

Small-holder rice farmers' perception of attitude of middlemen towards rice value addition in Ogun state, Nigeria

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ABSTRACT

Value addition to rice as well as the contributions of middlemen in rice production are major drives that determine the quality and quantity of rice demanded for by consumer. This study focused on the perception of rice farmers on the attitude of middlemen on value addition in rice production in Ogun State. A total number of 181 respondents were used for the study. A multi stage sampling procedure was adopted to select farmers from major rice producing areas in the three senatorial districts of Ogun State. Information was retrieved with the use structured questionnaire and described with the use of frequency count, percentages and mean. The personal characteristics of the respondents shows that, there were more male smallholder rice farmers than their female counterpart in the study area with 63.1% and 36.9% male and female farmers, respectively. Also, higher percentage of the respondents are in their active age, as just 22.7% were above 36years. Most of the respondents are married (62.4%), also, more of the smallholder farmers had their HND/B.Sc. level as their highest educational certificate (34.8%). The study found out that smallholder rice farmers are mostly of the opinion that middlemen believed that only large-scale producers can add value to rice production, with a mean score of 3.74. Also, lack of fund as well as lack of government incentives for middlemen are perceived as the greatest constraints to value addition with a mean score of 1.45 and 1.43, respectively. The study recommends that government should assist smallholder farmers in aspect of funding for them to be involved in value addition so that their products can command good market prices.

Key words: Rice farmers, perception, attitude, middlemen and value addition

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Introduction

Rice (*Oryzasativa*) is a major staple food in Nigeria; its consumption has no cultural, religious, ethnic or geographical boundary (Isa, Cyprian and Sam, 2013). According to Johnson, Takeshima, Gyimah-Brempong, Kuku-Shittu (2013), rice as a commodity ranks first among all staple food items in terms of expenditures and second only to cassava in terms of quantity consumed. USDA stated that between 2022 and 2023, rice consumption was estimated at 6.9 million tons (Punchng.com, 2022). The country's estimated average annual demand for milled rice is 5.2 million tons, while the average national production of paddy is 3.8 million tons. Given the country's rice processing capacity and average recovery ratio of 62% (Ogunfowora, 2007), an annual average of 2.4 million tons of milled rice is produced domestically (USDA, 2016)

Domestic paddy production in Nigeria is dominated by smallholder farmers (SHFs) who cultivate 1-2 hectares of farmland but account for more than 80% of the total paddy rice production, while large-scale commercial farms with mechanization account for only less than 10% of cultivated areas and less than 20% of total production (FFI, 2016; GrowAfrica, n.d.).

Food value chains in developing economies are experiencing structural changes due to the rapid expansion of supermarkets and the increasingly strict quality and safety requirements of domestic and foreign customers (Henson and Jaffee, 2008; Swinnen and Maertens, 2007). These changes represent challenges as well as opportunities for smallholder farmers. All around the world, smallholders are striving to comply with these increasingly stringent requirements. Whether they are successful depends to a large extent on the way production and distribution is coordinated along the food chain (Hernandez et al., 2007; Neven et al., 2009). Contract farming schemes, vertical integration and producer organizations are cited as important institutions that have emerged to address the market access challenges (Bijman, 2008; Henson et al., 2005; Moustier et al., 2010). Still, middlemen continue to play an important role in linking smallholder farmers to traders and final markets.

Although middlemen are active in developing economies' agricultural chains, their effect on improving the economic outcomes of smallholders is not clear, and they may have undesirable welfare consequences; for instance, due to the lock-in effects, farmers may not benefit from new market opportunities. Prior research on economic development has largely focused on individuals and institutions such as markets, firms, governments, and households but has paid less attention to personal relationships (Fafchamps, 2006). Middlemen should be conceptualized not just as an

economic institution that facilitates trade, but also as a social network structure. More specifically, the social relationships among farmers and middlemen should be explored and the impact of these relationships on the decision of the farmer to trade through a middleman (where this decision has welfare implications) analyzed (Herforth et al., 2015; Michelson, 2015; World Bank, 2015). Traders consider middlemen as an important institution to avoid commitment failures. Gabre-Madhin (2001) found that middlemen in the grain market operate on a commission basis and transact on behalf of traders. In representing traders, they facilitate the supply of grain from different regions and they set daily prices through rapid appraisal of supply and demand conditions. According to Gabre-Madhin (2001), middlemen are particularly beneficial for traders.

