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MEDIA ACCESS AND INFORMATION SOURCE PREFERENCE AMONG RURAL RICE FARMERS IN EKITI STATE

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Abstract

Small-holders farmers reportedly produce over 90% of what millions of Nigerians eat. These farmers live in rural settings with little or no access to basic infrastructures such as communication facilities that could assist in providing adequate information to keep them informed of available programmes, policies and technologies that can improve and increase yields. The nation depends largely on them to achieve its food security and self-sufficiency in food production, hence, the importance of ensuring that they are well informed. Anchored on diffusion of innovation and development media theories, this paper examined access to information and preferred sources of information among rice farmers in Ekiti state. A mixed method research approach combining survey and key informant interviews was adopted. The survey was conducted among Ekiti rural rice farmers, while three executive members of the state's Rice Farmers Association and two extension officers of the state Agricultural Development Programme were participants for key informant interviews. Multistage and purposive sampling were adopted for first and second sets of the population respectively. The study found that, only about one-in-five respondents (21.9%) have regular access to information, with more than half (54%) getting their information from interpersonal communication channels such as extension officers and farmers associations, with 58.6% preferring extension officers to other sources. Respondents identified irregular visits by extension officer as their major challenge to accessing information, hindering information access to majority of respondents. The study thus established the importance of extension officers in disseminating agricultural information, and calls for strengthening agricultural extension service for improved access and dissemination of vital information to rural farmers.

Key Words: Rural Farmers, Extension officers, information source, media access, food security, Sustainable Development Goals (SDGs).

Introduction

Nigeria's population was projected at 211 million in 2021 and is expected to double in 2050. (United Nations Population Fund, [UNFPA], 2020). According to a release on Sustainable Development Goals, by the United Nations Population Funds in June 2020:

> Among the ten largest countries worldwide, Nigeria is growing the most rapidly. The population of Nigeria, currently the world's 7th largest, is projected to surpass that of the United States and become the third-largest country in the world shortly before 2050. (UNFPA, 2020, p. 1)

This poses an enormous challenge for a country that is ravaged by many problems, such as insecurity, inflation, poverty, corruption, unemployment and hunger among others. Nigeria has a poverty rate of 40 per cent with 83 million people living below the poverty line, while unemployment rate stood at 33.3% as of the fourth quarter of 2020 (National Bureau of Statistics {NBS}, 2021). The country has experimented with various development policies and programmes to tackle these problems, topmost among which is food security. (Otaha, 2013; Owolabi, 2019; Tenong & Ngharen, 2017).

Previous programmes and policies introduced at different periods to tackle food insecurity and ensure food sufficiency included Operation Feed the Nation by then Head of State, Olusegun Obasanjo in 1978; Green Revolution of the Shagari Administration in 1980; Back to Land Programme of Muhammadu Buhari's military regime that followed suit in 1983; and the Directorate of Food Roads and Rural Infrastructure (DFRRI) of Ibrahim Babangida of the early 90s, to mention a few. (Tenong & Ngharen, 2017). Almost all of these efforts have

however yielded little or no result. **(**Okodua, 2018; Okuneye & Ayinde, 2011; Tenong, & Ngharen, 2017). Attaining Food security is however critical for combating rising poverty, reducing the incidence of hunger among vulnerably poor members of the society (Ministry of Budget and National Planning, 2017). Hunger is one issue that Stakeholders in the Nigerian Economy have been relentless in addressing. It remains critical due to the growing economic challenges with declining oil revenue and ever rising cost of living.

In 2013, the Nigerian government identified the transformation of the Agricultural sector and diversification of the Nation's economy from 'oil' to agriculture as a way out and launched the 'Agricultural Transformation Agenda' (ATA). (Central Bank of Nigeria [CBN], 2016). The programme, aimed at ensuring that the Nation not only produces enough to feed herself but also exports to increase the nation's external reserves and earn more income to develop the country. Thus, the slogans 'Produce what we eat, and eat what we produce' was initiated. This is further emphasised by the African Development Bank Group (2013);

> The ATA sets out to create over 3.5 million jobs along the value chains of the priority crops of rice, sorghum, cassava, horticulture, cotton, cocoa, oil palm, livestock, fisheries, etc. for Nigeria's teeming youths and women, in particular. (African Development Bank Group (ADBG), 2013, p. 3)

Such attempts at reviving and developing the agricultural sector to ensure food security and achieve further economic growth are very much in line with the second goal of the 17 Sustainable Development Goals (SDGs) set by the United Nations General Assembly in 2015 for the year 2030. The central focus of the goal, 'Zero Hunger' is to 'End Hunger, Achieve Food Security, and Improved Nutrition and Promote Sustainable Agriculture. (United Nations Development Programme [UNDP], 2020). It emphasises the importance of the food and agriculture sector as key to development solutions. According to the Food and Agriculture

Organization (FAO, 2021), specific targets of this goal includes: doubling the agricultural productivity and income of small-scale food producers; ensuring a sustainable food production system and implementing resilient agricultural practices that will increase productivity and production by the year 2030, among others.

