural famers to participate in decision making process necessary for them to take charge of their cultural, economic and social environment to enable them play active roles in developmental activities.

As observed by Lele (2003) it is obvious that development involves change and this comes first from the attitude of the people who are directly affected by the development. To achieve developmental goals, there must be basic changes in how farmers approach agricultural productions and the pace at which they adopt new farming practices and technologies, in achieving this change, farmers in rural communities need to be getting adequate information on the significance of adopting the fresh *Fadama* practice. Attempt by extension workers/staff via demonstrations in farms as well as working with rural communities shall not be sufficient to bring about the desired change in agricultural attitude. Thus, to compliment the efforts of extension workers, radio has regularly been used. Government agencies have consistently used the radio medium to organize programmes and advertorial center on *Fadama* awareness and call to participation by the public. These programmes have been ongoing overtime, with different *Fadama* and agricultural experts featuring in some to give proper orientation on the project. Government through the Federal Ministry of Agriculture also uses the radio channel to diverge information to the *Fadama* users and beneficiaries because radio has the power to mobilize rural communities by using local languages, structuring it in the way and manner that fits each community thereby transcending the challenges of illiteracy, it also provide maximum space and time for programme agent to educate the farmers more, hence purchase of time and space is cheaper compared to the television and other means of communication. However, radio is available to a lot of people especially in the rural areas because of it portability and cheapness.

Research Design

The population under study is beneficiaries of *Fadama* project in Chanchaga Community of Lavun Local Government Area of Niger State. According to records from Niger State *Fadama* Coordinating Office, Minna, the total number of beneficiaries is 109. The researcher adopted judgmental technique because of the nature of the study, the *Fadama* users were selected because they have better judgment on the effectiveness of radio broadcast on the *Fadama*project. Sample size for the study consists of the entire population of *Fadama* beneficiaries in Chanchaga Community of Lavun Local Government Area, which is 109, thus, a sample of 109 was selected for the study.

The study used a survey questionnaire to collect data for the study. The instrument was self-administered to 109 *Fadama* beneficiaries and the data that was collected was analysed using SPSS. A self-administration of questionnaire allows a researcher to have personal contact with the respondents who are averagely educated; they can read and understand the questionnaire. However, wherever the respondents faced difficulties in understanding any statement in the questionnaire the research took the opportunity to explain to them in their local language of Nupe.

Therefore, out of the 109 questionnaire that were distributed, only 104 respondents were able to return a well-completed questionnaire back to the researchers, while five of the respondents were preoccupied with some other engagement that prevented them from returning the completed questionnaire.

Response Fraction = $\frac{Sr \times 100}{Ss-r1+r2}$

$\frac{104 \times 100}{109 -0+0}$

Response Rate = 95%

Result of the Findings

Table 1: Demographic Characteristics of the Respondents

Item Responses	Frequency	Percentage (%)
Sex		
Male	89	86
Female	15	14
Age		
25-30	25	24.04
30-35	46	44.23
35 and above	33	31.73
Marital Status		
Married	74	71
Single	30	29
Total	**104**	**100**

Data in Table 1 shows that out of the 104 questionnaires collected, 86% of respondents were males, while 14% of the respondents were females. The Table indicates that 44.23% of respondents were within the age of 30-35years and 31.73% of the respondents are aged between 35years and above respectively. Finally, the Table reveals that 71% of respondents are married, while 29% are single.

Table 2: Listening to *Fadama* Programmes on Radio and its Benefits

Item Question	Yes	No	Total
Are you a beneficiary of *Fadama*?	101(97%)	3(3%)	104
Have you ever listened to *Fadama* Programmes on Radio?	95(91%)	9(9%)	104

Table 2 shows that 97% of the respondents are beneficiaries of *Fadama* programmes while only 3% were not beneficiaries. Also, the Table 2 shows that 91% of respondents have listened to *Fadama* programmes on radio while 9% said they have not listened to any of the *Fadama* programmes on the radio.

Table 3: If your answer to question 5 (Table 2) is 'YES', identify the type of programmes

Response	Frequency	Percentage (%)
News	8	8
Documentary	11	11
Talk/Discussion	66	63
Interview	19	18
Total	**104**	**100**

Table 3 indicates that 63% said Talk/Discussion out of 104 respondents that said YES to questions 5 above, 8 respondents representing 8% said the listened on News, 11 respondents representing 11% said they listened through documentaries and 19 respondents representing 18% said they have listened to the programme on radio through Interview respectively.

Table 4: (Question 7) How important is the programme to you?

Response	Frequency	Percentage (%)
Important	29	28
Very important	71	68
Undecided	4	4
Total	**104**	**100**

According to Table 4 (above), the majority 68% of the respondents said that the programme is very important to them, 29 respondents representing 28% said the programme is important, while 4 respondents representing 4% were undecided to the question.

Table 5: Has the programme improved your knowledge in farming?

Response	Frequency	Percentage (%)
Yes	86	83
No	14	13
Undecided	4	4
Total	**104**	**100**

Table 5 (above) reveals that 83% of the respondents said YES that the programme has improved their knowledge in farming, 14 respondents representing 13% said No, while 4 respondents representing 4% were undecided.

