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Original Article

Assessment of Farmers' Participation in the Value Chain of Rice Entrepreneurial Activities in Kwara State, Nigeria

Adesiji GB[1*], Joseph JK[2], Gunu U[3] and Adelowo JY[1]

[1]Department of Agricultural Extension and Rural Development, University of Ilorin, Ilorin, Kwara State, Nigeria
[2]Department of Home Economics and Food Science, University of Ilorin, Ilorin, Nigeria
[3]Department of Business Administration, University of Ilorin, Ilorin, Nigeria

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***Corresponding Author**

Adesiji GB, E-mail: gbadesiji@gmail.com

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A B S T R A C T

Entrepreneurship means creating wealth through togetherness of resources in new ways to start and operate an enterprise. Farmers can explore the enormous opportunities associated the value chain as source of livelihood. Pitching tent as an entrepreneur around rice value chain will serve as another source of income to compliment the profit to be generated during cultivation. The rate at which rural farmers involve in value chain is not encouraging and this has given room for the activities of middlemen and maximize the advantage at the detriment of the farmers. The study assessed the participation of farmers in the value chain of rice entrepreneurial activities in Kwara State, Nigeria, with the following objectives: identify sources of information available for the Rice Entrepreneurs; describe the attitude of rice entrepreneur towards rice entrepreneurial activities; assess the participation of rice entrepreneurial activities in the value chain. Multistage sampling technique was used to obtain primary data from 400 respondents in the study area using structured questionnaire. Structured interview schedule Findings revealed that fellow entrepreneurs (0.89) and radio (0.79) were the major source of the information of the respondents. Majority of the respondent have positive attitude towards rice entrepreneur activities in the study area. Also the respondent were majorly into processing and marketing value chain. The study concludes that the respondent participated greatly in processing and marketing. The study recommends that the government to make policy that will mobilize more women into rice entrepreneurs activities to improve their standard of living and Agricultural extension agent should be more proactive in services delivery.

Introduction

Rice is one of the few food items whose consumption has no cultural, religious, ethnic or geographical boundary (Ibitoye, Idoko and Shaib, 2014). Rice is an important annual crop in Nigeria. It is one of the major staples, which can provide a nation's population with the nationally required food security minimum of 2,400 calories per person per day. Over the years, Nigeria rice production stands at 1.5 million metric tonnes against the 5 million metric tonnes required per year (Ochoga, 2015), hence the country depend largely on importation to supplement the domestic requirement (Hassan, 2016; Alfred, Kayoma, and Nwokoye, 2018). Since the Federal Government of Nigeria place a ban on rice importation, the level of local rice production is perceived to have increased hence, it has help to boost the economy. Hassan, Onwunali and Ibrahim (2020) corroborated that the need for self- sufficiency in rice production necessitated the policy on the restriction of imported rice to encourage smallholder farmers who in spite of their efforts, production still remains below requirement

Agricultural value chains in developing countries like Nigeria have experienced tremendous growth in structural transformation, driven by several factors such as population growth, rising urbanization, increasing consumer incomes, and varying consumer dietary requirements. This growth has created a huge market for entrepreneur along with employment in the various value chain in rice production (Adesiji, Ibrahim and Komolafe, 2018; Henderson and Isaac,

2017; Mensah, Adu, Amoah, Swinnen and Kuijpers, 2019). Participation of farmers in the value chain of rice entrepreneurial activities encompasses a set of linked activities at the various stages along rice value chain.

Agricultural entrepreneurship such as rice value chain is considered important in reducing poverty, improving food and nutrition security, and also have the potentials to foster economic development by generating both direct and indirect employment. (Rajaei, Yaghoubi and Donyaei 2011; Bairwa, Lakra, Kushwaha, Meena, and Kumar, 2014). The benefits of entrepreneurship have been widely highlighted. For instance, entrepreneurship to an individual provides self-employment, freedom to use ones idea, independence and mean of livelihood. To the nation it provide larger employment, greater distribution of wealth among others (Bairwa *et al*., 2014).

