

RICE PRODUCTION AND MARKETING IN NIGERIA: ASSESSING REGULATORY AGENCIES' ROLE IN POSITIONING MADE IN NIGERIA GOODS

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ABSTRACT

Rice food system has been identified as a key block in global food security. However, demand for locally manufactured rice is still abysmally low due to broken food system leading to concerns for standards. Regulatory agencies have a lot of role to play in enhancing standards, quality and positioning the product before consumers. This is the crux of this study. Specifically, the study sought to ascertain the role of rice regulatory agencies in ensuring quality control and how it affects consumer patronage. In addition to identify best techniques to position local rice to consumers. Using data from 151 rice producers and marketers in Ebonyi state obtained from well-structured questionnaire and analyzed with descriptive statistics, the study observed that majority of the respondents are involved in marketing/supply and rice production while only 7.9% specialized on both rice production and marketing. Most of them have prior regulatory permit approval from Standard Organization of Nigeria (SON), National Agency for Food and Drug Administration and Control (NAFDAC), among other certifications. The result showed that regulatory agencies plays a vital role in ensuring quality control of made in Nigeria rice, but observed that consumers still lack trust in standards hence, the low patronage for local rice. Finance was mentioned as the major threat to rice production and marketing among other challenges. The study therefore, recommended that the government should set up programmes to enlighten rice producers and marketers on the potential threat of poor standards in their rice marketing. As such, they should be provided with the necessary and adequate standard machineries that will aid them in improving quality of our local rice, which will aid large production and marketing of made in Nigeria rice. This has implication on wider product acceptance and competitiveness.

Keywords: made in Nigeria rice, NAFDAC, positioning, regulatory agencies, and Standard Organization of Nigeria (SON).

Introduction

Food is one of the most important needs of man. It has impact on systems, productivity and society well-being. Hence, it is difficult to think of economic growth and its sustainability, without improvement in basic food commodities particularly for developing countries such as Nigeria. There is no doubt that basic food items play important roles in both local and global food security, but they depend on the working food system activities to ensure that activities are not compromising. Furthermore, these impacts are negative on both food security and nutrition bearing in mind such implications on human health, income, food security particularly among poor segments of the population in both rural and urban areas. One food that has been identified in both national and global food security is rice (*Oryza sativa* or *Oryza glaberrima*) (Nwachukwu et al., 2015). Rice occupies importance space in household food expenditure

basket. Importantly, it is a staple food with rich cultural identity. In Thailand, rice is described as the essence of life; In China, it is referred to life and generally the root of Asian civilization (Gomez, 2001). In addition, rice has a rich nutritive value. According to FAO (2008) and Inuwa *et al.*, (2011), many people depend on it for about 80 percent of their calorie requirement; as a result, there is hardly any country in the world where it is not utilized in one form or the other. In Nigeria, rice is one of the few food items whose consumption has no cultural, religious, ethnic or geographical boundary (Ibitoye *et al* 2014). Consequently, its demand and consumption have continued to witness momentous changes with increasing population across all socio-economic classes (Ogunsumi *et al.*, 2013).

Unfortunately, rice production in Nigeria has not kept pace with the increasing population. The annual

growth rate of food sub-sector is 2.0 percent while the annual population growth rate is 3.3 percent (NBS, 2002). This means that a wide gap exists between food supply and the demand for food by Nigerians. For instance, Nigeria's annual demand consumption for milled rice exceeds domestic output of 3.3 million metric tons per annum by over 2.2 million MT per annum (FMARD, 2013). According to the recent report by United States Department of Agriculture (USDA), Nigeria is expected to be the second highest importer of rice after China by 2019. To cushion this effect, Nigeria government has pledged \$60 billion to subsidize rice production. This policy like other policies is expected to increase rice production.