Table 6: If your answer to question 8 above is YES, give reasons.

Response	Frequency	Percentage (%)
I now understand that I can farm any time of the year	53	51
It has helped reduced ignorance of the local farmers	17	16
It has helped reduce the communication gap between government and the *Fadama* Famers	6	6
All of the above	28	27
Total	**104**	**100**

N=104

In term of Table 6 (above), 51% of the respondents said they now understand they can farm throughout the year, while 27% of the respondents chose all of the above are reasons they said YES to question 8 above.

Table 7: How often do you practice what you learn from the programme?

Response	Frequency	Percentage (%)
Very Often	59	57
Often	32	31
Not often	13	12
None of the above	-	-
Total	**104**	**100**

From the result obtained in Table 7 (above), 57% of the respondents said they practice what they learned from the programme very often, 32 respondents representing 31% practice often, while 13 respondents representing 12% said that they do not practice what they learned.

Table 8: Do you think the programme has been effective so far?

Response	Frequency	Percentage (%)
Yes	87	84
No	17	16
Total	**104**	**100**

According to Table 8, 84% of the respondents said that the programme has been effective so far, while 17 respondents representing 16% said No that the programme has not been effective.

Table 9: Reasons Given by Respondents for the Favorableness of *Fadama* Radio Programmes

		Freq.	%
Questions:	**If your answer to question 11 No, identify the reason(s)**		
Responses:	It has helped in educating more in farming	17	16
	Provided technical knowledge in *Fadama* programmes	9	9
	It enlightened farmers on irrigation farming	42	40
	All of the above	36	35
Questions:	**Identify ways in which these radio programmes can be made more effective**		
Responses:	Improve the local dialect used for the programme	65	63
	The programmes must be more focused of the *Fadama* Farming	10	9
	Endeavour to use more current information of *Fadama* Farming	8	8
	All of the above	21	20
Questions:	**Identify ways in which the *Fadama* programmes can be made more effective**		
Responses:	Intensify enlightenment campaign	26	25
	Government officials should implement *Fadama* Farming with more sincerity	18	17
	Introduction of *Fadama* Programmes to more local government areas and Communities	41	40
	All of the above	19	18
	Total	**104**	**100**

According to Table 9, the majority 40% of the respondents gave the reason that it has enlightened them on irrigation farming, while 35% of the respondents said that all of the above options are reasons the programme is more effective. Additionally, Table 9 (above) shows that the

majority 59% of the respondents said it is because the language used is not understood by all and that is why they do not think that the programme has been effective so far, while 26% of the respondents said all the reasons above are why the programme is not effective.

Also, Table 9 shows that the majority 63% of the respondents said the programme can be made more effective by improving more on the local dialect used for airing the *Fadama* programme on radio, while 20% of the respondents said all the above suggestions are reasons to make these radio programme more effective.

Discussion

The findings revealed that the majority males as indicated in Table 1, also most the *Fadama* beneficiaries are within the ages of 30-35 representing 44.23%, followed by 35 years and above representing 31.73% (Table 1). Table 3 revealed that the majority of the beneficiaries are married. Further analysis showed that, radio programme of *Fadama* project was effective, so far, as many of the beneficiaries who are the respondents attested to the fact: as indicated in Table 5, while the majority 83% of the respondents said that the programme has been effective. This shows that *Fadama* project has helped in promoting sustainable agricultural project in Chanchaga Lavun Local Government Area. This finding is corroborated by Ogai (2003) that the development of the agricultural sector is a major' indicator of a nation's economic development and this development is viewed in terms of mechanization of agricultural food produces, improved seedlings, research improved planting methods and financial assistance of farmers.

Consequently, 16% of the respondents said that it has helped in educating more on farming, 9 respondents representing 9% said it provides technical knowledge on *Fadama*, while 40% said it enlightens farmers on irrigation farming, whereas 35% said it has helped in all of the above listed options. The findings advanced the view of Tripp and Rody (1996) which state that radio programme when used as a promotional and sensitization tool can benefit the weaker rural residents.

Findings also revealed that *Fadama* radio programme has been important to the beneficiaries as it has helped in reducing rural poverty, as farming knowledge of the rural community dwellers are improved, as indicated in Table 4, thus, 28% said the programme is important to them, 68% said the programme is very important to them, while 4% could not decide. However, these findings have supported the various functions radio perform as stated by Baran (2009) that, radio has helped in educating the masses on paramount issues of socialization, entertaining as well as informing people through surveillance of the government policies and activities concerning their wellbeing. Also from the data gathered, 83% said that the programme has improved their knowledge in farming as they have learnt new ideas and processes of farming, thereby it has increased their production rate, hence poverty among them has reduced.

Even, when 13% and 4% think otherwise as shown in Table 5 were undecided, still this finding was corroborated by the observation of Lele (2003) apparently, development involves change and change begins with the attitude the people who are will directly be influenced by the development. Also, observation of Wambugu, Franzel, Cordero and Stewart (2006) states that it is important to understand farmer's cultural practices and this could be achieved through

communication and that inadequate impart of information on agriculture will limit the intended development in agricultural practices.

