MARKETING EXTENSION NEEDS OF PORK MARKETERS IN WARRI SOUTH LOCAL GOVERNMENT AREA, DELTA STATE, NIGERIA

*KONKWO, S.O., [1] ONYEMEKIHIAN, F. [2] AND TUOYO, A.W. [1]
[1]Department of Agricultural Economics and Extension Services, Faculty of Agriculture, University of Benin, Benin City
[2]Department of Vocational and Technical Education (Agricultural Education Unit) University of Delta, Agbor, Delta State, Nigeria
*Corresponding author: stephen.konkwo@uniben.edu

Abstract

The study assessed marketing extension needs of pork marketers in Warri South Local Government Area, Delta State, Nigeria. It specifically identified the marketing extension services needed by the respondents, information channels used and preferred as well as the constraints encountered by them. A multi stage sampling procedure was employed for the simple random sampling of 120 respondents using structured questionnaire. Collected data were analyzed using descriptive statistics which included frequency counts, simple percentages and mean scores while the Spearmans' rank correlation analysis was used to draw inferences. Results showed that information on low interest rate ($\bar{X} = 3.33$), means of transportation of pork from processing site to market ($\bar{X} = 2.97$) and storage/preservation ($\bar{X} = 3.53$) were the most needed components of extension services. While sales agents was the information channel used by majority (84.2%) of the respondents, radio was the most ($\bar{X} = 3.45$) preferred medium. The most significant constraint encountered by the marketers was insufficient funds ($\bar{X} = 3.5$). There was a significant and positive relationship (r = 0.482, p<0.01) between pork marketers' preference for information channels and their marketing extension needs in the study area. The study concluded that information on low interest rate, transporting processed pork from abattoir to market and storage/preservation of pork were the most needed marketing extension services by respondents. It was therefore recommended that extension workers should prioritize information delivery based on the most needed information by marketers without neglecting other areas of lesser needs.

Key Words: *Extension, Marketing, Needs, Preference, Remunerative*

Introduction

The agricultural environment is rapidly changing in varying ways due to market liberalization and globalization (Kahan, 2013). Changes are being experienced in quality of food, prices, consumer preferences, satisfaction and safety standards (Neuchatel group, 2008). Hence, as society develops, agricultural marketing becomes necessary to significantly address the growing food needs of its diverse population. One of those areas requiring remarkable development is the livestock sector. Livestock substantially contributes to the global value of agricultural output and supports the livelihood and food security of almost a billion people in the world (Uddin and Osasogie, 2016). Pig (*Sus scrofa*), an important component of livestock has been described as one of the most prolific and fast growing species that can convert food waste to valuable products, making them more palatable than some red meat animals, such as cattle, sheep and goats (Vicente *et al.,* 2011).

The meat from pig in the butchery is referred to as pork and constitutes one of its major products before bacon, gammon and bristle skin (Young, 2005). Pork as a considerable source of animal protein has made the pig industry very relevant in Nigeria, among the livestock sub sector (Ajieh and Okwuolu, 2015). It has become one of the most consumed animal protein option and lucrative marketed product in Warri south, Delta state and other States in Nigeria (Ajieh and Okwuolu, 2015). The increasing popularity gained by this pork is due to the economic and nutritive values. Apart from protein, pork is a rich source of lipids, minerals, vitamins and was once considered to be high in fat

hence, a less healthful choice in the meat group thereby limiting its relative market value (Ajieh and Okwuolu, 2015).

Marketing extension services are tasks performed by extension workers to assist farmers with their marketing of produce (FAO, 2002; Cukur, 2013). It helps farmers to minimize costs, improve the quality of farm produce and marketability resulting to increased income (Agbarevo and Obinne, 2010; Altarawneh, *et al.,* 2020). In spite of the aforementioned Agunbiade, *et al.,* (2001) remarked that the pork marketing in Nigeria has not yet developed like ruminant and poultry production. There has been an age long controversy in pork consumption which has adversely restricted the expected investment in pig farming. For instance, pork is predominantly consumed in the southern Nigeria than in the northern counterpart due to differences in social and religious beliefs of the indigenous people. Sadly, most pig farmers are faced with unattended extension needs relating to basic production and marketing ethics. Even when relevant information are generated, it is shocking to note that such messages were delivered without adequate consideration to the peculiarity of end-user's extension needs and preferences for communication channels.

