

Proceedings of the Annual Conference of the Agricultural Extension Society of Nigeria

Number: Twenty-Seventh Annual Conference

Theme: Enhancement of E-Agricultural Extension Systems

Date: 26-28, September 2022

Venue: Nnamdi Azikiwe University Awka

ISSN: 1595 – 1421.

Website: <http://info@ajol.org> .

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Information Seeking Behaviour of Rice Farmers in Anambra State, Nigeria

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<https://dx.doi.org/10.4314/jae.v27i1.3S>

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Abstract

The study assessed the information-seeking behaviour of rice farmers in Anambra State, Nigeria. The multi-stage sampling procedure was adopted in selecting 120 respondents in the area. A structured interview/questionnaire was used for data collection and the data were analysed using frequency, percentage, and mean statistics analysis. Results revealed that 98.3% of the respondents obtained information about agribusiness from their fellow farmers and 96.7% from friends and neighbours. In addition, 34.2% of the respondents preferred information from fellow farmers, while 24.2% preferred information from the radio. Types of information sought by rice farmers on agribusiness were mainly market information and the current price of farm produce (\bar{x} =3.88), new seeds/ improved varieties (\bar{x} =3.80) and, pesticide availability (\bar{x} =3.07). Results also showed that 39.2% of the respondents were aware of the Agricultural Transformation Agenda (ATA) out of which 61.7% got the information from the radio. Whereas 32.5% of the respondents were aware of the Commercial Agricultural Credit scheme, 48.7% of them got the information from the radio, while 27.5% were aware of the Anchor Borrowers' Programme, from which 42.4% got the information from the radio. Both government and nongovernmental organisations should provide farmers with adequate information on different agribusiness policies and initiatives through various sources such as radio and extension agents to enable them to participate and benefit from different programmes designed for farmers for their benefit and that of the country as well.

Keywords: Information-seeking behaviour, rice farmers information sources.

Introduction

Rice is considered a necessity, a staple food, a source of livelihood for many poor (or near-poor) households and an object of considerable cultural and social importance (Mukhopadhyay, 2019). Rice is the main source of food energy and is an important source of protein providing substantial amounts of the recommended nutrient uptake of zinc and niacin (Aremu & Akinwamide, 2018). Apart from rice being used as a source of food, the by-products of rice milling are used for a variety of purposes. Rice bran is the most valuable by-product. The bran, which is a rich source of protein (about 17%) and vitamins (vitamins A and E), is used as cattle feed and poultry feed, rice also contributes a significant share of the national economy through the foreign exchange from its export (Laitonjam, Singh, Yumnam, Kalai, & Meena, 2018).

A continuous increase in rice production is required to meet the demands of the increasing population. To meet the ever-increasing demand for food, because of population growth and improved living standards, world rice production needs to double by 2030 (Zeng, Tian, Qian, Rao, Dong et al., 2017). To increase production, rice farmers need to have up-to-date information on new agricultural technologies and marketing strategies. Agricultural information is useful for farmers because it helps them to overcome their inadequacies in the knowledge of certain basic practices that may include technical, marketing, social, and legal agricultural information, (Acheampong, Frimpong, Adu-Appiah, Asante, and Asante, 2017). Information is important for farmers to sustain and diversify their production, take well-informed decisions on sale activities and negotiate better prices for agricultural products, all of which ultimately contribute to greater market participation and potentially higher incomes (Kayumova, 2017). Information is a powerful tool for empowerment, it takes away ignorance and enables an individual to be enlightened and bold (Ere, 2017)

Information service provision to farmers has been ineffective for the production of varieties of food and, raw materials for the sustenance of the people. The majority of our rural farmers depend on indigenous or local knowledge for improved farming systems. For this reason, adequate information and awareness on agribusiness should be provided for rice farmers in order to meet food security, create employment opportunities, enhance income and improve livelihood because the information is a critical resource in the operation and management of organizations. From ancient time to the present day, information has always been an essential part of growth and development, in every field (Tripathi, Sharma, & Bisaria, 2015).