Furthermore, finding in Table 9 revealed that *Fadama* programme has helped reduce the communication gap between the government and the farmers as both can now convey messages safe via the radio programme without the hitch of travelling through and from longer distances. Hence, this finding is in line with the view of Couch (1997) that observed thus: radio has the ability to transmit quality awareness sensitization to audiences located across different geographical expansion all at a low cost per unit production.

Findings also showed that respondents do practice what they learnt from the radio programme on *Fadama* as 57% of the respondents said they practice very often, while 31% said it often whereas 12% said though they practice what they often learnt from the programme but it is not often as indicated in Table 7. This is what Diffusion Innovation Theory implies: the theory is concerned with the spread of messages and information that are perceived as new idea and whether the idea are finally adopted and put to use. According to Ogai (2003) the diffusion of innovation theory is used to explain the process through which less privileged societies may attain development through adaptation of development idea. The finding revealed that the theory has been effective as adopted for the study.

However, Table 9 displays the responses of the respondents who thinks that radio programmes can be made more effective through improvement on local dialect used for the programme, 63% of the respondents claimed this, while 9% said the programme must be focused on *Fadama* farming, whereas 8% suggested it should endeavour to use more current information on *Fadama* project. Yet, 20% of the respondents said that for the programme to be more effective the whole options (Table 9) should be considered. The finding advanced the suggestion of Aina (2003) that communication should pursue their aims, increase understanding of development problems, build up a spirit in a common effect and enlarge the capacity of men and women to take charge of their development. Here, the radio programme does not only inform and educate the people but also mobilize them to participate effectively in own development.

These respondents believe that the *Fadama* programmes can be made more effective through intensify enlightenment campaigns on *Fadama* project as 25% of the respondents suggested, while 17% of them said government officials should implement *Fadama* farming with more sincerity, whereas 40% suggested that the *Fadama* project be introduced to more local government areas and communities. More so, 18% of the respondents said for it to be more effective, all the options should be considered. This according to Miller (1998) who states that radio is a medium that one can listen to at his/her own solitude irrespective of place and can improve development from that zone using understandable alternative and more concise tune. More so, 97% of the respondents were beneficiaries of *Fadama* project, while 3% were not beneficiaries of *Fadama* project. Finally, 91% of the respondents said that they have listened to *Fadama* programmes programme on radio, while 9% of them said they have not listened to the *Fadama* programme on radio, whereas 8% of the said they listened to News programme, 11% of the respondents said that they listened through Documentaries. More so, 63% of the respondents said that Talk/Discussion programme and 18% said that they have listened to the programme on radio through Interview.

Therefore, from the above findings, after analyzing the data gathered, it can be concluded that radio programmes have been effective thus based on the theoretical framework of the study, the Diffusion of Innovation Theory, has far helped in promoting *Fadama* agricultural project in Chanchaga, Lavun Local Government Area of Niger State which was able to boost sustainable agricultural productivity in the community. Hence, diffusion of new media idea or innovations goes through a predictable sequence of stage. First, the *Fadama*beneficiaries gain knowledge about the new idea they learnt from the programme and form the change agent of the *Fadama* project, secondly, then they weighed the merit of trying, they decided to try it and, finally improvement on that decisions if they still believe that the innovation will be desired thing for them. Majority of the farmers in the *Fadama* project area are at the last stage of diffusion of the new, improved technologies, examples is the legume rotation, technology to improve soil fertility and reduce strange infestation, among others. The *Fadama* beneficiaries are re-assessing and modifying their use of it, while some few of them are rejecting the technologies. Hence, the *Fadama* radio programme should be further improved so as to increase its effectiveness in promoting agricultural policy in rural communities in order to further reduce rural poverty in Niger State and Nigeria as a whole.

Conclusion

The study indicates that radio plays a vital role in boosting agricultural development in the society. It is an essential ingredient in promoting agricultural development because it has been able to disseminate information on new technologies on farming, livestock and fishery among others and also information gets to the people at the grassroots and rural communities. However, the general lack of awareness among farmers in rural areas can be attributed to their level of illiteracy and this contributed to low level of option of agricultural new ideas and technologies. Thus, these problems can be solved through the use of appropriate languages since most of the farmers in these rural communities especially in the area of study are Nupe speaker. This would promote the agricultural sector in the rural community and in the urban settlement.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. That the *Fadama* officials should endeavour to use more current information on the *Fadama* farming techniques.
2. Improvement on the local dialect used for the programmes because the languages are not understood by all especially rural settlers who do not go to school.
3. The extension agents should give proper orientation to the *Fadama* users and implement *Fadama* farming in more societies.
4. The government officials should also intensify enlightenment campaigns in order to introduce the *Fadama* programmes to more local government areas and rural communities.
5. *Fadama* programmes should be broadcast on radio stations at least twice in a week.
6. There should be creation of more funds from the Federal Government for the survival of the *Fadama* programmes and the radio programmes as well.

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