However, in spite of these efforts, production capacity of local rice has not kept pace with the population density of its consumers. Although, it is possible for local rice production to surpass local demand typical Nigerian attitude towards locally produced goods is still a major concern. Evidences such as Nwachukwu et al. (2009), Miebaka et al. (2017) and Leon and Kanuk (2007) have shown that Nigerians still prefer foreign made items to local ones due to quality and standard especially food safety concerns, packaging standard, price, and product availability among other issues. With a country still majorly dependent on oil revenue and in dire need of how to satisfy her citizens' food demand, this is a major challenge to locally grown rice. Most Nigerians view locally produced goods as inferior, fake, low in standard, and products that cannot compete favourably in the internationally market. With regard to rice, most consumers in the country prefer the imported rice to the locally produced rice because the local rice is not entirely stone free, is not well polished, takes longer cooking time, and not appealing when compared to the imported rice. These others are factors having dire effects on the local production.

The Nigerian government has made conscious efforts to tackle this problem through sensitization and awareness creation on the nutritive content of locally produced goods in order to grow the economy. Further, placing of ban on foreign exchange on rice and its importation, has exacerbated smuggling given Nigeria porous borders. Besides, all these efforts, this study examines the role regulatory agencies could play in positioning made in Nigeria rice. From literature, the role of regulatory agencies includes but not limited to monitor and ensure optimum production of quality and standard products that can compete favourably in the international market. Part of their core value is to promote (food) safety within the framework of regulation. This is expected to

increase competitiveness and is seen as a pro-growth measure to encourage local food acceptance for export. In Nigeria, these regulatory agencies for goods and services include Standards Organization of Nigeria (SON), National Agency for Food, Drug Administration and Control (NAFDAC), Nigeria Agricultural Plant Quarantine Service (NAQS) and Consumer Protection Council (NPC). According to Emodi and Madukwe (2008), a regulatory agency is a governmental body that is created by a legislature to implement and enforce specific laws. Such an agency has quasi-legislative functions, executive functions and judicial functions. The major role of these agencies is to ensure conformity with established rule of engagement, bearing in mind that as institutions, they have the power to sanction in the course of its supervision and oversight functions for the benefit of the public. It is important to stress that rule and regulations are made for the optimum good of every member of the society. Therefore, for government to achieve optimum utility of goods, there is need for regulations that would guide the quality of such goods. The agencies are citation with authority to supervise, monitor and regulate the activities of producers and providers of services (Basorun, 2013).

In order to evaluate the regulatory agencies' effectiveness in positioning of made in Nigeria goods using rice production and marketing as a case in point, the study ascertained the role of regulatory agencies in ensuring quality control of made in Nigeria rice; investigated the problems facing the production and marketing of made in Nigeria rice. The study also determined the effect of product certification on consumer patronage of made in Nigeria rice and identified marketing techniques best for rice positioning in the study area. The major theory underpinning this study is the institutional theory of the firm.

Theoretical perspective

It is a truism that every firm operates within an environment. Therefore, its actions and inactions affect and are affected by the environment. In order to ensure a balance that benefits both the environment and business, institutions are created to oversee the common good of all. This is perhaps the reason for the proponents of strong institutions. One of the major roles of institutions is that they engage and create activities that ensure conformity to rules and regulations. This study considers the institutional theory of the firm apt for this study to underscore the role institutions could play in advancing conversation for conformity to standards among firms for the common good of society. According to Hirsch (2015), Institutional theory examines how external

pressures influence activities of a business or organization to be socially responsible. This is achieved mostly through either coercive, normative, and mimetic principles or drivers (DiMaggio and Powell, 1983). Coercive isomorphic drivers occur from influences exerted by those in power including government agencies (Rivera, 2004), who regulate activities of businesses to ensure compliances with extant rules and regulations. Normative isomorphic drivers cause enterprises to conform in order to be perceived as having legitimate organizational activities especially in relation to environmental management practices (Ball & Craig, 2010). The central principle of this is based on the understanding that businesses activities that are perceived to be good for all could bring enormous goodwill and opportunities for future prosperities. This thinking is perhaps the basis for many firms attempt to be seen as friends of the environment. Mimetic isomorphic drivers, underscores the fact that there is nothing good in business that others cannot copy such as winning strategy. This driver occurs when enterprise imitates the actions of successful competitors in the industry, in an attempt to replicate the path of their success (Aerts, Cormier & Magnan, 2006). In all, these drivers whether forced on the firm or otherwise, are aimed at increasing awareness of new triple-threat bottom line – place, planet and profit.