The reasons for focusing on Agriculture as the 'best alternative' is not far-fetched. According to the Nigerian Ministry of Budget and National Planning (2017):

> Investments in Agriculture can guarantee food security, have the potential to be a major contributor to job creation, and will save on the foreign exchange required for food imports. Successful harvests will also help to reduce inflation and promote economic diversification. (Ministry of Budget and National Planning, 2017, p. 14)

In Africa, Nigeria is one of the largest producers of food commodities like rice, and one of its biggest consumers on the continent. (Imolehin & Wada, 2000). Rice is a major food items in many households in Nigeria, irrespective of social, economic, tribal, religious or ethnic differences. Rice consumption is prevalent in Nigeria, but not popularly produced in the country, as the gap between production and consumption is very wide, and this has been the problem in many African countries. According to the Coalition for African Rice Development (CARD), an organization established in the year 2008 to respond to the increasing importance of rice production in Africa:

> Amongst staple crops, rice consumption showed a significant increase of approximately 37% during the period 1999-2007, comparatively higher than increases for other crops such as maize (20%), sorghum (21%) and cassava (32%). Whilst production is also on the rise, it has not been able to keep on par with the soaring consumption. Subsequently, this gap has been covered by imports, mainly from Asia, causing substantial strain on the foreign reserves of African countries. (Coalition for African Rice Development [CARD], 2018, p. 1)

This was further buttressed by Adesina who noted Nigeria as a major consumer and importer of rice in Africa, spending over 356 billion naira on rice importation every year (Guardian, 2020). The FAO (2021), also estimated that in 2008, Nigeria produced only two million metric tons of milled rice, while about three million metric tons were imported. Hence, rice production in Nigeria has been unable to meet up with local demand, with experts continuously exploring means to end the problem.

Some of the recent efforts is the Federal Government's Anchor Borrowers Programme (ABP) launched in 2015 (CBN, 2016). The Programme aimed at promoting various commodities such as:

> Cereals (Rice, Maize, Wheat etc.), Cotton, Roots and Tuber (Cassava, Potatoes, Yam, Ginger etc.), Sugarcane, Tree Crops (oil palm, Cocoa, Rubber etc.), Legumes (Soya bean, Sesame seed, Cowpea etc.), Tomato, Livestock (Fish, Poultry, Ruminants etc.), and any other commodities that may be decided upon by the Bank from time to time. (CBN, 2016, p. 6)

With rice as one of the listed commodities under the Anchor Borrowers Programme, some of the objectives include providing rice farmers with both funds and farm inputs to boost rice production, among others. The project saw the birth of various local rice producers such as LAKE rice, jointly produced by Lagos and Kebbi States, Mitros Rice by Ogun State and Ekiti Rice from Ekiti State among others. The Nigerian Government in Abuja on Tuesday 18th January 2022, unveiled what it refers to as the largest Rice Pyramid in Africa to showcase its rice production capacities. At the unveiling of the Central Bank of Nigeria / Rice Farmers Association of Nigeria (RIFAN) Paddy Rice Pyramids, the government revealed that, following the introduction of the Anchor Borrowers Programme (ABP), there has been a significant increase in rice production in Nigeria, from less than four million metric tons as of 2015, to over

7.5 million metric tons yearly. (Onoja, 2022). The Nation is however yet to achieve self-sufficiency, as the local rice production is yet to meet up with its demand. (FAO, 2021).

No doubt, the country still has a lot to do in achieving self-sufficiency in food production and timely access to information on improved agricultural practices could enhance agricultural yield (Donye, 2018; Otaha, 2013). The question is; how can the rural farmers have adequate and timely access to the right information and be empowered with such information to bring about an increase in their farm productivity? This is one major issue of concern to stakeholders which is addressed in this study. Crucially, examining the level of access to information as well as identifying the preferred source of information among these rural farmers, who contribute 90% of the nation's food production, is an imperative task.

Literature review

Using the media of communication to facilitate development has been recognised by communication scholars across the world (Anaeto & Anaeto, 2010; McPhail, 2009; Schramm, 1964; Sparks, 2007; World Bank [WB], 2017). Although the argument is on the level of effectiveness of the media, the consensus is that Mass Media do influence people. According to Williams (2003), the question is ‘What effects do the media have, and to what extent’?