In Kwara state, rice production enterprise is a prominent enterprise in Patigi and Edu Local Government Areas of the state. Sustainable livelihood creation through rice enterprise in farming communities requires the development of cultivating an entrepreneurial competency of rice farmers. Employment in rice entrepreneurial activities across the value chain is essential for diversification of the sources of farm household's livelihood. Therefore, a study of rice production along the value chain is crucial to the development of agriculture and economic growth of the country. This is expected to foster a better extension policy programme that will further enhance the capacity of rice-based entrepreneurs.

The main objective of this study was to assess the participation of farmers in the value chain of rice entrepreneurial activities in Kwara State, Nigeria. The specific objectives were to:

(i) identify sources of information available for the rice entrepreneurs in the study area
(ii) describe the attitude of rice entrepreneur towards rice entrepreneurial activities,
(iii) assess the participation of rice entrepreneurial activities in the value chain

Methodology

The study was carried out in Kwara State, Nigeria. The total landmass of Kwara State is 32,500 square kilometers out of which 75.3% is cultivable (Farmer Census 2009, KWADP, 2012). The population of the State is about 2.5 million people (National Population Commission, 2016). Kwara State lies between latitudes 7°45′N and 9°30′N and longitudes 2°30′E and 6°25′E. Kwara State comprises rainforest in the southern parts with wooded savannah covering the larger part of the state. The state has an annual rainfall between the range of 1000 mm to 1500 mm. Average maximum temperatures vary between 30°C and 35°C. The state comprises 16 Local Government Areas and has four (4) agro-ecological zones namely; Zone A, B, C and D. Majority of the farmers cultivate varieties of crops such as, vegetables, maize groundnut, rice, melon, cassava, sorghum, millet, and yam.

This study was carried out in Zone B which comprises of Edu and Pategi Local Government Areas (LGAs). Selection of respondents was done using a three-stage sampling technique. The first stage involved purposive selection of two rice producing Local Government Areas in zone B. In the second stage, five communities were also selected from each LGAs. The third stage involved simple random selection of 50% of the population of rice farmers from the selected communities on the sampling frame to give a total of 400 respondents.

Data collection was done with the aid of an interview schedule. Descriptive statistics involving the use of frequency counts, charts, percentages and means were used to identify the sources of information and farmers participation on rice entrepreneurial activities in the value chain. Likert scale was used to measure and present the results of the respondents' responses towards rice entrepreneurial activities.

Results and Discussion

The table 1 shows the sources of information to rice entrepreneurs in the study area. From the result obtained, the major sources of information were Fellow entrepreneurs (89.0 %), Radio (83.8%) and Cooperative meeting (66.0%). This implies that the respondents acquire information through the Fellow entrepreneurs, Radio and Cooperative meeting, this is so due to the accessibility, availability and affordability. The result align with the submission Adetimehin, Okunlola and Owolabi (2018) that says of farmers relied on interpersonal sources in accessing agricultural information, probably because of their easy access and no cost implication. The least sources of information were private consultant and print media, it can be inferred that the level of education and cost implication is responsible.

Table 1. The table Showing the sources of information Among the Rice Entrepreneurs in the Study area (n=400).

Sources of Information	Frequency	Percentage (%)
Fellow Entrepreneur	336	89.0
Radio	335	83.8
Cooperative meeting	264	66.0
Agricultural extension agents	262	65.5
Television	206	51.5
Private consultant	141	35.3
Newspapers	104	26.0
Internet/Journal	97	24.3

Source: Field Survey, 2018

Results in table 2 showed the attitude of respondents' rice entrepreneurial activities. Attitude on believe that agri-entrepreneurship extension education will empower rice farmers' ability shows that 1.0% strongly disagree, 7.4% disagree, 16.4% were undecided, 16.4% agree and 52.8% strongly agree to the statement with mean score value of 1.18 and was therefore considered positive attitude. This implies encouraging factor for extension education that may inhibit entrepreneurship.

