Analysis of Poultry Feed Marketing in Ahiazu Mbaise Local Government Area in Imo State

Okonkwo K. N
E-mail: Okonkwokenechi@gmail.com

Abstract

This Paper investigated the Analysis of Poultry Feed Marketing in Ahiazu Mbaise Local Government Area in Imo State. This study was aimed at determining the socio-economic profile of traders distributing poultry feed, the channels of poultry feed distribution from producers to farmers, the socio-economic factors influencing the income of traders dealing on poultry feed in the study area and also the factors militating against effective marketing of poultry feed in Ahiazu Mbaise L.G.A. of Imo State. The study area is located in Ahiazu Mabise were they have enough poultry feed marketers. Seven villages were selected from the thirteen villages that make up the Local Government Area and 3 markets were selected. For the study which includes Afor-ukwu, Afor-ogbe and Nwoaha market and a total of (70) questionnaires were administered to the wholesalers and retailers of poultry feed marketers who were randomly selected from the three (3) poultry feed markets.

Descriptive statistics was used to analyze the socio-economic profile of the respondents; it was also used to analyze the problems faced by the respondents in the study area. The factors affecting income of the poultry feed marketers in the study area were determined using multiple regressions. The lead equation which was the semi-log regression model was chosen based on apriori expectation which gave an R^2 value of 0.866 meaning that 86.6% of the variance in income when explained by the independent variables of Age, Educational level, Purchase cost and cost of transportation which were significant in the equation.

The marketing margin and efficiency was archived using the marketing margin analysis. For both wholesalers and retailers, given a margin of 14.2% and 19% respectively.

The research revealed three (3) marketing channels: the producers sell their poultry feeds to wholesalers, who resell their products to retailers and the retailers sell to consumers.

The marketing efficiency was also determined to be 13%. The major constraints faced by the traders include: trades: Higher cost of transportation, bad roads, lack of funds and credit facilities. Appropriate and useful recommendation was stated and if implemented will improved the poultry feed marketing in Ahiazu Mbaise L.G.A in Imo State.

Introduction

There is no doubt that agriculture occupies a prime place on the economy of Nigeria. For instance, agriculture is the second largest source of foreign exchange earning of the country. Poultry production occupies a very strategic place in both social and economic of Nigerians.

Laseinde (1994) supported the above assertion, when he opined that poultry production has developed and occupies a place of pride among the livestock enterprises due to its rapid monetary turnover. This reason has made poultry business very attractive to small, medium and large scale Nigerian poultry farmers. Efficient feeding and management of poultry will led to realization of compensating income to poultry farmers. However, efforts of poultry farmers have been hampered by poor supply of key inputs. According to Akinwumi and Ikpi (1980), the supply of key inputs has continued to becloud this industry especially where some of the ingredients needed in feed formulation are sourced abroad. This has led to rising cost of the product to final consumes indicates that feeds counts for about 65% of total cost, others are Day-old chicks 18%, labour 9.5%, medication 4%, transportation 2 and other miscellaneous expenses 1.5%. This shows that feed component is the most important production cost (Onuoha, 1995).

Recently, there has been a surge in poultry business especially in Ahiaazu Local Government of Imo State. This became necessary due in part to government agricultural support programs to encourage both civil servants and others to go into agriculture. More importantly, the recent bane on the importation of frozen chicken in Nigeria by the Federal Government despite government incentives – support programs, production output of this industry is often hampered by insufficient, irregular and lack of adequate supply of feeds. This poses a very negative consequence for poultry business.

Application of marketing in agriculture means different things to different people, institutions, organizations and even the government. To a farmer, it means selling his agri-produce while fertilizer distributor regards it a transporting his farm inputs to the farmers in the farm. In Britain, Bateman (1976:17) noted that agricultural marketing is primarily concerned with government policies towards distribution and processing of farm produce, thus is policy subject concerned with government intervention.

Ahiazu Local Government Area of Imo State is one of the economic nerve center of Imo State with a population of about 2million people with majority them in one type of agriculture or another. Given its strategic position in Imo State poultry business, the need to analyze the impact of effective marketing in poultry feed is brought to

light. This is the mandate of this project.

OBJECTIVE OF THE STUDY

The major objectives of this study is to x-ray the economics of poultry feed marketing in Ahiazu Mbaise L.G.A of Imo State. Specific objectives of the study are:-

I.   describe the socio-economic profile of traders distributing poultry feed in Ahiazu Local Government Area of Imo State.
II. determine the socio economic factors influencing the income of traders dealing on poultry feeds in the study area.
III. estimate the marketing margin and marketing efficiency of poultry feed marketers in the area.
IV. discuss the channel of poultry feed distribution from producers to farmers in the study area.
V.   describe factors militating against effective marketing of poultry feed in Ahiazu L.G.A. of Imo State.