Middlemen operate in all the continents of the world especially where the economy is booming. These groups of people act as intermediary between the producers (farmers) and the consumers. In the process of letting food or other agricultural materials reach the final consumer (user), the price is marked up to cover transportation, storage and profit. Food insecurity is one of the problems in sub-Saharan Africa as a result of many environmental factors including human. There are many functions to be carried out in moving the agricultural products from producers to customers. Each of these functions requires funding and, often experience and specialist knowledge as well as expertise. The central function of the middlemen is to absorb part of the risks, buyers and sellers face (Driel, 2003). The tasks performed by middlemen to fulfill their functions are manifold and can be described in different ways. Four dimensions of conditions of supply and demand are distinguished which include, place, time, quantity, and quality. If there are large gaps between these conditions, uncertainty for buyers and sellers is relatively high and also stability in food availability is not always guaranteed since middlemen are particularly suited to reduce this uncertainty by bridging the gaps in the supply chain (Rao, 2008).

Policy makers are almost one in saying that to help rice farmers get better compensated for their labour, the middlemen have to be eliminated and the farmers allowed to sell products directly to the consumers (Ingming, 2020). Smallholder rice farmers tend to perceive the middlemen as unworthy beneficiaries of rewards on rice produce rather than as individual or group of people helping them. It is believed that middlemen accrue exorbitant profits to themselves as against the rather small amount being paid the farmers for their products. This perception of the middlemen

by the farmers may end up being a key factor in determining the eventual price the product gets to the table of the final consumers, and the extent of value that can be added to the produce.

Farmers may either or jointly seek to channel their produce through an alternative route which will see them circumvent the perceived “extortionists” (middlemen), and or increase the amount to which they sell their produce to the middlemen. This sort of event may lead to instances whereby the produce may lack the proper value addition needed to meet up with the demands of the consumers, or increase the cost of purchase, transportation etc. by the middlemen. Value addition to rice will definitely generate more profit for the product. Considering that the smallholder farmers are peasants and do not technically have the capacity to add meaningful value to their products, the onus is shifted to the middlemen who have the required resources to execute the value addition on rice. This situation is believed by farmers to shift the bulk of the economic gains on rice value addition to the middlemen. The attitude of middlemen towards rice value addition is perceived by farmers to somewhat tend towards their self-economic gains rather than driving value addition to improve the wellbeing of the farmers. The presence of too many intermediates/middlemen results in the exploitation of both farmers and consumers with the middlemen offering lower prices to farmers and charging higher prices from the consumers.

According to Oguoma, Nkwocha, Ibeawuchi, (2010); 81% of farmers affirmed that middlemen buy the farmers produce directly from the point of harvest and further dictate the pace of the distribution channel. Majority (72.9%) of the farmers agreed that government has done very little to encourage farmers and save them from the over bearing influence of the middlemen in the agricultural product supply chain. It is against this background that this research paper tends to investigate the perception of smallholder rice farmers with regards to the attitude of middlemen towards rice value addition in Ogun state. To ensure the adequate execution of the study and proper measurement of necessary variables, this research general objective aims to evaluate the smallholder rice farmers’ perception of attitude towards rice value addition in Ogun state. This study is also designed to achieve the following specific objectives which are to:

- i. Determine the demographic characteristics of smallholder rice farmers
- ii. Evaluate the smallholder rice farmers’ perception of attitude of middlemen to value addition

- iii. Determine the perceived constraints encountered by smallholder rice farmers on the perception of attitude of middlemen to value addition