Attitude on ability to try improved practices/services as needed to become a successful agro-entrepreneur shows that respondents 4.3% strongly disagree, 7.6% disagree, 13.8% were undecided, 59.7% agree and 14.7% strongly agree to the statement with mean score value of 0.73 and was therefore considered positive attitude. This finding is an indication that rural rice farmers in the study area find their farming enterprise interesting and fascinating. Similar finding was reported by Mujuru (2014) who found that majority of farmer-entrepreneurs shown that they have good future prospects of their farming businesses.

Attitude about respondents' opinion on adopting innovative practices cannot multiply my income shows that respondents 4.1% strongly disagree, 7.1% disagree, 15.0% were

undecided, 33.8% agree and 40.0% strongly agree to the statement with mean score value of 0.98 and was therefore considered positive attitude. These findings showed that rural farmers were innovators, try new crops and cultivars, and alternative technologies to increase productivity and they always look for better and more efficient and profitable ways to do things. This remarkable innovative attributes possessed by these farmers was stated by Komolafe and Adesiji (2018) as an important quality for a farmer-entrepreneur, especially when the farming venture faces strong competition or operates in a rapidly changing environment.

Attitude on how respondents were prepared to take risks and bear all uncertainty in rice farming shows that respondents 5.0% strongly disagree, 19.8% disagree, 46.6% were undecided, 24.5% agree and 4.1% strongly agree to the statement with mean score value of 0.03 and was therefore considered neutral attitude. This finding implies that rural rice farmers were risk neutral. Risk neutral farmers according to Ajijola, Egbetokun and Ogunbayo (2011) are neither risk averters or avoiders nor risk preferring individuals. They further noted that this person will select the alternative with the highest expected outcome, regardless of the probabilities associated with potential gains or losses. Attitude on the possible to make a living out and escape poverty through rice entrepreneurial business shows that respondents 2.2% strongly disagree, 9.0% disagree, 15.3% were undecided, 30.9% agree and 42.6% strongly agree to the statement with mean score value of 1.03 and was therefore considered positive attitude.

Attitude about respondents' opinion on 'I am positive about myself and my rice entrepreneurial business that I will be successful' shows that respondents 2.6% strongly disagree, 6.0% disagree, 17.9% were undecided, 34.8% agree and 38.6% strongly agree to the statement with mean score value of 1.01 and was therefore considered positive attitude. This positive attitude found to be a successful yam farmer entrepreneurs is in line with Komolafe (2021) finding that majority of farmers in Southwest Nigeria had a strong belief in one's self to succeed.

Table 2. Attitude of rice entrepreneur towards rice entrepreneurial activities.