Information about policies, good agricultural practices, market prices of commodities, current demand of commodities and various useful agriculture schemes are helpful to farmers in reaping good profits (Barh & Balakrishnan, 2017). Farmers need to make efforts to seek agricultural information. Information-seeking behaviour involves a set of actions that a user takes to express information needs, seek information, evaluate and select information and use the information to satisfy their information needs (Tripathi, Sharma, & Bisaria, 2015). Because of the strategic position of rice in the food security and economic development of Nigeria, successive governments have prioritized the rice sub-sector. Several policies and initiatives have

been introduced by the government to increase rice production and market participation of rice farmers. However, lack of access to relevant information will limit farmers from benefitting from these policies and initiatives. The use of diversified information sources will offer a competitive advantage to rice farmers as this will enable them to have access to a variety of production technologies and marketing options. A deliberate effort to seek information is needed by the rice farmers to benefit maximally from these initiatives and policies of the government.

Purpose of the study

The general purpose of the study was to assess the information-seeking behaviour of rice farmers in Anambra State, Nigeria. Specifically, the study sought to ascertain the :

1. sources of information on agribusiness among rice farmers in the area;
2. types of information sought by rice farmers on agribusiness;
3. information-seeking behaviour of rice farmers on agribusiness policies and initiatives;

Methodology

The study was carried out in Anambra state, Nigeria. Anambra is located between Latitudes 5° 45´ and 6°46´ N and Longitude 6°31E´ and 7° 03´E and covers an estimated land area of 4887 km². Anambra State has a tropical climate with annual average temperature and rainfall of 27°C and 1828 mm, respectively, (Nwajinka, Nwanna, and Ogbu, 2019). Anambra State comprises 21 local government areas and four agricultural zones (Onitsha, Aguata, Awka and Anambra) to aid planning and rural development (Obianefo, Nwigwe, Meludu and Anyasie, 2020).

The population for the study constituted rice farmers in village communities in Anambra state. A multi-stage sampling technique was adopted in selecting respondents. In the first stage: two agricultural zones were selected for the study namely Anambra and Awka. Stage two: three blocks were selected from each zone based on their dominance in rice production bringing to a total of six blocks. The selected blocks include: Anambra East, Anyamelum, Awka North, Awka South, Orumba North and Orumba South. Stage three: from each selected block, two circles were randomly selected from each block giving a total of twelve. The selected circles were: Eziagulu otu Aguleri, Enugwu otu Aguleri (Anambra East), Omor, Umumbo (Anyamelum), Awba ofemili, Ugbenu (Akwa North), Isiagu, Nibo (Akwa South), Omogho, Ndikelionwu (Orumba North), Umunze and Ezira (Orumba South). Stage four: from each circle, 10 registered rice farmers with ADP were selected at random bringing to a total of 120 respondents.

To ascertain the sources of information on agribusiness among rice farmers. A list of sources of information such as radio, television, telephone, internet, fellow farmers, friends and neighbours, and extension agents among others were provided. The respondents were required to indicate their sources of information on agribusiness and also indicate their preferred sources of information.

To obtain data on the types of information sought by rice farmers on agribusiness. Respondents were presented with a list of options and were required to indicate their opinion on a four-point Likert-type scale by checking any of the options namely: always =4, occasionally =3, rarely =2 and never =1. These values were added to obtain 10, and further divided by 4 to obtain a mean score of 2.5. Variables with a mean score of 2.5 and above were regarded as the information sought by rice farmers on agribusiness in the area while variables with mean scores less than 2.5 were not regarded as types of information sought by rice farmers on agribusiness.

To determine the information-seeking behaviour of rice farmers on agribusiness policies and initiative, a list of current government policies and initiatives on rice were presented to the respondents. Respondents were asked to indicate the policies and initiatives on rice which they were aware of and to indicate where they sought information on those initiatives from. Some examples of such policies and initiatives include the Agricultural Promotion Policy (APP), Agricultural Transformation Agenda, and Anchor Borrowers Programme among others. Data collected on objectives 1 and 3 were analyzed using percentages while objective 2 data were analyzed using mean scores and standard deviation.