Ordinarily, business organizations will pay less attention to issues that increase their cost in the short-run. Therefore, this theory leverage on external pressure to address standard concerns for the overall welfare of society. This theory is linked to the societal marketing philosophy which advances conversation that firm benefits from its today activities in the long run in such area as social legitimacy, and economic efficiency. The formal rules of environmental institutions relate to environmental legislations, regulation, performances standards and various formal administrative guidelines that organizations can achieve through adoption of green operations.

Methodology

Area of the Study

The study was carried out in Abakiliki in Ebonyi State. Abakiliki is the capital city of the present day Ebonyi State in South Eastern Nigeria. The inhabitants are primarily members of the Igbo nation; it was the headquarters of the Ogoja province before the creation of the South Eastern State in 1967. It is located 6.32 latitude and 8.11 longitude and is situated at 65 metres above sea level. It covers about 64 kilometres (40 mi) South East of Enugu. The major occupation of the people is farming, with rice topping the crop of produce of the State. The state is famously

known for Abakiliki rice; hence this study considers it imperative to evaluate the regulatory agencies' effectiveness in positioning of made in Nigeria rice. The work which has much emphasis on made in Nigeria rice chose this area of study due to her specialization on production and distribution of local rice. There are many Small and Medium Scale rice integrated mills located at Abakiliki, Ebonyi State, Nigeria. Many of these companies are involved in the production and distribution of rice.

Population of the Study

According to unverified statistics, there are over 200 registered rice dealers in rice milling business in Abakiliki, with plethora of regulatory agencies around the state. Given the diverse terrain, the researchers chose their sample based on their convenience and availability (Creswell, 2014). To ensure that the senatorial zones are well represented, 50 rice farmers, millers, and distributors were randomly selected for each, except for Abakiliki area which has 51 due to more availability of these respondents. This aggregates the sample to 151 used for this study.

Method of Data Analysis

Given the nature of the characteristics of research objectives, descriptive statistics such as simple percentage and mean were adopted to answer research questions.

Results and Discussion

Distribution of respondents according to Area of specialization

Table 1 shows the classification of the respondents in their areas of specialty which include production of rice, marketing of rice products or both production and marketing.

The table showed that 55.0% of the respondents only specialized on marketing/supply of rice, 37.1% of the respondents specialized on rice production only while 7.9% of the respondents specialized on both rice production and marketing. The result implied that there were rice producers and marketers in the study area. Rice production and marketing are very lucrative and profitable, hence, is why farmers engage in them. This finding is in line with the finding of Cruz (2009), who stated that production and marketing of rice yielded returns to farmers.

Regulatory agencies permit among respondents in the study area

Table 2 shows the list of regulatory agencies and the number of respondents who got permit or approval

from the agencies in the course of doing business in the country.

The result in table 2 showed that 77 respondents representing 51.0% had regulatory agency permit from Standard Organization of Nigeria (SON), 33 respondents representing 21.9% had their regulatory agency permit from National Agency for Food and Drug Administration and Control (NAFDAC). In addition, 27 respondents representing 19.9% had no regulatory agency approval while 14 respondents representing 9.3% had regulatory agency permit from other third-party certification such as certification from states and local government, Federal Ministry of Health, Federal Ministry of Agriculture. The result implied that greater percentage of the respondents had regulatory agency approval from Standard Organization (SON). The SON is responsible for the formulation of standards on the composition of imported and locally manufactured foods. The Standard Organization (SON) enabled the farmers to maintain standards in their rice production. This result agrees with the finding of Imolehin and Wada (2000), who opined that rice producers always get production permit from regulatory agencies.

