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Factors Influencing Honey Marketing In Abia State, Nigeria

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Abstract

The study examined factors influencing honey marketing in Abia State, Nigeria. It specifically examined socioeconomic characteristics of respondents; analysed the cost and returns, marketing margin and marketing efficiency; and identified the factors influencing profits among honey marketers. Thirty respondents were drawn from each zone respectively to have 90 respondents. From the zones, Ikwuano LGA was selected from Umuahia Zone, Isikwuato LGA from Ohafia zone and Osisioma LGA from Aba zone. The results showed that males dominated the both markets with a fair distribution of ages. The marketing margins and efficiency were high indicating the existence of excellent performance in the entire honey market. The multiple regression analysis showed that there were significant factors influencing marketers' profits. It showed that marketing experience and patronage size were positively related to profits in both markets with household size and storage cost negatively affected profits in both markets too. Based on the findings of study, it was recommended that government should provide rural areas with developmental projects so as to reduce youth's urban migration and thus get them involved in honey marketing and as well as provide marketers with market grants and loans at low interest rates. Marketers on their own are advised to form intricacies for improving overall profits.

Introduction

Apiculture is one of the most widespread agricultural activities in the world [1] and of the oldest farming practices [2]. It is the science and practice of exploiting bee products and services, and has been in existence for thousands of years. Honey can be described as a sticky juicy sweet like the one substance obtained from the social and colonial insect called honey bee (*Apis mellifera*). Honey is the natural un-redefined sweet food available in commercial quantity for man's consumption and industries [1].

The fact that beekeeping can alleviate poverty cannot be over emphasized; beekeeping can boost income particularly in the rural areas and benefit the economy situation, beekeeping provides an excellent service for farmers by crop pollination [3]. Income through bee keeping is possible when the bee products are marketed. Honey marketing is widely accepted as a source of livelihood adaptation for both direct producers and secondary marketers as well.

Marketing is the sum total of all business activities involve in the movement of commodities from production to consumption, it is the method of bringing the impersonal forces of demand and supply together irrespective of the location of the market, [4]. Despite the high demand of honey in our society especially due to its dietary and medical roles, it is discovered that the supply of honey and its products seem not to be enough to meet the demand in the market. The inherent problem of honey marketing could be traced to quality of product, poor transportation and logistics, inefficient equipment for the processing and packaging of honey

According to *Imoudu and Afolabi* [5], the marketing of agricultural products in the region with honey inclusive are not perfectly competitive due to collusive tendency of sellers who form association for particular product. In Abia state, many researchers have criticized the performance honey marketing alluding its malfunctioning with respect to market structure, conduct, and performance. Thus, this study therefore aims at filling the information gap in the study area with respect to structure, conduct, performance of honey market and factors influencing entire gamut of honey marketing.

The main objective of this study is to analyse the dynamics of honey marketing in Abia State, Nigeria while the specific objectives are

- to examine the socio-economic characteristics of the respondents
- to determine the structure of honey marketers with respect to market share concentration
- to examine the marketing cost, net returns and marketing efficiency of the respondents
- to examine honey marketers conduct
- to analyse the factors affecting the profitability of honey marketers in the study area

Methodology

This project work was carried out in Abia State. The state lies between the latitude 50°-30'N to 50°-70' and longitude 70°-17'E to 70°-24'E and it is located in the tropical rainforest zone of Nigeria, Abia State has three agricultural zones namely; Ohafia, Umuahia and Aba with 17 Local Government Areas (LGA). Thirty respondents were drawn from each zone respectively to make up a total sample size of 90 respondents. From the zones, Ikwuano LGA was selected from Umuahia Zone, Isikwuato LGA from Ohafia zone and Osisioma Ngwa LGA from Aba zone. These local government areas were purposively chosen because of their comparative high involvement in honey production and another factor of functional large honey markets. Ten respondents were selected from three communities from each of the LGAs respectively. The data were elicited using structured questionnaire. Only 85 questionnaire were returned making the studied sampled size 85 respondents. The data analyses were carried out using descriptive statistics, gross margin analysis and Ordinary Least Square involving multiple regression analyses.



The model is implicitly specified for retailers as;

Y = F (X1, X2, X3, X4, X5, X6, X7, X8, X9, e).....(1)

Where; Y= Profit performance of marketers; X1=Age of marketers in years; X2=marketing experience in years; X3= cost of storage; X4=cost of transportation (N); X5=patronage size (litres); X6=level of education; X7=Household size; X8=Marital status; X9=Distance (km)

Results and Discussions

1.1. The Socio-Economic Characteristics of honey marketers

The socio-economic characteristics of marketers is presented in table 1 to 5.

Table 1: Percentage Distributions of Respondents by Sex.

Table with 5 columns: Wholesalers (Sex, Frequency, Percentage), Retailers (Sex, Frequency, Percentage). Rows include Male, Female, and Total.

Source: Field Survey Data.

Table 1 shows that majority of honey wholesalers were males against their retail counterparts who are females dominated the market. This could be because of the associated stress in wholesale marketing especially in the area of moving goods as well as travelling long distances to get the commodity.

Table 2: Percentage Distribution of Respondents by Age.

Table with 5 columns: Wholesalers (Age, Frequency, Percentage), Retailers (Age, Frequency, Percentage). Rows include age brackets from 20-29 to 60-69 and a Total row.