HYPOTHESIS OF THIS STUDY

Education, marketing, experience, household size, access to credit, labour cost, transportation cost, purchase cost does not influence the income of poultry feed marketing in ahiazu mbaise.

Methodology

This study was carried out in Imo State in Ahiazu Mbaise L.G.A.

Ahiazu Mbaise has its headquarters at Afor-oru. It was carved out from the old Aboh – Mbaise country council in the year 1778. It is made up of two clans Ahiara and Ekwerazu. Ahiazu Mbaise is bounded on the North by Ehime Mbano Local Government Area, on the South by Aboh – Mbaise Local Government Area, on the east by Obowo Local Government Area and on the west by Ikeduru Local Government Area. The L.G.A. is made up of 27 autonomous communities headed by 27 traditional rulers with about 205 villages.

This study employed simple random and purpose sampling technique in the selection of respondents. As stated earlier, the study area for this study is Ahiazu Mbaise, therefore every poultry feed seller had an equal chance of being selected for this study. Being that, it is not possible to study all the production of the study, the study selected randomly 7 villages from the 13 villages that make up the Local Government Area. The last stage was chosen randomly 10 respondents from each village. This aggregates to 70 respondents for the study.

A number of analytical tools were employed. This includes the use of descriptive statistics and multiple regression analysis. The descriptive statistics will be used to achieve objective 1, 4 and 5. The regression analysis will be used to realize objective 2. Objective 3 was archived using the marketing Margin and marketing efficiency analysis

RESULTS AND DISCUSSIONS

The socio economic characteristics of the poultry feed marketers that were examined include: Age, Education level, marketing experience, access of credit, household size, marital status. These socio economic characteristics are captured in order to carry out proper research work and obtain adequate information needed for efficient analysis as regards to poultry feed marketing.

Table: 1 Distribution of respondent according to their sex

Sex	Wholesale		Retail		Total	
	No	%	No	%	No	%
Male	48.8		12	17.1	46	65.9
Female	16	22.8	8	11.4	24	34.2
Total	50	71.6	20	28.5	70	100

Source: market survey data, 2010.

Table: 1 Sex of Respondents

From the **table: 1** above 48.8% of male wholesalers is more than that of retailers which is 17.1.

Compared to that of the female wholesalers 22.8 and retailers 11.4 this shows that the male farmers participated more in poultry feed marketing.

Age of the Respondents

From **table:2** it can be seen that most of the wholesalers fall within the age range of 25-35 which accounts for 37.1% of the marketers and most of the retailers accounting for 7.1% of the respondents resulting to a total of 44.2. The remaining 55.7% was distributed across the age ranges of 36-45, 46-55 respectively. None of them was above 55 years of age.

Table: 2 Distribution of Respondents according to their age

Age	Wholesalers		Retailers		Total	
	No	%	No	%	No	%
25-35	26	37.1	5	7.1	31	44.2
36-45	15	21.4	12	17.1	27	38.6
46-55	9	12.9	3	4.3	12	17.2
Total	50	71.4	20	28.5	70	100

Source: market survey data, 2010

Table: 3 Marital Statuses of Respondents

The **table: 3** shows that most of the marketers (about 85.7) are married and the remaining 14.3 are simple within the bracket of wholesalers, we can say that 57.1 are married and 14.3 are single. While the married retailers accounts for 28% of the poultry feed marketers in Ahiazu Mbaise. There is no single retailer. Married people are more because poultry feed business involves very mature adults.

Table: 3 Distributions of Respondents According to their Marital Status

Marital status	Wholesalers		Retailers		Total	
	No	%	No	%	No	%
Married	40	57.1	20	28.6	60	85.7
Single	10	14.3			10	14.3
Total	50	71.4	20	28.6	70	100

Source: market survey data 2010

Table: 4   Level of Education of Respondents
The survey revealed that 10 of wholesalers had no schooling (ie no formal education). Followed by 30%, 15% and 7% had primary, secondary and tertiary education respectively. The tertiary aspect of education recorded 7% of wholesalers while the retailers account for just 1% respondent% of respondents acquired informal training for wholesalers while retailers it is 4%.1% of retailers had no education while primary, secondary, tertiary and informal education accounts for 10%, 11%, 1% and 4% respectively. a greater population of the marketers (traders) acquired primary and secondary education followed by no schooling on the wholesalers column and informal training on the retailers column. This means that the traders have a low level of education and this may affect the output of poultry feed marketing and also the level of innovation and marketing acumen.