Role of regulatory agency in ensuring quality control of made in Nigeria Rice

This section addresses the role of regulatory agency in ensuring quality control of made in Nigeria rice. The analysis is presented in Table 3.

From Table 3, it was observed that Training farmers, Awareness creation, Ameliorating the sub-standardization and inferiority of made in Nigeria goods. Confiscation and fines as sanction for defaulters, Giving orientation and sensitization on the regulatory provisions of made in Nigeria goods and the legal consequences are ways regulatory agencies strive to ensure quality control of made in Nigeria rice owing to their mean value of 2.5 and above. The result implied that regulatory agencies play a vital role in ensuring quality control of made in Nigeria rice. The result show regulatory agencies in the country are doing their best to regulate production and ensure that goods produced in the country meet the stipulated standard and best quality. They also ensure that the goods produced are produced and packaged in the best conditions fit for human consumption. The result points out the need for farmers to get regulatory agency permit/approval in other for them to enjoy the numerous benefits of the agency. This result is consistent with the finding of Akande (2003) who pointed out that for rice producers not to go extinct and for consumers to get standardized products, farmers need the approval of the regulatory agencies.

Accordingly, most products have been confiscated by regulatory agencies because the producers were never oriented on regulatory provisions of made in Nigeria goods and as a result of non-approval by the regulatory agencies (Cruiz, 2009). From further interactions with respondents, the study observed that defaulters' goods were confiscated and fine imposed on them.

Effect of Product certification on consumer patronage on made in Nigeria Rice

Table 4 shows the effect and progress certification of produce by regulatory agencies has on locally produced goods in the area. This observation is made in response to the value of such certification to competitiveness and enhancing consumer trust in production and marketing activities.

Table 4 showed responses on increased customer patronage, positive response from customers, product traceability as a result of certification. Certification process and regulation in line with international standard and global acceptance and regulatory compliance provisions for certification are often times improved upon and reviewed to suit demand had no effect on consumer patronage of made in Nigeria rice owing to their mean cut off value of less than 2.5. This result was against a priori expectation. This could be attributed to the fact that most consumers do not read the inscriptions on bags of rice; hence they may not take notice of such certifications. This result advanced argument of weak trust in locally manufactured goods and services among consumers. In addition, most consumers do not follow the news on the roles and achievements of these regulatory bodies and products banned by these agencies, and hence, these consumers might not base their patronage in line with the provisions made by these agencies. This result also highlights the weak dissemination cum communication strategy adopted by government and its agencies to publicize its regulatory policies.

Further investigations revealed that most rice producers and marketers do not certify their product for customers to patronize them, they do so in order to abide by the laws of the land and to avoid their produce been confiscated. The result is in contrast with the finding of Akande (2003) who opined that product certification influences the customer patronage of made in Nigeria rice. Cruiz (2009) pointed out that most customers only patronize products that are certified to ensure their standards. This result is important for policy implementation and highlights the role of strong institutions in creating

desire to demand standards from producers of goods and service.

Marketing techniques best for rice positioning

This section examines the various marketing techniques adopted by respondents involved in rice production, distribution and marketing. The analysis was presented in table 5.

Table 5 showed that bringing product closer to people, making sure that the product is never scarce, good/acceptable policy and regulatory framework, positioning through word of mouth communications were the marketing techniques best for rice positioning in the study area based on their mean cut off value of 2.5 and above. When you are trying to position your product/commodity strategically in the hearts and mind of consumers and such product is rarely available in the market, such positioning would be fruitless and futile. The result further revealed that soliciting prospective customers to buy or through the use of mobile device, celebrity endorsement were not the best marketing techniques for rice positioning owing to their mean cut off value of less than 2.5. This could be due to the nature of the product which involves in most case physical handling of the product to compare both quality and other attributes that consumers look for in their ideal rice. The result implied that bringing product closer to customers would foster their patronage considering the fact that there would be little or no cost of transportation to purchase the product. Most customers are not used to handling mobile devices; this implies that they will not patronize the products that are being marketed via mobile devices since they will not access the product. Further, it was observed that good/acceptable policy and regulatory framework were among the best and important techniques for positioning of local rice given a high mean of 3.635. This result highlights the importance of building strong institutions and agencies to ensure standards for the welfare of all. Policy is made for the good of all in society. However, there is need to make policies that encourage competitiveness and are pro-growth to encourage obedience. Professionalism in executing policy is a key block to building overwhelming acceptance among the target audience.