Results and Discussion

Sources of information on agribusiness among rice farmers

Findings in Table 1 show that the majority (98.3%) of the respondents obtained agribusiness information from their fellow farmers, while 96.7% sourced information from their friends and neighbours, and 79.2% used radio as a source of information on agribusiness. From the findings, just about 30% of the respondents obtain information on agribusiness from extension agents. This implies that contact farmers are very important in disseminating agricultural innovation programmes as they aid in disseminating such relevant information to other farmers. This is in line with the findings of Nwaobiala, Alozie and Anusiem, (2019), who reported that fellow farmers who may be Agricultural Development Programme contact farmers play a complementary role in disseminating innovations. Other studies indicated that information-seeking through radio is a very effective medium of disseminating new agricultural innovations and marketing information to farmers (Achaempong et al., 2017).

Table 1 also shows that 34.2% of the respondents preferred information gotten from fellow farmers while 24.2% preferred information from radio, 7.5% preferred information from meetings and only 6.7% preferred information gotten from extension agents. The implication is that most of the respondents relied on interpersonal sources in accessing agricultural information, probably because of their regular availability. Achiampong et. al. (2017) also found that farmers preferred fellow farmers, family members, radio, extension and personal experience as sources of agricultural information.

Table 1: Sources of information on agribusiness among rice farmers

Sources of information		Source Used (%)	Source Preferred (%)
Radio		79.2	24.2
Television		41.7	4.2
Telephone and mobile phone		70.8	3.3
Internet		11.7	3.3
Fellow farmers		98.3	34.2
Friends and neighbours		96.7	3.3
Input dealers		53.3	
Research institutions		18.3	7.5
NGOs		1.7	
Extension agents		30.0	6.7
Meetings		57.5	7.5
Libraries		1.7	
Magazines		12.5	
Bill boards/ posters		4.2	
Leaflet		16.7	
Interaction with leaders	15	12.5	0.8
Films/ slide presentation	4	3.3	
Previous experience	85	70.8	2.5
Conference and workshops	4	3.3	

Source: field survey, 2021

Types of Information Sought by Rice Farmers on agribusiness

Results in Table 2 show the types of information sought by rice farmers on agribusiness in the area. From the table market information and the current price of farm produce (\bar{x} =3.88), new seeds/ improved varieties (\bar{x} =3.80), and pesticide availability (\bar{x} =3.07). The findings imply that the farmers would need more frequent and adequate information on the areas listed above. Increased access to such information can increase rice farmers' production, income and market value of their produce. However, the farmers were not seeking information on fertilizer application, weed control and management, weather condition, and environmental hazards among others. This implies that rice farmers in the area could be engaging in practices that are not environmentally safe. This result is in contrast to the findings of Ume, Okoro, Ben- Chukwu, Nnaji, (2020), that farmers sourced for information on fertilization, pesticide application, weed control and disease control.

Table 2: Types of information sought by rice farmers on agribusiness

Information Components	Mean	Standard deviation
Pesticide availability	3.07	0.58
Fertilizer application techniques	2.36	0.896
Availability of Improved farm implement/machinery	3.05	0.995
Weed control and management	2.33	0.610
Pest management	2.85	0.545
Market information	3.88	0.441
Weather condition	1.73	0.730
Agricultural credit/ loan	2.72	2.062
New seeds/ improved varieties	3.80	0.528
Storage methods	1.89	0.754
Planting methods	1.80	0.630
Disease and pest control	2.81	0.507
Pesticide application	2.65	0.630
Cultivable lands	2.51	1.061
State institution supports	2.97	0.733
New farm technology or innovation	3.02	0.825
Environmental hazard	1.60	0.824
Current price of farm produce	3.88	0.505
Current policies on rice	1.34	0.655
Information on flood	1.95	1.060
Land preparation techniques	1.46	0.721
Irrigation	1.20	0.661
Method of harvesting	1.42	0.773
Method of Processing	1.50	0.745
Information on nurseries	1.37	0.595
Cultural practices	1.48	0.661
Information on soil fertility	2.18	0.876
Training producers	2.63	0.952
Taste and nutritional qualities	1.19	0.572