Theoretical framework

In economic theory, the main function of institutions is to minimize transaction costs (North,1994; Platteau,1994; Williamson,1998). The transaction cost literature considers the institution of middlemen as a cost-reducing arrangement between sellers and buyers (Landa, 1981). Middlemen can economize on direct exchange costs, for example, by facilitating a match between a buyer and a seller (Biglaiser and Friedman, 1999) and by decreasing transaction costs related to search time and information asymmetry (Dixit, 2009; Hayami, 1996). Using a game theoretic approach, Townsend (1978) demonstrates that intermediaries emerge endogenously to economize on the fixed cost of exchange. Rubinstein and Wolinsky (1987) argue that middlemen are a time saving institution since they shorten the negotiation time of sellers and buyers in a transaction.

Introducing the notion of quality uncertainty in the sense of Akerlof (1970), Li (1998) argues that middlemen provide efficiency benefits due to their role in bridging information asymmetry. Looking at the severity of the private information problem and the cost of the middleman's quality-testing technology, Li (1998) explains that if the information problem is not severe and if agents are willing to undertake exchange without knowing the exact quality of the goods, the presence of middlemen in trade is inefficient. Therefore, middlemen are an efficient institution in markets where quality uncertainty is high.

In contrast, Masters (2008) argues that the most persuasive and the least productive individuals are the ones who become middlemen to take advantage of the existence of producers who have lower production costs than themselves, but do not know the market. Under such market conditions, middlemen prosper by 'buying low' and 'selling high' and, hence, middlemen represent the cost of reducing information asymmetry. The institution of middlemen differs from other types of economic institutions because it could also be considered as a social network structure, defined by group-membership (Munshi, 2014) and institutionalization of group relations (Portes,1998). Thus, an economic transaction involving a middleman can represent a socially tied relationship. According to Munshi (2014), close knit communities such as those based on kinship and geographical proximity are characterized by strong social ties. Social networks become more important under conditions of contract uncertainty and positive transaction costs (Landa, 1981).

They can prevent commitment failures, particularly in imperfect markets, because of their threat of social sanctions (Karlan et al., 2009), promote social capital (Coleman, 1988) and allow members to work together to achieve common objectives (Munshi, 2014).

Two types of trust can develop in social networks personalized and generalized trust. Personalized trust arises from repeated interpersonal interactions (Fafchamps, 2006), while generalized trust results from knowing the community or society as a whole (Platteau, 1994). A drawback with a social network, however, is that it can force individuals to cooperate according to social norms even if this is against their self-interest (Fehr et al., 1997; Hoffman et al., 1998). It may decrease efficiency, for instance, by excluding new entrants from participating in the market, by applying price collusion and by constraining entrepreneurship (McMillan and Woodruff, 1999; Fafchamps, 2000). In addition, social networks may lead to lock-in effects (Jones et al., 2007).

Methodology

The study was carried out in Ogun state. The 3 senatorial districts of Ogun state were considered for the study, these are Ogun central, Ogun west, and Ogun east. Two Local Government Areas were randomly selected from each of these 3 senatorial districts. The population of this study is made up of all smallholder rice farmers in the selected Local Government Areas from the senatorial districts. The research design used in carrying out this study was the survey method. Fifteen (15) percent of the estimated number of smallholder rice farmers in the Local Governments Areas selected were considered adequate as the sample using multi stage sampling technique which consist of a purposive selection of local government areas that are prominent in rice production, then, a random selection of rice growing communities in the local government areas, and finally a systematic sampling of registered smallholders rice farmers to arrive at a total of One Hundred and Eighty-One (181) respondents. A structured questionnaire was used to retrieve useful information from the respondents. Content and face validity were carried out to ascertain the validity of the instrument by soliciting the professional inclusion of experts. The instrument was administered in the selected Local Government Areas. Split half method was used to test the reliability of the instrument. Spearman Rank Correlation was then used to calculate the reliability co-efficient of the instrument to arrive at reliability co-efficient of 0.76. The data collected were subjected to simple descriptive statistics and presented using frequency and percentages tables, weighted mean score.