Communication scholars (e.g. Khalid, Ahmed & Mufti, 2015; Choudhury, 2011; Schramm, 1964,) have noted that the media of communication can play major roles in the development of all nations of the world, whether developed, developing and most especially underdeveloped. As McQuail (1987) puts it, where media exert influence, they also cause

change, while Oso (2002) noted that behind almost all works in communication is the assumption that the mass media are powerful agents of social change.

Many believed that the problems and challenges confronting the Third World countries can be minimised if not completely eradicated if the government, policymakers and other stakeholders in the development process will recognise and ensure the inclusion of effective communication in their development programmes, planning and execution (Inuwa, 2007; World Bank, 2002).

Scholars like Rogers (1983), Sosale (2008), Servaes (2008) and United Nations Development Programme (2011) have posited that it is only through the effective use of communication tools that the Third World Countries can move from their state of underdevelopment or developing to the state of developed countries. This was further reaffirmed by McQuail (1987) Development Media Theory, which outlines some roles for the media in facilitating and bringing about the development of the nations where they operate by providing required information that will not only entertain the people, but educate them to be better informed to achieve the desired social change.

The media are useful channels for the dissemination of knowledge. The crucial role communication can play in bringing about the required social change in society cannot be overemphasised, especially when efficiently and effectively put to use. According to the World Bank (2017), the relationship between development and communication is such that when well utilised, can bring about desired change in society:

> A well-conceived, professionally implemented strategic communication program, relating directly to project or reform objectives and bringing an understanding of local political, social, and cultural realities into project

> design, can make the difference between a development initiative's success and failure. (World Bank, 2017, p. 5)

Anaeto and Anaeto (2010) opined that the provision of information and knowledge is one element that can help create conditions and speed up the development of Third World countries. Knowledge and information are essential for people to respond to the opportunities and challenges in their environment. Communication however goes beyond providing necessary information, but also ensuring that the target audience has access to that information, understands it, internalises it and also takes expected actions. (Quarry & Ramirez, 2009; Yahaya, 2008). It is only by this that effective communication could be said to have taken place, and thus, intended missions achieved.

Thus, identifying the preferred sources of information of the target audience and ensuring that they have access to such information is very crucial in the scheme of bringing about necessary change in a society like Nigeria, where most of its populace lives in the rural areas, where the nation's foods come from. This was among the areas of focus at the World Congress on Communication for Development by the Food and Agricultural Organization of the United Nations in 2006 in Rome, Italy, tagged 'Communication for Food Security, Rural Development, and Livelihood Strategies'. (FAO, 2007). There were deliberations on how communication can ensure food security and rural development. The discussions recognised the strategic roles of knowledge, access to information as well as means of communication as some of the approaches needed to achieve these objectives.

In the same vein, eradicating the challenges of hunger by ensuring food security is the second of the seventeen goals of the Sustainable Development Goals (SDGs) set by the United Nations General Assembly in 2015 for the year 2030. According to the UNDP (2020), to

actualise 'Zero Hunger' for food security, the food and agriculture sector offers key development solutions and is central to hunger and poverty eradication. Hence the efforts of stakeholders to increase food production across the globe.

Communication plays an important role in achieving desired change in the scheme of things. Communication scholars, from early scholars like Schramm (1964) to the later ones like McPhail (2009), Oso (2002), Roling (2007) and Sparks (2007) recognised the important role of communication in bringing about the development of a nation. Sharing relevant information with those concerned to enable them make informed decisions and improve the lot of the Agricultural Sector, and ensure national development is the domain of communication, and in particular, the mass media.

Topmost on the list of responsibilities of the media, according to the Development Media theory (McQuail, 1987) is the provision of the right information, to farmers, which will enable them to make decisions that will improve their productivity and subsequently lead to growth in the Agricultural sector. This growth in the agricultural sector can be achieved through the diffusion of innovations. The Diffusion of Innovation theory propounded by Ryan and Gross (1943); and Rogers (1983), centres on provision (diffusing) more ideas, innovations and new technologies to improve the sector to farmers (who are the end-users) so that they can adapt them to enhance productivity which will subsequently transform to National Development. This study thus examined the following research questions:

1. To what extent do Ekiti rural rice farmers have access to information on improved rice cultivation practices?
2. What is/are the preferred source of information on rice cultivation for Ekiti rural rice farmers?

3. What is the perceived influence of Ekiti rural rice farmers' information source on the utilization of such information?
4. What are the challenges of Ekiti rural rice farmers in accessing rice cultivation information?

Methodology

This study adopted the mixed-method approach combining both qualitative and quantitative designs to gather needed data. It combines survey with Key Informant Interviews (KII). For the survey aspect, copies of questionnaire were administered on rural rice farmers in Ekiti state, while Key Informant Interviews were held among Extension Agents of the Agricultural Development Programme office in the state, and three selected members of the State Executive of the umbrella body for the rural Rice Farmers; Rice Farmers Association of Nigeria (RIFAN).