Source: field survey, 2021

Information seeking behaviour of rice farmers on agribusiness policies and initiative

Table 3 shows that 39.2% of the respondents were aware of Agricultural Transformation Agenda (ATA). Out of this, 61.7% got the information from radio, 19.1% got the information from extension, and 14.9% got the information on ATA from fellow farmers. Also, 32.5% of the respondents were aware of the Commercial Agricultural Credit Scheme. Out of this, 48.7% got the information from the radio, 33.3% from extension agents, and 12.8% got the information from fellow farmers. On the other hand, 27.5% of the respondents were aware of the Anchor Borrowers Programme out of which 42.4% got the information from the radio, 39.4% got the information from extension agents, and 21.2% from fellow farmers. The use of radio as a source of agricultural information is one of the most popular among farmers in Nigeria. The popular use of radio by the respondents could probably be because many farmers in Nigeria can afford to purchase a transistor radio as it is cheap and easy to maintain with the use of batteries (Uwandu, Thomas and Okoro, 2018).

These findings imply that most farmers were unaware of these agribusiness policies and initiatives and thus do not benefit greatly from these programs. This could be due to a lack of appropriate information and sensitization of the farmers on their existence, importance and need for active involvement in these agribusiness policies. Access to pertinent information and facts is necessary to improve agricultural performances and livelihoods in rural areas, especially in developing countries. To improve income and reduce poverty agriculture extension is considered an important tool for disseminating agriculture information to farmers and has been pointed out as a significant intermediary needed to transform traditional farming into modern and commercial agriculture (Anju & Satbir, 2017). Farmers must move beyond subsistent production by vigorously seeking agricultural information through different channels.

Table 3: Information seeking behaviour of rice farmers on agribusiness policies and initiative

Agribusiness policies on rice	Percentage					
	Fellow farmers	Extension	Radio	TV	Internet	Newspaper/Magazine
Agricultural Promotion Policy (App)	9.1	9.1	68.2	13.6	4.5	
Agricultural Transformation Agenda	14.9	19.1	61.7	12.8	2.1	
Commercial Agricultural Credit Scheme	12.8	33.3	48.7	2.6	2.6	
Nigerian Incentive-based Risk Sharing for Agricultural lending			50.0		50.0	100.0
Anchor Borrowers Programme	21.2	39.4	42.4	3.0	3.0	
Growth Enhancement Scheme			100.0			
Others						
Anambra Agricultural Development Project		100.0				
FADAMA		100.0				

Source: Field survey, 2021

Conclusions and Recommendations

Rice farmers' sources of information in the area were majorly through fellow farmers, friends and neighbours, radio, telephone and mobile phone, from previous experiences, the meeting, input dealers, television, and extension agents. Respondents preferred information gotten from fellow farmers, radio, meetings and extension agents. The major types of information sought by rice farmers were market information, seeds/improved varieties, pesticide availability, and availability of improved farm implements/machinery. The farmers were not seeking information on fertilizer application, weed control and management, weather condition, and environmental hazards. The majority of the respondents were not aware of government policies and initiatives on rice including the Agricultural Transformation Agenda (ATA), Commercial Agricultural Credit Scheme and Anchor Borrowers Programme, and Agricultural Promotion Policy (APP).

The extension should target the provision of information on government policies and initiatives on rice to farmers. This will help the farmers to key into current projects aimed at helping them improve rice production and enhance market access for their produce. There is also a need for awareness to be created on the need for rice farmers to make keen efforts in seeking agricultural information on their own and from the right sources. This will offer them a competitive advantage in their livelihood activity. The extension services should be deliberating provide information on the environmental impact of rice

production, especially in the area of fertilizer application and weed management to farmers. This will help to increase their knowledge of environmental best practices in rice production.

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