Results and Discussion

Demographic characteristics of respondents

The result on the personal characteristics of respondents in this study shows that 60.2% of the smallholder farmers are males, while 39.8% were females. This implies that males go into rice farming as an occupation than their female counterparts. This is in line with the finding of World Report of women agriculture of 2012 who asserts that the average share of female labour inputs for Nigeria is 37% and it declines to 32% in northern Nigeria and rises to 51% in the south. Further findings also show that majority (34.8%, 30.4%) of the respondents are between the ages of 46-55 and 36-44 respectively. This implies that most smallholder farmers are people in their young and productive age. This finding correlates with that of Ajikori, (2009) who observed that farmers are more active and productive at their tender age, while they grow older, they need more hands. Most (34.8%) of the respondents have either an HND or BSC as their highest level of education. This is in consonance with the study of Aribigbe (2009) who identified the qualifications of wholesalers in rice in Abia State to be more of first degree and HND holders.

Table 1: Demographic Characteristics of Smallholders' Farmers

Variables	Frequency	Percentage (%)
Sex		
Male	109	60.2
Female	72	39.8
Age		
26 – 35	21	11.6
36 – 45	55	30.4
46 – 55	63	34.8
56 & above	42	23.2
Marital status		
Single	34	18.8
Married	98	54.1
Divorced	39	21.6
Widow	10	5.5
Religion		
Islam	80	44.2
Christian	79	43.6
Traditional	22	12.2
Qualification		
SSCE	41	22.6
NCE/OND	62	34.3
HND/BSC	63	34.8
M.Sc.& above	15	8.3
Years of Business Experience		
5yrs	47	26
10yrs	72	39.8
15yrs	23	12.7
20yrs & above	39	21.5
Total	181	100

Source: Field survey, 2021

Smallholder Rice Farmers' Perception of Attitude of Middlemen to Value Addition

Table 2 presents the result of smallholder rice farmers' perception of attitude of middlemen to value addition. Statements such as "Middlemen are only concerned about buying and selling of rice product", "Value addition to rice production can only be done by the Government and not the middlemen", etc. were considered among others. The statement that only large-scale producers can add value to rice production was ranked 1st as regards the perception of smallholder farmers about the attitude of middlemen towards value addition in rice. The implication of this, is that smallholder farmers believe that middlemen do not really care about adding value to rice probably to save themselves the stress and resources required for the value addition processes. They shift the responsibility to the large-scale producers. This situation creates an economic disadvantage for the smallholder farmers as the middlemen tend to patronize the large-scale producers more, which may force the smallholder farmers to sell their produce at a very cheap price. This is further supported by the finding of Oguoma, Nkwocha, and Ibeachukwu; 2010 which states that the real profit goes to the middlemen who buy up the farm products at almost give away prices and sell at outrageous prices to consumers.

Table 2: Distribution of Smallholder Rice Farmers' Perception of Attitude of Middlemen to Value Addition

Statement	SA		A		U		D		SD		WMS	Rank
	F	(%)	F	(%)	F	(%)	F	(%)	F	(%)		
Middlemen have no time for adding value to production	47	26.0	40	22.1	50	27.6	26	14.4	18	9.9	3.39	6 TH
Middlemen are only concerned about buying and selling of rice product	36	19.9	76	41.9	31	17.1	26	14.4	12	6.7	3.54	2 ND
Middlemen have no financial well withal to add value to rice production	20	11.1	37	20.4	59	32.6	39	21.5	26	14.4	2.92	9 TH
Value addition to rice production can only be done by the Government and not the middlemen	69	38.1	29	16.0	21	11.6	47	26.0	15	8.3	3.50	3 RD
Farmers prefer value addition from the Government than the middlemen	45	24.9	59	32.6	32	17.7	29	16.0	16	8.8	3.48	5 TH
Only large-scale producers can add value to rice production	55	30.4	59	32.6	31	17.1	36	19.9	0	0	3.74	1 ST
Value addition to rice production is only done by group of middlemen in the rural areas.	19	10.5	27	15.0	40	22.1	58	32.0	37	20.4	2.63	10 TH
Middlemen in urban areas have larger capital to finance rice farmers than middlemen in rural areas.	42	23.2	69	38.1	20	11.1	36	19.9	14	7.7	3.49	4 TH
Middlemen always want to add value to production because of its perceived benefits	45	24.9	49	27.1	29	16.0	30	16.6	28	15.4	3.29	7 TH
The constraints encountered by middlemen in adding value to rice production always discouraged them from adding value to rice production.	41	22.7	41	22.7	23	12.7	43	23.7	33	18.2	3.08	8 TH