The population for this study was segmented into three groups. The first group comprised rural rice farmers in Ekiti State, the second group comprised Extension Agents under the Agricultural Development Programmes office in charge of information packaging and dissemination for rural rice farmers in the state, while the third group was the Executive members of the Rice Farmers Association in Ekiti State. There is a total of two thousand five hundred (2,500) rural rice farmers spread across Ekiti State based on profiled rice farmers in the database of Rice Farmers Association of Nigeria (RIFAN) Ekiti state (RIFAN Ekiti, 2021). A sample size of 333 farmers was arrived at using the Geopoll and Creative Research System (2022) online sample size calculator.

Using Multistage sampling techniques the study segmented the rural rice farmer's population into the rice growing local government areas spread across the existing zones of the

Ekiti State Agricultural Development Programmes. The state is segmented into three zones under the Agricultural Development Programmes Offices in the state, with one Extension Agents manning each zone, and various Extension Blocks officers working under them in each of the Local Government Areas under the zones.

To select this sample size of 333, Quota sampling procedure under the non-probability sampling method was used to first segment the rural farmers in the state into rice producing local government areas, and then disproportionate stratified sampling under the probability sampling method was adopted to divide the sample size among the local government areas in the State (since no record of specific number of rice farmers in each of this local government was available). Finally, snowball sampling was adopted to finally select respondents who filled the questionnaire for the survey.

For the second and third sets of the population (the Extension Agents and the RIFAN executive members), purposive sampling technique was adopted. Two extension agents of the Agricultural Development Programme offices from the state, as well as the three executive members of the Rice Farmers Association in the state; the Association chairman, its secretary, and its Public Relation Officers were purposively sampled for the study. Respondents from the Key Informant Interview were anonymised using generated code names with EA, numbered one-three used to represent each of the Extension Agents, and RIFAN executive one, two, and three representing each of the participating RIFAN executives.

Findings

This section presents our analysis of the data form the survey, integrated with key excerpts from the Key Informants Interviews. A total number of 333 copies of questionnaires

were administered to rural rice farmers in Ekiti State, and all 333 copies administered were recovered. The findings are presented below.

Table 1: Respondents' Frequency of Access to Information on Rice Cultivation

Frequency of Access	Frequency	Percentage
Occasionally	186	55.9
Always	73	21.9
Often	58	17.4
Rarely	14	4.2
Not at all	2	0.6
Total	**333**	**100.0%**

Source: Field Survey (2022)

Table 1 shows that majority of respondents (55.9%, n=186) reported having occasional access to information on rice farming, while only one-in-five (21.9%, n=73) reported they always have access to information.

Table 2: Respondents' Level of Adequacy of Information on Rice Cultivation

Information Adequacy	Frequency	Percentage
Not Adequate	213	64.0
Adequate	80	24.0
Very Adequate	35	10.5
Don't Know	5	1.5
Total	**333**	**100.0%**

Source: Field Survey (2022)

Majority of respondents, almost two-in three (64%, n=213), in their assessment of the level of adequacy of information on rice cultivation rated the information they often receive as not adequate for their rice cultivation needs. Only about a-third (34.5%, n=115) considered such information as either adequate or very adequate. This perception of inadequacy of information available to rice farmers for optimal cultivation and yield is supported by the extension workers interviewed in the study. They confirmed that the information these farmers get is not adequate especially in view of numerous challenges confronting the extension officers from delivering the

required services to the farmers. According to them, though their state office have some agricultural programmes running on both state television and radio stations, in addition to their own visits to farmers and their farms, the extent of farmers' access to information is not adequate enough for the farmers giving the various challenges preventing effective delivery of information to the farmers. According to one of the Extension Officers from Ekiti State Agricultural Development Programme office:

> I am presently in Gbonyin local government where we have five extensionists. I feel the ratio of the extensions officers to the farm families in Gbonyin is very low. So presently all together, all of us are six in number. And those six I can say is very inadequate because we are having so many farm families in Gbonyin local government. (EA 1)

Table 3: Respondents' Preferred Source of Information on Rice Cultivation

Preferred Source of Information	Frequency	Percentage
Extension Officers	195	58.6
Radio	58	17.4
All of the Above	40	13.0
Farmers' Associations	28	8.4
Friends / Families	5	1.5
Social Media	4	1.2
Television	2	0.6
Newspaper	1	0.3
Others	0	0.0
Total	**333**	**100.0%**

Source: Field Survey (2022)

Results from Table 3 shows that majority of respondents (58.6%; n= 195) mostly preferred extension officers as their source of information on rice farming. Social Media, Television, and Newspapers were the least reported as preferred sources among respondents.