Attitudinal Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean (Std Dev.)	Mean rating (Remark)
I believe that agri-entrepreneurship extension education will empower my ability for rice entrepreneurial business	6 (1.0)	43 (7.4)	95 (16.4)	130 (16.4)	306 (52.8)	**1.18** (1.024)	1st (Positive)
It is possible to make a living out and escape poverty in rice entrepreneurial business	13 (2.2)	52 (9.0)	89 (15.3)	179 (30.9)	247 (42.6)	**1.03** (.855)	2nd (Positive)
I am positive about myself and my rice entrepreneurial business that I will be successful	15 (2.6)	35 (6.0)	104 (17.9)	202 (34.8)	224 (38.6)	**1.01** (1.020)	3rd (Positive)
Adopting innovative practices cannot multiply my income	232 (40.0)	196 (33.8)	87 (15.0)	41 (7.1)	24 (4.1)	**0.98** (1.098)	4th (Positive)
I learn from my setbacks and move on	11 (1.9)	45 (7.8)	117 (20.2)	284 (49.0)	123 (21.2)	**0.79** (.924)	5th (Positive)
I do not believe in rice farming business, so I don't encourage others to start it	146 (25.2)	254 (43.8)	107 (18.4)	51 (8.8)	22 (3.8)	**0.77** (1.040)	6th (Positive)
An agro-entreprenur should have commercial characteristics to determine success	8 (1.4)	20 (3.4)	178 (30.7)	276 (47.6)	98 (16.9)	**0.75** (.823)	7th (Positive)
Ability to try improved practices/services is needed to become a successful agro-entrepreneur	25 (4.3)	44 (7.6)	80 (13.8)	346 (59.7)	85 (14.7)	**0.73** (.950)	8th (Positive)
Ability to make timely decision does not determine success in agri-entrepreneurship	28 (4.8)	56 (9.7)	77 (13.3)	305 (52.6)	114 (19.7)	**0.72** (1.037)	9th (Positive)
I would rather own a rice entrepreneurial business than earn a higher salary working for someone else	13 (2.2)	93 (16.0)	61 (10.5)	296 (51.0)	117 (20.2)	**0.71** (1.032)	10th (Positive)
Adding value to my rice products/services will increase sales and income	34 (5.9)	65 (11.2)	105 (18.1)	290 (50.0)	86 (14.8)	**0.56** (1.058)	11th (Positive)
Fulltime commitment and continuous extension training to crop enterprise is a key to success	26 (4.5)	47 (8.1)	167 (28.8)	299 (51.6)	41 (7.1)	**0.48** (.947)	12th (Negative)
I do not have time to be thinking of creativity for my rice entrepreneurial activities	40 (6.9)	304 (52.4)	154 (26.6)	44 (7.6)	38 (6.6)	**-0.45** (.965)	13th (Negative)
I have no ambition for running my rice entrepreneurial activities.	160 (27.6)	90 (15.5)	113 (19.5)	180 (31.0)	37 (6.4)	**-0.26** (1.324)	14th (Negative)
I plan what to do according to the schedule	8 (1.4)	285 (49.1)	123 (21.2)	123 (21.2)	41 (7.1)	**-0.16** (1.007)	15th (Negative)
I can pay any amount to seek for extension information to improve my rice entrepreneurial business	34 (5.9)	102 (17.6)	210 (36.2)	214 (36.9)	20 (3.4)	**0.14** (.947)	16th (Negative)
I am prepared to take risks and bear all uncertainty in farming	29 (5.0)	115 (19.8)	270 (46.6)	142 (24.5)	24 (4.1)	**0.03** (.899)	17th (Negative)
I often find new opportunities to explore in order to increase my income	52 (9.0)	183 (31.6)	116 (20.0)	175 (30.2)	54 (9.3)	**-0.01** (1.162)	18th (Negative)

Source: Field survey, 2018
Note: SD= Strongly Disagree, D= Disagree, Undecided, A=Agree and SA=Strongly Agree

The chart below shows the rice entrepreneurial activities in rice processing. As shown in chart 1 61.5% of the respondents participated actively in rice processing to a great extent. This may be due to the nature of capital secured to engaged in enterprise processing. Hence they might have acquired or save more due to their participation in such value

chain activities. However, about 26.5% of the respondents participated to a little extent in the processing value chain while only few (12%) of the respondents do not participates in processing in the study area.

Bar chart representative on the participation of rice entrepreneurial activities in the value chain

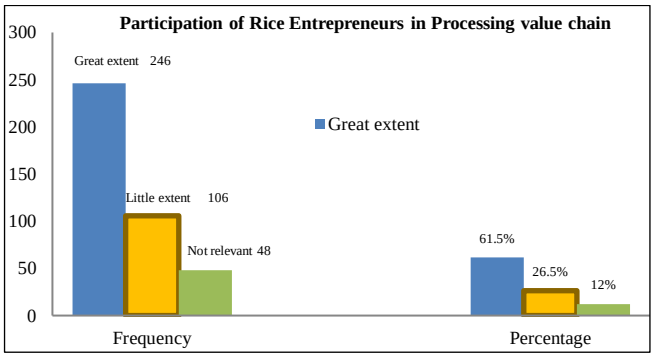

Chart 1. Participation of rice entrepreneurs in processing value chain.
Source: Field Survey, 2018

From chart 2, results revealed that few of the respondents (22.5 %) participated in the transporting of rice entrepreneurs goods to a great extent, about 24. 2% of the respondents participated but to a little extent, while majority of the respondents (53.5%) were not active in participating in such rice value chain activities. Their interest could be traced to the nature of road that existed in that study area or the capital involved in such enterprise activities.