Table: 4 Distributions of Respondents According To Their Level of Education

Educational level	Wholesaler		Retailers		Total	
	No	%	No	%	No	%
No schooling	7	10	1	1.4	8	11.4
Primary education	21	30	7	10	28	40
Secondary education	11	15.7	8	11.4	19	27.1
Tertiary education	5	7.1	1	1.4	9	8.5
Informal education	6	8.6	3	4.3	9	12.9
Total	50	71.4	20	28.5	70	100

Source: market survey data 2010.

Table: 5 Marketing Experiences of Respondents
The **table: 5** below show that 47.1% of wholesalers in Ahiazu Mbaise have a maximum of 4 years of experience while 10% of the retailers have the same years of experience with the wholesalers. 24.3% of 8 years of experience. This a greater population of wholesalers has more years of experience than the retailers in Ahiazu mbaise.

Table: 5 Respondents distribution according to marketing experience

Years of experience	Wholesaler		Retailer		Total	
	No	%	No	%	No	%
0-4	33	47.1	7	10	40	57.1
5-8	17	24.3	13	18.6	30	42.9
Total	50	71.4	20	28.6	70	100

Source: market survey data 2010

Table: 6 Access to Credit
The survey reveals that 44.3% of wholesales and 18.6% of retailers in Ahiazu Mbaise had access to credit whereas 27.1% and 10% of wholesalers and retailers had no access to credit. Thus a total of 62.9% of marketers in Ahiazu Mbaise had access to credit.

Table: 6 Distribution Respondents according to their access to credit

Access to credit	Wholesaler		Retailer		Total	
	No	%	No	%	No	%
Yes	31	44.3	13	18.6	44	62.9
No	19	27.1	7	10	26	37.1
Total	50	71.7	20	28.6	70	100

Source: market survey data 2010

Table: 7 Household Sizes
 From **table: 7** below, we deduce that 57.1% of wholesale marketers have 1-5 persons and 18.6% of the retailers have a household size of 1-5 persons also. On the other hand 14.3 % of the wholesalers have a household size of 6-10 persons. Also within the same household range of 6-10 persons, the retailers account for just 10% in Ahiazu Mbaise

Table: 7 Distributions of Respondents According To Their Household Size

Household size	Wholesaler		Retailer		Total	
	No	%	No	%	No	%
1-5	40	57.1	13	18.6	53	75.7
6-10	10	14.3	7	10	17	24.3
Total	50	71.4	20	28.6	70	100

Source: market survey data 2010

Table: 8 Incomes of Respondents

The survey revealed that the average income of respondent's in ahiazu mbaise is between ₦1500500-₦2500,500 was 35.7% for wholesalers while 32.8% falls between the income range of ₦2,500600-₦3500,600. On the other hand only 2.9% falls within the income range of ₦3500700-₦4500700. Thus only 2.9% of marketers in Ahiazu mbaise made the highest income.

The average income of retailer falls within the range ₦100500-₦300500which is 17.1% of marketers and 4.3% of marketers at an income range of ₦300600-₦500600,on the other hand 5.7% of marketers made income within the range of ₦500700-₦700700 and1.4% of traders/marketers made income which lies within the range of ₦700800 - ₦900800. This is to say that the distribution of marketers who made lesser income within the range of ₦100500 - ₦300500 is higher than those marketers which fall within the range of ₦700800 – ₦ 900800

Table: 8 Distribution of respondents according to average income per month

Income for retailers	Frequency	%
₦100500- ₦ 300500	12	17.1
₦ 300600-₦ 500600	3	4.3
₦ 500700-₦ 700700	4	5.7
₦ 700800- ₦ 900800	1	1.4
Income for wholesalers	**Frequency**	**%**
₦ 1500500- ₦ 2500500	25	35.7
₦ 2500,600- ₦ 3500,600	23	32.8
₦ 3500700-₦ 4500,700	2	2.9

Source: market survey data, 2010.