Table 4. : Respondents' Perception on Benefiting from Information Received from Preferred Source

Benefits of Information Received	Frequency	Percentage%
Yes	314	94.3
No	10	3.0
Don't Know	9	2.7
Total	**333**	**100.0%**

Source: Field Survey (2022)

Table 4 shows that majority of the respondents 314 (94.3%, n=314) agreed that information on rice farming received from their preferred source of information is always highly beneficial to them on their farms, while 10 (3.0%, n=10) disagreed and 9 (2.7%, n=9) are not sure if such information offers them benefits or not.

Table 5. : Frequency of Usage of Information on Rice Cultivation from Preferred Source

Frequency of Usage of Information	Frequency	Percent
Always	192	57.7
Often	85	25.5
Occasionally	49	14.7
Rarely	6	1.8
Not at all	1	0.3
Total	**333**	**100.0**

Source: Field Survey (2022)

Table 5 shows that a large majority of respondents (57.7%, n= 192) reported they always use information received with only one respondent claiming not to make use of such information at all. The extension agents interviewed also confirmed wide adoption on promoted practices noting that farmers always accept and adopt many technologies introduced to them by extension agents who usually offer them the opportunity to see the technologies they want to adopt and its performance.

> There is what we call small plots adoption technique, when we are introducing any kind of new technologies to farmers, that we want them to adopt we go to their farms and demonstrate it on a very small portion on their farm. So after sometimes farmers will now be able to see its benefits and at the end of the day, they will not adopt it. (EA 2)

The RIFAN executive members interviewed in the study also confirmed that many of their members do make use of the information received from their preferred source of information on rice cultivation having seen the results, thus easing persuasion and conviction 'yes, they do. Yes, they do. We don't play with our extension officers. We are not happy with the way government is taking care of our extension officers' (RIFAN Executive 1).

Table 6. : Respondents' Challenges in Accessing Information on Rice Cultivation

Challenges	Frequency	Percentage
Irregular visits of extension officers to farms	147	44.1
Lack of rural electrification/constant power interruption	96	28.8
All of the above	33	9.9
Inadequate access to media of information	21	6.3
Inadequate agricultural programmes on air	21	6.3
Language barrier	7	2.1
Inability to read and write (Illiteracy barrier)	4	1.2
Inadequate funds to access media messages	4	1.2
Total	**333**	**100%**

Source: Field Survey (2022)

Table 6 shows that most respondents (44.1%; n=147) see irregular visit of extension officers as their main challenge. Lack of rural electrification/constant power outage was also identified by about 30% (28.8%, n=96) of respondents as another major challenge in accessing information on rice cultivation. Language and literacy barrier, and lack of funds to access media messages, were the least identified barriers among respondents

Discussions

Findings from the study are discussed in the sub-sections below based on the research questions that guided the study.

Access to Information

The study sough to examine the extent to which Ekiti rural rice farmers have access to information on improved rice cultivation practices. This study found that majority of Ekiti rural rice farmers do not have adequate access to information on rice cultivation. Previous findings of farmers' access to information in Nigeria are diverse. While Adetimehin, Okunola and Owolabi (2018), in their study on 'Utilization of Agricultural Information and Knowledge for Improved Production by Rice Farmers in Ondo State' noted a high access to, and utilization of agricultural information and knowledge on improved rice production, Olajide (2011) noted that the volume of information to which farmers (in Iddo district of Oyo State, Nigeria) have access to depends largely on the varieties of information sources they use. Also Obidike (2011) in her study on 'Rural farmers' problems accessing agricultural information' noted that farmers in Nsukka Local government area of Enugu state did have access to agricultural information at high rate, and have thus benefitted from variety of agricultural information in the past.

The lack of access to adequate information by farmers in our study area suggest that these farmers lack the necessary information to enable them take necessary decisions that can impact positively on their cultivation.

Preferred Source of Information on Rice Cultivation

The second research question for the study examined the preferred source of information on rice cultivation among Ekiti rural rice farmers. The findings showed a higher preference for extension officers, distantly followed by radio. Respondents' justification for preferring

extension officers is based on the fact that they enjoy one-on-one interaction with the agents which enable better understanding of issues and gives room for clarification, at minimal cost. Based on these findings, it is clear (from the study) that majority of the rural farmers preferred to get their information on rice cultivation through 'interpersonal communication', mostly from extension officers, and tend to highly believe information gotten from them.