Then, while several agricultural manuals had focused on providing relevant information for improved livestock production, there has been a glaring void on the aspect of linking pig farmers to the market. For instance, a study by Uddin and Osasogie (2016) concentrated on the constraints to pig production in Edo Central Agricultural zone of Edo State, Nigeria. Similarly, Ajieh and Okwuolu (2015) assessed the constraints and strategies for enhancing

pig production specifically in Delta State, Nigeria. A more related study by Emokaro and Amadasun (2012) only examined beef marketing in Benin City, Edo State. Hence, none of these works addressed the extension needs of the pork marketers. To this end, it is crucial to assess from the marketers' perspective areas in which assistance is needed for pork marketing because extension programs can be effective only when they meet real needs of intended user. This situation has to be ascertained for pork marketers in Warri South Local Government Area, Delta State, Nigeria. With this in mind therefore, the study assessed the marketing extension needs of pork marketers in Warri South Local Government Area, Delta State, Nigeria. The specific objectives of the study were to;
  (i)   identify the marketing extension services needed by pork marketers in Warri South Local Government Area of Delta State;
  (ii)   identity the marketing information channels used by the respondents;
  (iii) ascertain the marketing information channels preferred by the respondents; and
  (iv) examine the constraints encountered by pork marketers in the study area.

Test of Hypothesis
Ho₁: There is no significant relationship between respondents' preference for information channels and their marketing extension needs in the study area.

Methodology
   This study was carried out in Warri South Local Government Area (LGA) of Delta State, Nigeria. Warri South LGA was created on the 21st of August, 1997 and has its headquarters in the town of Ogbe-Ijoh. It lies between Longitude 5 °31' N and Latitude 5° 45'E of the Greenwich Meridian. It covers a land area of approximately 1,520km^2 with a population of 311,970 persons (National Population Commission, NPC, 2006).
   A multi stage sampling procedure was employed for the simple random selection of 120 respondents using structured questionnaire. Collected data were analyzed using descriptive statistics which included frequency counts, simple percentages and mean scores while the Spearmans' rank correlation analysis was used to draw inferences.
The mathematical expression of the model is stated below as:

$$rs = 1 - \frac{6\sum D2}{N(N2-1)}$$

Where:
D = Difference between scores of preferred information channels and marketing extension needs of pork marketers.
N = Number of estimated variables
Σ = Sigma or Summation sign

Results and Discussion
Distribution of Respondents According to Respondent's Marketing Extension Needs
   With respect to credit/loan acquisition, Table 1 shows that the most needed marketing extension service by the respondent was low interest rate ($\bar{X}$ = 3.33) and ranked first in the list of variables. This was closely followed by link with credit sources ($\bar{X}$ = 3.27) and credit for paying labour ($\bar{X}$ = 3.08). The

result implies that the marketers regarded credit as an essential tool necessary for the smooth running of their business which should be provided at reduced rate of interest. This result however agrees with the assertion by (Olukosi and Dongs, 2016) that interest rates are usually very important factors in making decisions loanable funds. Most lenders are not willing to extend loan to farmers because agricultural production is biological in nature and is characterized by all kinds of risks and uncertainties. High interest rate of agricultural loans, coupled with high transactional cost significantly increase the money cost of agricultural lending. Consequently farmers who borrow at high interest rates may become delinquent. Again, Table 1 presents that all the transportation variables were significantly needed by the respondents with means of transportation from processing site to market ($\bar{X} = 2.97$) as prominent among others. According to Gbam (2017) transportation is the live wire of economic development of every nation. In the view of Abdulraheem *et al.* (2021), efficient transportation system influences the value of an agricultural output by ensuring reduced wastage and safety of produce. With transportation, raw materials are brought to the factory for processing, while the finished goods are delivered to the wholesalers, retailers and the final consumers (Gbam, 2017). On the other hand, result of the marketing component in Table 1 also shows that storage/preservation ($\bar{X} = 3.53$) had the most significant mean among the needed information by pork marketers. This result may suggest that the marketers may have witnessed severe spoilage of pork arising from the use of inefficient storage and preservation facilities. According to Dave and Ghaly (2011) meat is highly susceptible to spoilage due to chemical and enzymatic activities. This is because poorly preserved meat provides favorable growth condition for various microorganisms and therefore the need for efficient storage and preservation method.