Table: 9 Regression table showing the socio economic factors affecting income of wholesalers and retailers of poultry feed marketers in ahiazu mbaise

Independent variables	Linear regression	Exponential regression	Double log regression	Semi log + regression
(constant)	-34537.657	12.482***	0.087	-17987483.351***
	(-0.115)	(32.636)	(0.032)	(-4.168)
Age X_1	13026.682	0.009	0.544***	842887.996*
	(1.367)	(0.734)	(1.849)	(1.827)
Marital status X_2	-267690.116	-0.275	-0.343	-121272.63
	(-1.597)	(-1.288)	(1.380)	(-0.311)
Educational level X_3	17703.529	-0.074	0.084	294471.537**
	(0.479)	(-1.571)	(1.101)	(2.464)
Marketing experience X_4	-12143.913	0.000	0.077	216636.812
	(0.405)	(0.013)	(0.836)	(1.492)
Purchase cost X_5	0.936*	6.05E-008	0.744	2351190.518***
	(3.968)	(0.201)	(1.573)	
Household size X_6	24717.337	0.055	0.051	-227857.584
	(0.693)	(1.201)	(0.425)	(-1.204)
Cost of labor X_7	-8.109	-4.82E-005	0.086	464501.695
	(-0.100)	(-0.467)	(0.189)	(0.654)
Cost of transportation X_8	6.514	3.49E-005**	0.111	-1832054.261**
	(0.693)	(2.912)	(0.224)	(-2.345)
R^2	0.925	0.858	0.937	0.866
R	0.962	0.926	0.968	0.931
F- ratio	93.559***	46.032***	112.885***	49.382***

Source; Market Survey data, 2010
Significant at *   = 10%
Significant at **   = 5%

Significant at *** = 1%
+ Lead equation
According to **Table: 9**, F- Ratio: was used to test the null hypothesis that none of the explanatory variables are related to the income levels of the poultry feed marketers. Here we reject the null hypothesis since (F (8,61) = 49.38, P.<0.001) and so conclude that at least one of the variables of age, marital status, Education level, marketing experience, purchase cost, Household size, cost of labor, cost of transport (Explanatory variables) is related to the income earned by the poultry feed marketers.

R: It's the multiple correlation coefficients, testing the overall relationship between the income level of poultry feed marketers and the explanatory variable as proposed by the model, the multiple correlation coefficient

R =0.931 indicates that there a strong correlation between the income level of markets and those predicted by the regressions model.

R^2: This tells us how much of the variance in the dependent variable (markets income) is explained by the model (which includes the variables of Age, Marital status household size, level of education, purchase cost, transportation cost) in this case the value is 0.866. Expressed as a percentage, this means that the model explains 86.6 percent of the variance in the income of the marketers while the reaming 13.4 % is attributed to the error term.

Marketing Margin and Marketing Efficiency
Wholesalers marketing Margin
The average cost of 1 bag of feed   = ₦1930
Transportation cost for 1 bag on average   = ₦100
Miscellaneous cost of offloading/labour per bags   = ₦5
The wholesaler therefore sells 1 bag of poultry feed on the average for
₦2250
Hence
Total cost of marketing
=   1930 + 60 + 5
=   ₦1995
Net margin of wholesalers
=   2250 -1985
=   ₦255

Hence, the marketing margin of the wholesalers in given by:

$$MM = \frac{\text{Selling price} - \text{Purchase Price}}{\text{Selling price}} \times \frac{100}{1}$$

$$= \frac{2250 - 1930}{2250} \times \frac{100}{1}$$

$$= 14.2\%$$

Retailers Margin
The average cost of 1 bag of feed for a retailer = ₦2100
Other cost of marketing includes
Transportation   = #₦40/bag
Offloading/labour = ₦5/bag
Average cost of selling 1 bag of poultry feed by retailers = ₦26000
Net Retailers margin = 2600 – (2100+40+5)
=   ₦455
Hence the marketing margin of retailers

$$= \frac{\text{Selling price} - \text{purchase x price}}{\text{Selling price}} \times \frac{100}{1}$$

$$= \frac{2600 - 2100}{2600} \times \frac{100}{1}$$

$$= 19.2\%$$

Based on the foregoing, the marketing margin of wholesaler and retailers is 14.2% and 19.2% meaning that for every bag of poultry feed sold, that's the percentage that accrues to them, and the remaining 85.8% and 80.8% goes to the producer, from both the wholesalers and retailers.