This preference for interpersonal communication agrees with the findings of Babaleye, Asekun-Olarinmoye and Akinwande (2010), which shows that majority of the farmers sampled preferred face to face participatory communication to other forms of communication, in getting their agricultural information. This is further reinforced with findings from Ayinde, Fatigun, Ogunbiyi, Ayinde, and Ambali, (2018), which revealed that majority of Anchor Borrowers' Programme beneficiaries studied got their information about agriculture from agricultural extension agents. This portends good omen for rice cultivation in the country as Babaleye (2022, p. 43) has argued that, 'the failure of food self-sufficiency and food security policies can be reversed if participatory communication with farmers can be adopted and incorporated into the Nigerian agricultural extension systems and implemented with candour'.

There have however been varied perspectives from other related studies. Ronald, Silayo, and Abdalah, (2015) found that majority of the farmers in their study preferred radio and television as their source of agricultural information. Contrary to findings from this study, Ajayi et al (2011), noted that extension services have not been effective in disseminating information to oil palm farmers, hence farmer's reliance on radio and fellow farmers as their source of information.

Hence, while our study suggests preference for extension officers, efforts must be made to also develop other information sources regularly being used by farmers to seek relevant information on improved rice cultivation. Appropriate adoption of development communications channels should be prioritise using a combination of communication channels to adequately disseminate necessary development information to target audience based on their specific peculiarities.

Influence of Information Source on the Utilization of Information

The third research question examined the influence of information source preference on acceptability and utilization of information on rice cultivation by farmers. Findings from this study showed that the preferred source of information by the rural farmers does influence their acceptability and utilization of information received from their preferred source. A large majority of respondents (57.7%, n= 192) agreed that they always make use of information provided by their preferred information source with the preferred source reportedly influencing their acceptability of the message to a very high extent. The findings thus suggest that acceptability and utilization of information by rural farmers in the studied area is greatly influenced by their preferred source of information.

This finding is consistent with that of Saka and Lawal (2009) which affirmed, among others, that frequency of extension contacts is among the 'significant determinants of farmers' decision to adopt improved rice varieties'. This was also corroborated by Adetimehin, et al. (2018) in their study which indicated a significant relationship between farmers' access to extension services and their utilization of agricultural information. This is not surprising when we consider the type of persuasion and convincing methods being adopted by extension officers. According to the ADP officials as well as the extension officers interviewed, the use of

demonstration plots through SPAT (Small Plot Adoption Techniques) is another means through which the ADP subtly persuade and convince the farmers to adopt new systems. This method further put credence to characteristics of an innovation as postulated in Rogers' diffusion of innovation theory. According to Rogers (2003), some of the characteristics of an innovation that determine the rate of its adoption as well as the speed of adoption are trialability and observability; that is, the possibility that an innovation can be experimented on a smaller scale for the would be adopters to observe the results, especially when put side by side with the old methods, tends to facilitate the adoption process for an individual.

Challenges in Accessing Agricultural Information

Our last research questions examined challenges confronting rural farmers in accessing information. Our findings noted that one of the major challenges of rural farmers in accessing agricultural information is lack of frequent visits to their farms by the extension officers, who happened to be their preferred source of information. This was jointly agreed to by both the farmers and the extension officers as the extension officers interviewed also confirmed that due to various challenges such as mobility, insecurity, bad infrastructure as well as shortage of staff, visiting farmers regularly has been a serious problem, thus preventing delivery of messages that could be beneficial to these farmers as at when due. This finding also agreed with that of Ronald et al. (2014) who found inadequate number of extension agents and lack of funds as some of the major challenges constituting barriers to farmers in accessing agricultural information. Kelemu (2017) also identified lack of access to the media of communication as a major barrier.

According to the Ekiti State ADP Programme Manager (Yahyah, Personal Communication, August 24, 2022) 'the ratio of EAs to farmers' families is even less than 1 to 5000 now, far below the FAO standard'. According to him, majority of extension agents recruited over the years have either retired, died, or resigned which has led to a major depletion of human resources in the ADP offices, while issues of lack of funding, training and insecurity among others are also hindering the effective performance of the offices. However, going by our findings that these farmers still prefer getting their information from extension agents, it is imperative that many of these challenges are tackled so that new technologies can get to farmers easily and as at when needed for subsequent increase in production.

Conclusion and Recommendation

This study found that extension officers are the most preferred source of information for rural rice farmers in southwest Nigeria, followed by radio and farmer's associations. These are also the information sources that these farmers have access to, though not adequate enough for their needs due to some challenges preventing frequent visits of these extension officers to farmers and their farms. However, the farmers believe so much in information coming from this source while also their acceptability and usage of information on rice farming depends largely on if the message is coming from their preferred medium, as it provides the opportunity of direct contacts which enables them to not only hear, but see and participate in whatever methods or techniques that are being introduced to them. The irregular visit of the extension agents is the major challenge affecting farmers access to information about rice cultivation and this problem is as a result of different challenges confronting the extension services which findings shows range from issues of mobility, security, and staff strength among others.