Source: Field survey, 2021.

Perceived Constraints Encountered by Smallholder Rice Farmers on the Perception of Attitude of Middlemen to Value Addition

The results on the perceived constraints encountered by smallholder rice farmers on the perception of attitude of middlemen to value addition is presented in Table 3. It shows that lack of fund as well as lack of government incentives are perceived as the greatest constraints to value addition in rice production by the respondents as they rank first and second respectively in the distribution. This is probably because the respondents who are smallholders see paucity of fund as a major challenge of value addition. This assertion is supported with the findings of Okoye (2012) who observed that government hardly fund the middlemen on their activities which makes them to be left alone with micro-finance bank. This is also in consonance with the statement of IFC,2014; which states that smallholders tend have little or no access to formal credit which limits their capacity to invest in the technologies and inputs they need to increase their yields and incomes therefore subjecting them to the dictate of middlemen

Table 3: Distribution of Perceived Constraints Encountered by Smallholder Rice Farmers on the Perception of Attitude of Middlemen to Value Addition

Statement	Major Constraints		Minor Constraints		No Constraints		WMS	Rank
	No	%	No	%	No	%		
Lack of fund	100	55.2	62	34.3	19	10.5	1.45	1 ST
Inadequate infrastructure	76	42.0	71	39.2	34	18.8	1.23	3 RD
Lack of improved technology	57	31.5	75	41.4	49	27.1	1.04	6 TH
Natural hazards	45	24.9	42	23.2	94	51.9	0.73	9 TH
Inadequate input supply	66	36.5	58	32.0	57	31.5	1.05	5 TH
Lack of government incentives	92	50.8	75	41.4	14	7.7	1.43	2 ND
High cost of production	34	18.8	47	26.0	100	55.2	0.64	10 TH
Lack of manpower	50	27.6	39	21.6	92	50.8	0.77	8 TH
Lack of training	66	36.4	64	35.4	51	28.2	1.08	4 TH
Fake inputs in the market	57	31.5	67	37.0	57	31.5	1	7 TH

Source: Field survey, 2021.

Conclusion and Recommendation

Undoubtedly, middlemen play a critical role in bridging the link between the smallholder farmers and the consumers. They determine to a significant extent the eventual quality and quantity of the product that will get to the consumer. This study therefore looked into the perception of smallholders on the attitude of middlemen towards value addition on rice. With regards to the demographic characteristics of the respondents, the research concludes that there were more male smallholder rice farmers than their female counterpart in the study area with 63.1% and 36.9% male and female farmers, respectively. Also, higher percentage of the respondents are in their active age, as just 22.7% were above 36years. Most of the respondents are married (62.4%), also, more of the smallholder farmers had their HND/B.Sc. level as their highest educational certificate (34.8%). The study also concludes that smallholder rice farmers are mostly of the opinion that middlemen believed that only large-scale producers can add value to rice production. The study further concludes that lack of fund as well as lack of government incentives for middlemen are perceived as the greatest constraints to value addition. Based on the findings of this study, it is therefore recommended that smallholder farmers should leverage on their academic knowledge and experience on the business to seek for ways of creating value for their produce. Government should properly encourage financial institutions to make accessibility to loans easy for smallholder farmers for them to add value to their produce. Government should also initiate more and efficient funding schemes targeted at smallholder farmers. It is also recommended that middlemen should be sensitized by the adequate agencies about the need of, and benefits derivable from adding value to rice produced by smallholders.

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