Problems encountered by both rice marketers and producers

Table 6 addresses the problems encountered by both rice marketers and producers in the study area. The analysis is presented in table 4.

Table 6 showed the respondents encountered several problems in rice production and marketing. The major problem encountered by the respondents in the study

area was lack of finance with mean value of 0.9404. No business can be sustained without finance. Finance is important in aiding producers to register and invite regulators for inspection and certification of their products. Poor access to finance limits the production and marketing of made in Nigeria rice since the production processes are capital intensive. Several evidences such as Oteh, Nwachukwu and Nwachukwu (2016) have shown that lack of finance is a serious impediment to activities of SMEs in developing countries such as Nigeria. The result revealed that the farmers always encountered the problem of high transportation cost, price fluctuation which affects demand and supply, poor farming knowledge on modern rice technology and lack of trust/traceability due to quality issues with mean values of 0.9007, 0.7550, 0.7152 and 0.6026 respectively. High transportation cost affects rate of marketing of agricultural produce and profitability of rice in Nigeria. In most cases, these costs are transferred to the final consumers who may be reluctant to buy at a higher price when compared with foreign/imported rice. The study further revealed that the rice producers and marketers encountered the problem of poor milling technology/value addition technology, non-availability of farm input, restriction on land, non-availability of improved rice variety, information bottleneck both for consumers and sellers and perception of marketing with mean values of 0.4702, 0.1854, 0.1275, 0.0728, 0.0530 and 0.0265 respectively. From this finding, poor milling technology slows the production process of made in Nigeria rice. This affects quality and quantity of rice that could be produced at any given point in time. When there is little or no knowledge about modern rice technology, rice farmers will be making use of traditional techniques which are slow and tedious. The ability of technology especially the engine powered mill to process large quantities of paddy rice at great speed, time, and better quality is not in doubt. This is perhaps the advantage foreign made products have over locally produced products in most developing countries due to their low level of industrialization. From the study area, it was observed that there are no modifications to the milling machines because they broke down even during operation.

Conclusion

The study showed that regulatory agencies play a vital role in ensuring quality control of made in Nigeria rice. Based on the findings of the study, the study recommends that the government should set up programmes to enlighten rice producers and marketers on the potential threat of poor standards in their rice marketing. As such, they should be provided

with the necessary and adequate standard machineries that will aid them in improving quality of our local rice, which will aid large production and marketing of made in Nigeria rice. This has implication on wider product acceptance and competitiveness. Government and authorities/bodies governing the trade unions should make favourable policies that will not infringe on the rights of the rice producers towards production and marketing of our locally produced rice and also affect consumers' patronage of our locally produced rice in the study area. There is need to enhance awareness of the importance of adopting standards. In this regard, the regulatory agencies should pay periodic visits to rice producers to sensitize and educate them on the best way to improve production and marketing of rice. As a major strategy issue, regulatory agencies should educate rice producers and marketers on the best marketing techniques for repositioning their products to gain wider demand among the target audience. In addition to this, rice farmers should be flexible and open to conversation that will improve business processes such as guidelines or directives on standards by regulatory agencies.

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Table 1: Distribution of respondents according to Area of specialization

Area of specialization	Frequency	Percentage
Production only	56	37.1
Marketing/supply only	83	55.0
Both	12	7.9
Total	151	100

Source: Field survey data, 2018

Table 2 Distribution of respondents according to regulatory agencies permit

Regulatory Agencies Permit	Frequency	Percentage
SON	77	51.0
NAFDAC	33	21.9
Other third-party certification	14	9.3
No approval	27	19.9
Total	151	100

Source: computations from field survey data.