Furthermore, the identification of the extension officers as the preferred source of information by the rural farmers and their influence on acceptability and usage of information by these farmers, has been able to reveal that interpersonal communication can combine both roles of the mass media and interpersonal communication in the diffusion process, more so, with the unavailability of the mass media in the rural. Since smallholder farmers contribute about 90% of what the whole nation eat (Ekiti ADP, 2022), reaching these farmers with up to date information on different issues that have to do with their cultivations should be given priority if the objective of food security and self-sufficiency in food production is to be achieved.

There is need for inclusion of communication programme in all agricultural development programmes so that policies and programmes are not only made but effectively communicated to achieve the desired objectives. The extension service system of the ADPs in the various states across the country need to be strengthened by addressing issues like staff strength, staff mobility, their security as well as training in order to maximize opportunities presented by them as rural farmers' preferred information source . Relevant stakeholders also need to improve on provision of information through other channels of communication like radio and television to enable farmers have variety of information sources to choose from.

References

Adetimehin, O., Okunlola, J., & Owolabi, K. (2018). Utilization of agricultural information and knowledge for improved production by rice farmers in Ondo State. *Journal of Rural Social Sciences*, *33(1),* 76-100.

African Development Bank Group. (2013*). Agricultural transformation agenda support program – Phase 1 (ATASP1): strategic environmental and social assessment* (Sesa-Summary). https://www.afdb.org/sites/default/files/documents/environmental-

Ajayi, M., Banmeke, T., & Solomon, O. (2011). Information needs of oil palm farmers in Esan Central Local Government Area of Edo State, Nigeria. *Nigerian Journal of Rural Extension and Development*, *3,* 45–56.

Anaeto, S. & Anaeto M. (2010). *Development communication: Principles and practice*. Stirling-Horden.

Ayinde, O., Fatigun, O., Ogunbiyi, K., Ayinde, K., & Ambali, Y. (2018). *Assessment of central bank intervention on rice production in Kwara State, Nigeria: A case study of anchor borrower's program* [Conference Session]. 30th International Conference of Agricultural Economists. Vancouver.

Babaleye, S. T. (2022). *Participatory agricultural communication with rural farmers: Potentials and panacea for food self-sufficiency and food security in Nigeria* [Inaugural lecture]. Lead City University.

Babaleye, S., Asekun-Olarinmoye, S., & Akinwande, A. (2010). Farmers' communication preference for effective dissemination of agricultural technologies in Borno state, Nigeria. *Babcock Journal of Mass Communication*, *2(2*), 16-32.

Central Bank of Nigeria. (2016). Anchor borrowers' programme guidelines: development finance department. https://www.cbn.gov.ng/out/2017/dfd

Choudhury, P. S. (2011). Media in development communication. *Global Media Journal - Indian Edition. Winter Issue. 2(2)* Kolkata, India: Department of Journalism and Mass Communication, New Alipore College. https://www.caluniv.ac.in/global-mdia-journal/Winter%20Issue%20December%202011%20Commentaries/C-5%20Sen%20Choudhury.pdf

Coalition for African Rice Development. (2018). CARD final review assessment: final report. *Japan International Cooperation Agency (JICA)* Price water house Coopers Aarata LLC. https://riceforafrica.net/wp-content/uploads/2021/09/F

Creative Research System (2022). *The survey system sample size calculator*. https://www.surveysystem.com/sscalc.htm

Donye, A. (2018). Assessment of mass media performance in agricultural information dissemination to rural farmers in girei local government area of Adamawa state. *International Journal of Agricultural Extension and Rural Development*, 6(5), 639-647.

Food and Agricultural Organisation (2021). *Nigeria at a glance.* http://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/

Food and Agricultural Organisation, (2007). *World congress on communication for development: lessons, challenges and the way forward*. The World Bank.

Imolehin, E. & Wada, A. (2000). Meeting the rice production and consumption demands of Nigeria with improved technologies. *International Rice Commission Newsletter* 49, 23-41. FAO.

Inuwa, I. M. (2007). Role of the media in national development. *Proceeding of the 27th Youth Leadership Programme LEAP Africa*. British Council Nigeria. http://www.gamji.com/article6000/NEWS7617.htm

Kelemu, K. (2017). Determinant of farmers access to information about improved wheat varieties: Case of farmers in major wheat growing region of Ethiopia. *International Journal of Research in Agricultural Sciences*. 4(1), 2348-3997

Khalid, M. Z., Ahmed, A., and Mufti, S. (2015). Media and development in society: Continuity and challenges. *IOSR Journal of Humanities and Social Science*

McPhail, T. (2009). *Development communication: reframing the role of the media.* Wiley Blackwell

McQuail, D. (1987). *Mass communication theory*: *An introduction (*3rd ed.). Sage.