The retailers have a wider marketing margin than the wholesalers, due to the high of incurred in transporting the products down to the point of sale. This may cause the wholesalers to either increase the price the sell to retailers so as to increase their margin or to selling poultry feed as retailers so as to get greater return from marketing the product.
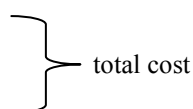
Marketing Efficiency
Total selling price:
Total purchase price:
Total transportation cost:　⎱ — total cost
Total Labour cost:

Hence, marketing efficiency
= $\dfrac{\text{Value added by marketing}}{\text{Total cost}}$　x　$\dfrac{100}{1}$

50 wholesalers
20 Retailers
This value shows the percentage of the lowest cost consistent with the provision of the service of producing, and marketing of the poultry feed, as well as meeting consumers desires.

Total Purchase price　　　=　　₦138500
Total selling price　　　　=　　₦164500
Total cost of labour　　　=　　₦350
Total cost of transport　　=　　₦3800
Hence total cost　　　　　=　　138500+3800+350 = ₦142650

Value Added by marketing
=　　Total selling price – Total cost
=　　164500 -142650
=　　₦21850

Hence marketing efficiency of poultry feed marketing
$\dfrac{\text{Value added by marketing}}{\text{Total cost}}$ x $\dfrac{100}{1}$

=　　$\dfrac{21850}{142650}$ x $\dfrac{100}{1}$

=　　13.3%
This is the marketing efficiency per try of feed sold

CONCLUSION AND RECOMMENDATION
Based on the regression results, the analysis of poultry feed marketing in Ahaizu Mbaise in Imo state has been quantitatively analyzed using appropriate research methods, statistics and fact findings.
Hence, based on the recommendation put forward, the efficiency of poultry feed market in the state will be achieved optimally as well as exporting the product to other states and countries in terms of economic development. Also problems facing poultry feed marketing identified in the study will be tackled in other to develop efficient marketing channels, effect stable price and improve roads.
Government should also develop storage facilities so as to boost production of poultry feed as long period of storage is achieved
Finally, if all this recommendations are properly implemented, they will boost poultry feed trade as well as economic development in Ahaizu Mbaise L.G.A. Imo state.

REFERENCES
Alexander, M. (2003). "Coarse Grains". The International Business Magazine for Grains, Flour and Feeds.
Akinwumi and Ikpi (1980). Developing the Nigeria Poultry: The Case of Hatchery and Feed. A Rural Development Paper Number 28, Feb, 1980.
Aderibigbe, N.K. (1973). "Industrial Problems of Livestock Proceedings of Agricultural Society of Nigeria. Vol. 10, 1973
American Marketing Association: Committee on Definition Marketing Definition: A Glossary of Marketing Terms Chicago, 1760.
Abbot, C. and Makehan, J.P. (1979). Agricultural Economics and Marketing in the Tropics. London Long Group Limited.
Akinwumi and Ikpi (1980). Developing the Nigeria Poultry. The Case of Hatchery and Feed. A Rural Development. Paper Number 28, Feb, 1980.
Bateman, D.T. (1976). "Agricultural Marketing: A Review of the Literature of Marketing Theory and of Selected Agricultural". Journal of Agricultural Economics. Vol. XXVII. No. 2. May.
Baker, Michael J. (1981). Marketing: Theory and Practise, London, The Macmillian Press.

Extension Guide No. 117: Agricultural Marketing and Credit Series No. 1. Principles of Agricultural Marketing. AERIS. Abu Zaria.

Inyanga, T.I. (1998). Marketing for a Developing World, Owerri Global Press Limited.

Josling, T.E. (1974). "Agricultural Policies in Developed Countries: A Review Journal of Agricultural Economics. Vol. XXV. No. 3, September.

Kotler, P. and Ketter, K.L. (2007). Marketing Management. New Delhi Practice – Hall of India Private Ltd.

Kotler, P. and Armstrong, G. (2004). Principles of Marketing. India – Prentice Hall of India Private Ltd.

Laseinda, F.A.O. (1994). Terminology in Poultry Production, Tropical Agricultural Production Series.

Markin, Rom (1982). Marketing. Strategy and Management. 2nd Ed. New York. John Wiley and Sons.

Oluyemi, J.A. and Roberts, F.A. (1979). Poultry Production in Warm Climate. Macmillan Press Ltd. London. Pp. 197.

Olayemi, J.K. (1980). Food Crop Production by Small Farmers: Problems and Prospects in Integrated Rural Development.

Rosenbloom, B. (1995). "Channels of Distribution". Companion Encyclopedia of Marketing, Padstow. TJ Press (Padstow). Ltd.

Stanton, Williams J. (1981). Fundamentals of Marketing, 6th Ed., Tokyo, Japan McGraw-Hill me.