Table 3: Roles of regulatory agency in ensuring quality control of made in Nigeria Rice

Variables	Strongly Agreed.	Agreed	Disagreed	Strong Disagreed	Mean	Decision
Training of farmers is one of the ways by which regulatory agencies ensure quality control of made in Nigeria goods	23.6	62.8	11.5	2.0	3.0811	Accept
Awareness creation is a strategy deployed by regulatory agencies in ensuring quality control of made in Nigeria goods.	12.1	65.1	20.8	2.0	2.8725	Accept
Ameliorating the sub-standardization and inferiority of made in Nigeria goods	44.6	49.3	4.7	1.4	3.3716	Accept
Confiscation and fines are the sanctions embedded on defaulters of regulatory policies	85.1	13.5	0.7	0.7	3.8311	Accept
Food safety regulation policy established by regulatory agencies have ameliorated the sub standardization and inferiority of made in Nigeria goods.	13.3	48.9	36.3	1.5	2.7407	Accept

Source: computations from field survey

Cut off score = > 2.5 = ensured quality control of made in Nigeria rice, while < 2.5 are not the roles of regulatory agency in ensuring quality products.

Table 4: Effect of Product certification on consumer patronage on made in Nigeria Rice

Variables	Strongly Agreed.	Agreed	Disagreed	Strong Disagreed	Mean
To what extent has certification of locally produced goods increased customers patronage of made in Nigeria rice?	0.7	9.1	65.0	25.2	1.8531
Increase and positive response from customers on the certified products quality	10.1	6.7	24.8	58.4	1.6846
To what extent does product traceability as a result of certification encourage customers' patronage of made in Nigeria rice?	4.7	18.7	58.7	18.0	2.1000
To what extent is the certification process and regulation in line with international standard and global acceptance?	4.0	6.6	56.3	32.5	1.8411
How often are regulatory and compliance provisions for certification improved and reviewed by regulatory bodies to suit demands?	6.6	4.0	40.4	49.0	1.6821

Source: Computations from field survey

Table 5: The marketing techniques best for rice positioning

Variables	Strongly Agreed.	Agreed	Disagreed	Strong Disagreed	Mean	Decision
Bringing product closer to people as a marketing technique is an effective tool used in positioning made in Nigeria rice	53.3	45.3			3.9333	Accept
Strategically putting things in place so as to make sure that the product is never scarce or in short supply	68.9	29.7	1.4		3.6757	Accept
Positioning Nigeria made rice through the use of mobile device soliciting prospective customers to buy or to attract high patronage	16.9	25.7	36.5	20.9	2.3851	Reject
Use of word of mouth and/or opinion leaders is a convincing means of ensuring high patronage of made in Nigeria rice	4.8	67.3	26.5	1.4	2.7551	Accept
Event/shows encourages high patronage of made in Nigeria rice	8.3	33.1	44.8	13.8	2.3586	Reject
Celebrity endorsement promulgates products and encourages high sales of them	7.5	9.6	33.6	49.3	1.7534	Reject
Designing a good/acceptable policy regulatory framework set peace for the positioning of made in Nigeria rice.	75.9	15.5	5.4	3.4	3.6351	Accept

Source: Computations from field survey

Table 6: Problems encountered by both rice marketers and producers

Problems encountered	Mean	Rank
Land tenure system (restriction on land)	0.1275	8 th
Non-availability of rice farm input	0.1854	7 th
Non-availability of improved rice varieties	0.0728	9 th
Poor faming knowledge on modern rice technology	0.7152	4 th
Price fluctuation which affects demand and supply	0.7550	3 rd
Poor milling technology/value addition technology	0.4702	6 th
Lack of trust/traceability due to quality issues	0.6026	5 th
Information bottleneck both for consumers and sellers	0.0530	10 th
High transportation cost	0.9007	2 nd
Lack of finance	0.9404	1 st
Perception of marketing	0.0265	11 th

Source: computations from field survey