Table 1: Marketing extension needs of pork marketers

Marketing extension needs	Mean	Rank
Credit/Loan acquisition		
Low interest rate	3.33*	1st
Link with credit sources	3.27*	2nd
Credit for paying labour	3.08*	4th
Credit purchase of pigs	2.16	3rd
Transportation		
Means of transportation from processing site to market	2.97*	1st
Means of transportation from farm to market	2.91*	2nd
Means of transportation from farm to processing site	2.88*	3rd
Good road network	2.83*	4th
Means of transportation from village to town	2.73*	5th
Group transportation for cost reduction	2.67*	6th
Pork marketing functions		
Storage/preservation	3.53*	1st
Packaging	3.38*	2nd
Processing	3.28*	3r
Grading	3.16*	4th
Slaughtering	3.14*	5th
Protection from infestation of pest and diseases	3.01*	6th
Where to buy	3.00*	7th
Speculation/Sales timing	2.99*	8th
How to buy	2.93*	9th
Current prices	2.88*	10th
Market location	2.43	11th
Where to sell	2.40	12th
How to sell	2.33	13th

Significantly needed (Mean ≥ 2.50)

Information Channels Used by Pork Marketers

Result in Table 2 signifies that majority (84.2%) of the marketers obtained information from Sales agent. This was closely followed by information from Friends/neighbours (60.8%), Personal experience (50.8%), Market association (35%), group discussion and workshop (32.5%), GSM/Telephone (26.7%), Internet (20%), Posters (17.5%), Newspaper (16.7%), Radio and television (15.8%), Pamphlets (12.5%), Bulletins (9.2%) and Lecturers (4.2%) respectively. The fact that majority of respondents sourced marketing information from sales agents portray the dominance of middlemen who provide linkage between producers and buyers in the marketing system. According to Yankson (2016) improving the agricultural marketing environment requires close linkages between the farmers and other value-chain actors to coordinate supply and demand. This linkage is usually provided by market agents as intermediary between buyers and sellers of farm produce. However, most stakeholders have queried the activities of middlemen to be exploitative rather than facilitative (Farinde, 2016).

Table 2: Information channels preferred by pork marketers

Information channels	Used		Not used	
	Freq.	**Percent.**	**Freq.**	**Percent.**
Radio	19	15.8	101	84.2
Television	19	15.8	101	84.2
Friends/neighbours	73	60.8	47	39.2
Market association	42	35.0	78	65.0
Lecturers	5	4.2	115	95.8
Internet	24	20.0	96	80.0
Sales agent	101	84.2	19	15.8
Workshop	39	32.5	81	67.5
Pamphlets	15	12.5	105	87.5
Bulletins	11	9.2	109	90.8
Group discussion	39	32.5	81	67.5
Newspaper	20	16.7	100	83.3
Campaign/exhibition	17	14.2	103	85.8
Posters	21	17.5	99	82.5
GSM/Telephone	32	26.7	88	73.3
Personal experience	61	50.8	59	49.2

Marketing Information Channels Preferred by Pork Marketers

The distribution of the respondents based on their preference for marketing information channels in Table 3 indicates that radio $(\bar{X} = 3.45)$ was the most preferred medium. This was closely followed by Sales agent $(\bar{X}\ 3.23)$, Television $(\bar{X} = 3.18)$, GSM/Telephone $(\bar{X} = 3.12)$, Workshop $(\bar{X}\ 3.03)$, Personal experience $(\bar{X} = 2.99)$, Market Association $(\bar{X} = 2.82)$, Friends/neighbours $(\bar{X} = 2.81)$, Group discussion $(\bar{X} = 2.67)$, Campaign/exhibition $(\bar{X} = 2.59)$, Internet $(\bar{X} = 2.55)$, Posters $(\bar{X} = 2.52)$ and Newspaper $(\bar{X} = 2.5)$ which had significant means above 2.5. Radio as the most preferred channel may be attributed to Agbamu (2006), position that radio is very useful in communicating with marketers because market broadcast can be presented in local languages, which they can easily understand. Ajayi (2003), had earlier proffered reason for the popular use of radio, in that many farmers, if not all, can afford to purchase a transistor radio as it is cheap and more accessible and easy to maintain than other mass media. This result is in agreement with the findings of Oriakhi and Okoedo-Okojie (2013) where radio was the most preferred channel of communication Arable Crop Farmers in Edo State, Nigeria but differs from Konkwo and Michael 2021 where GSM/Telephone was the most preferred electronic medium of marketing information transmission to smallholder arable crop farmers in Imo State, Nigeria.