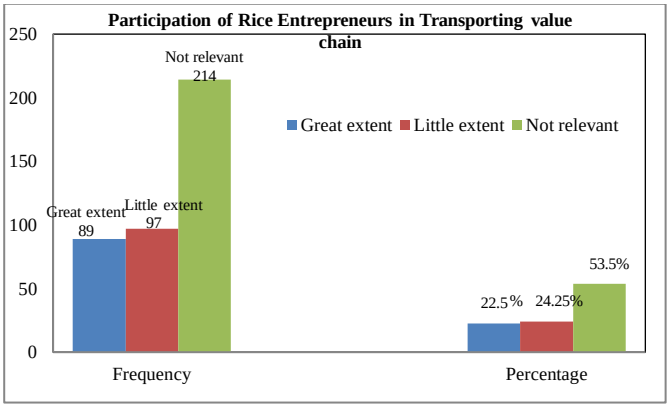

Chart 2. Participation of rice entrepreneurs in transporting value chain.
Source: Field Survey, 2018

The bar chart below shows that the largest percentage of the rice entrepreneurs participated in rice marketing activities while 44.5% of the respondents participated to a little extent. The significantly few respondents do not participated at all in that value- chain activity. This may be to the fact that the respondents engaged more in other rice value chain activities than marketing.

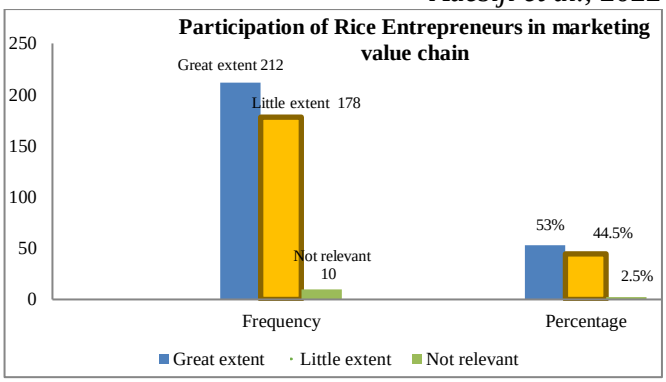

Chart 3. Participation of rice entrepreneurs in marketing value chain.
Source: Field Survey, 2018

Conclusion

From the research findings, it was concluded that the major source of information was fellow entrepreneurs. Fellow entrepreneurs as a social networks significantly influence farmers' participation in rice value chains, and can also improve their market performance. It also conclude that rice farmers have positive attitude towards rice entrepreneurial activities and are more likely to participate in the value chain. Rice entrepreneurs participated to a great extent in processing value chain and this also contributed positively in reducing poverty among the participants in the study area. This is evident from the percentages of the participants compared to those who did not participate in the processing value chain. In the marketing activities of rice entrepreneurs, Majority of the rice entrepreneurs' participated to a great extent while 2.5% did not see such activities as relevant in the study area. While the largest percentage of farmers did not participate in transportation of rice in the value chain.

5.3 Recommendations to the Study

- Agricultural extension agent should be more proactive in services delivery, especially on information needed for the rice entrepreneurs in the study area.
- Agricultural Transformation Agenda Support Pragram (ATASP) should initiate and sustain facilitation and linkages to credit sources with favorable interest rates so that vulnerable women and youths can access start–up capital for increased productivity.
- Government should encourage the rice entrepreneurs with accessible credit not only to boost production, but for them to access rice processing equipment in the study area.
- To increase farmers' participation, strategies to improve in rice value chain should be considered and implemented.
- Government should provide good road networks in the study so as to improve the movements of good and services

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