Ministry of Budget and National Planning (2017). *Federal Republic of Nigeria; Economic recovery & growth plan 2017-2020*.

National Bureau of Statistics (2021). *2019 Poverty and inequality in Nigeria; Executive Summary.* https://nigerianstat.gov.ng/calendar

Obidike, N. (2011). Rural farmers' problems accessing agricultural information: A case study of Nsukka local government area of Enugu state, Nigeria. *Library Philosophy and Practice.* https://digitalcommons.unl.edu/libphilprac/660/

Okodua, H. (2018). Assessing the impact of rice sector policy reforms on the income mobility of rural households in Nigeria. *The Open Agriculture Journal,* 12, 174-184. https://openagriculturejournal.com/VOLUME/12/PAGE/174/FULLTEXT/

Okuneye, P.A., & Ayinde, I.A. (2011). The Nigerian agricultural policy inadequacy: The way forward. *Nigerian Journal of Agricultural Economics (NJAE),* 2(1), 1-16.

Olajide, B.M. (2011). Assessment of farmers' access to agricultural information on selected food crops in Iddo district of Oyo state. *Journal of Agricultural and Food Information*, 12(3-4), 354-363. https://doi.org/10.1080/10496505.2011.609434

Onoja, B. (Writer), & Yunusa, A. (Director). (2022, March 17). The rice story (Episode 9). [TV Series Episode]. In I. Buba (Executive Producer), *transforming agriculture in Nigeria.* Newage Network.

Oso, L. (2002). Communication theories and development communication. In L. Oso (Ed.), *Communication and development: A reader* (pp.75-96). Jedidiah

Otaha, I.J. (2013). Food insecurity in Nigeria: Way forward. African Research Review *International Multidisplinary Journal,* 7(4), 27-35. http://dx.doi.org/10.4314/afrrev.7i4.2

Owolabi, M. O., (2019). *Insight into agricultural sector and rural development landscape in Nigeria* [Conference Session]. Energy – Agric Nexus for Economic Development conference. Abuja, Nigeria. https://rea.gov.ng/ref-energy-agric-nexus/Owolabi_Insight_into_Agric.pdf

Quarry, W., & Ramirez, R. (2009). *Communication for another development*: *Listening before telling*. Zed.

RIFAN Ekiti, (2021). *Brief on rice farmers association of Nigeria Ekiti state chapter*.

Rogers E. (1983). *Diffusion of innovation* (3rd ed.). Free.

Rogers, E. M (2003). Diffusion of innovation (5th ed.). Free.

Roling, N. (2007). Communication for development in research, extension and education. *In FAO (Ed), Communication and sustainable development:* Proceedings of the 9th UN Roundtable on Communication for Development. Food and Agricultural Organisation.

Ronald, B., Silayo, G., & Abdalah, K. (2015). Preference sources of information used by seaweeds farmers in Unguja, Zanzibar. *International Journal of Academic Library and Information Science,* 3(4), 106-116.

Ryan, B. & Gross, N. (1943). The diffusion of hybrid seed corn in two Iowa communities. *Rural Sociology.* 8, 15-24. https://www.proquest.com/openview/7de2b2276a089fe888071663de12b6a0/1?pq

Schramm, W. (1964). *Mass media and national development; The role of information in developing countries.* Stanford University Press

Servaes, J. (2008). *Communication for development and social change*. Sage

Sosale, S. (2008). The panoptic view: A discourse approach to communication and development. In J. Servaes (Ed.), *Communication for development and social change.* Sage.

Sparks, C. (2007). *Globalization, development and the mass media.* Sage.

Tenong, J. F. & Ngharen, A.Z (2017). *Agricultural practices, policies and programs in Nigeria since 1970: An appraisal.* https://www.academia.edu/43806050/

The Guardian Newspaper. (2020, January) Editorial: Ban on rice import and reality check. *The Guardian Newspaper.* https://m.guardian.ng/opinon

United Nation Development Programme. (2011). *Communication for development: Strengthening the effectiveness of the United Nations.*

United Nation Development Programme. (2020). *The SDGS in action.* https://www.undp.org/sustainable-development

United Nations Population Fund (2020). *Sustainable development goals: 17 goals to transform our world'* [Press Release]. UN Department of Public Information. https://www.un.org/en/development/desa/population/

World Bank, (2017). Strategic communication learning program. Devcom Brochure. www.worldbank.org/develpmentcommunications

Yahaya, M. (2008). *Development communication: lessons from change and social engineering projects.* Kraft.