Table 3: Marketing information channels preferred by respondents

Information channels	Mean	Rank
Radio	3.45*	1st
Sales agent	3.23*	2nd
Television	3.18*	3rd
GSM/Telephone	3.12*	4th
Workshop	3.03*	5th
Personal experience	2.99*	6th
Market association	2.82*	7th
Friends/neighbours	2.81*	8th
Group discussion	2.67*	9th
Campaign/exhibition	2.59*	10th
Internet	2.55*	11th
Posters	2.52*	12th
Newspaper	2.50*	13th
Bulletins	2.47	14th
Pamphlets	2.46	15th
Lecturers	1.98	16th

Significantly preferred (Mean $\geq$ 2.50)

Constraints Encountered by Pork Marketers

As shown in Table 4, result indicates that insufficient funds ($\bar{X} = 3.5$), erratic electricity power supply($\bar{X} = 3.49$), inadequacy of communication infrastructure ($\bar{X} = 3.13$), dearth of marketing research data ($\bar{X} = 2.94$), inappropriate communication media ($\bar{X} = 2.91$), untimely availability of message ($\bar{X} = 2.78$), insufficient feedback from marketers ($\bar{X} = 2.78$), taste/preferences ($\bar{X} = 2.63$), poor road linkage ($\bar{X} = 2.55$)

and unavailability of improved pig species ($\bar{X} = 2.51$) were significant constraints encountered by the pork marketers. This result implies that insufficient fund was prominent among constraints encountered by pork marketers in the study area. This result is in agreement with the findings of Uddin and Osasogie (2016) where insufficient fund was a major constraint to pig business. Financial inadequacies have adversely affected the growth of the livestock industries especially for low income earners who dominate the sector.

Table 4: Constraints encountered by pork marketers in the study area

Constraints	Mean	Rank
Insufficient funds	3.50*	1st
Erratic electricity power supply	3.49*	2nd
Inadequacy of communication infrastructure	3.13*	3rd
Dearth of marketing research data	2.94*	4th
Inappropriate communication media	2.91*	5th
Untimely availability of message	2.78*	7th
Insufficient feedback from marketers	2.78*	8th
Taste/preferences	2.63*	9th
Poor road linkage	2.55*	10th
Unavailability of improved pig species	2.51*	11th
Disease/pest infestation of pigs	2.47	12th
Pilfering	2.46	13th
Market too remote from farm gate	2.40	14th
Restrictions by market union/association	2.22	15th
Language barrier/illiteracy	2.03	16th
Norms and tradition of the people	1.93	17th

Significant constraints (Mean $\geq$ 2.50)

Relationship Between Respondents' Preference for Information Channels and Their Marketing Extension Needs in the Study Area

Result shown in Table 5 indicates that there was a significant and positive relationship (r = 0.482, p$\leq$0.01) between the pork marketers' preference for information channels and their marketing extension needs in the study area. The positive relationship however infers that as the respondents' extension need increases, their preferences for alternative channels of information also increases. This result is therefore not surprising considering Opara (2008) assertion that extension delivery ought to regularly identify those communication channels that farmers prefer as this will enable them effectively address their myriad information needs. By implication, extension services should concentrate on market-led services geared toward customer satisfaction that maximizes the marketer's income.

Table 5: Relationship between the respondents' preferred channels of information and their marketing extension needs

Variables	Extension need	
	Coefficient (r)	Probability level
Preference	0.482**	0.000

**Significance at 0.01%*

Conclusion and Recommendation

The study proffered that information on low interest rate, means of transportation of pork from processing site to market and storage/preservation were the most needed areas of extension services. While

marketing information dissemination through sales agents was the channel used by majority of respondents, radio was the most preferred medium by them. The most significant constraint encountered by the marketers was insufficient funds. There was a significant and positive relationship between pork marketers' preference for information channels and their marketing extension needs in the study area. The study concluded that information on low interest rate means of transporting processed pork from abattoir to market and storage/preservation of pork were the most needed marketing extension services by respondents. It was therefore recommended that extension workers should prioritize service delivery based on the most needed information by marketers without neglecting other areas of lesser needs.

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