Source: Survey Data.

Table 2 shows that different age brackets participated in honey marketing. Among the wholesalers, ages 40 – 49 accounted for about 45% of the entire marketers. However, ages 20 -29 witnessed the lowest level (7%) of participation. This conforms to literature that due to urban migration, certain activities have been restricted to the aged. Also, honey marketing might have been perceived as menial and unfit for the youths. On the other hand, participation was fairly distributed among the various age groups. This could suggest that majority of the retailers took honey marketing as a part-time job.

Table 3: Percentage Distributions of Marketers by Level of Education.

Table with 5 columns: Wholesalers (Education, Frequency, Percentage), Retailers (Education, Frequency, Percentage). Rows include No form, Primary, Secon, Tertiary, and Total.

Source: Survey Data.

Table 3 shows that both wholesalers and retailers attended at least a primary school. This was highest among wholesalers as about 40% of them had a maximum primary education. It can thus be inferred that wholesale marketing of honey involved less skilled and unlearned persons as opposed to retailers whose majority (60%) attended at least a secondary school. From both sides, it can be simply concluded that honey marketing in the study area majorly involved the learned (can read and write).

Table 4: Percentage Distributions of Respondents by Source of Capital.

Table with 5 columns: Wholesalers (Source, Frequency, Percentage), Retailers (Source, Frequency, Percentage). Rows include Personal, Loans, Friends, and Total.

Source: Survey Data, 2014.

Table 4 indicates that source of capital sharply differed among the two marketers' category. Majority (about 60%) of the wholesalers had their capital source from loans (either from commercial, microfinance banks, cooperatives and other local lenders who used interest rate. For the retailers, 100% used personal savings to float their businesses. This could support the thought that they were part-time marketers and did not find it wise borrowing for it. Most of these retailers would have been poor and could not meet the collateral demand of many financial institutions.

Table 5: Percentage Distributions of Respondents by Marketing Experience.

Table with 5 columns: Wholesalers (Experience, Frequency, Percentage), Retailers (Experience, Frequency, Percentage). Rows include experience brackets from 5-Jan to 21-25 and a Total row.

1.2. Field Survey Data

Marketing experience as shown in Table 5 indicates that wholesalers had the highest experience of 6-10 years. Thus, they were moderately experienced. However, retailers were also moderately experienced with the highest experience standing at 26%. Marketing experience is believed to be an influencing indicator on marketers' profitability and efficiency.

1.3. Marketers' Conduct

This was achieved using two main indices: behaviour of sales i.e. whether they buy and sell immediately or whether they buy for both storage and sells and the frequency of purchases.

Table 6: Percentage Distribution of Respondents by Frequency of Purchase.

Table with 5 columns: Wholesalers (Frequency, Percentage), Retailers (Frequency, Percentage). Rows include Daily, Weekly, Monthly, and Total.

Source: Survey Data.

Based on frequency of purchase of honey, it was shown that majority of the wholesalers purchased honey monthly from producers while majority of the retailers purchased weekly (Table 6). This result could be as a result of the presence/absence of storage facilities, cost of rent, ease of movement of the commodity. Wholesalers are assumed to buy in bulk so would buy in such a way as to reduce transportation cost. Since retailers buy from wholesalers, they may buy weekly due to ease of carriage and possible lack of storage and processing facilities.

Table 7: Percentage Distribution of Respondents by Sales Behaviour.

Wholesalers		Retailers		
Behaviour	Frequency	Percentage	Frequency	Percentage
Store	24	60	-	-
Sell	26	40	45	100
Total	40	100	45	100

Source: Survey Data, 2014.

Table 7 shows the reason for marketers either buying and storing or buying and selling immediately could be explained by the presence/absence of storage and processing facilities for majority of the wholesalers (60%) and retailers (100%).

Table 8: Net - Returns, Marketing Margin and Efficiency for Honey Marketers in the Study Area (%).

Indicators	Aba	Umuahia	Ikwano	Isikwuato
Av. Cost Price (N)	700	850	800	1,000
Av. Selling Price (N)	1,000	1,200	1,100	1,000
Gross Margin (%)	30	29	27	20
Av. Returns (N)	15,000	12,000	10,000	15,000
Av. Marketing Cost (N)	7,000	5,000	4,500	5,500
Net Returns (N)	8,000	7,000	5,500	9,500
Marketing Efficiency	114	140	122	172

Source: Survey Data.

Table 8, indicates higher net returns for honey marketing. The marketing margin analysis also shows that high margins existed. According to Scarborough and Kydd [6], five percent and ten percent marketing margins are acceptable for storable and perishable goods and higher for non-perishables. Since honey may not be regarded as perishables, it can be concluded that honey retail marketing is acceptable in the study area.

1.4. Analysis of Factors Affecting the Profitability of Honey Marketers in the Study Area

The Semi-log regression model was chosen as the lead equation based on the number of significant explanatory variables, the signs of the regression coefficients and the value of the coefficient of multiple determination (R²) as they conform to a priori expectations. The model shows that 89.6% of profits received were accounted for by the independent variables and 11.4% error [7-10].

Age was positively related to profits at 1% significance. This implies that as marketers advanced in age, their profits increased. Thus, it is stated that honey marketing was positively affected by marketers' age. Marketing experience on the other hand was positively related to profits at 1% significance. This result is in conformity with a priori expectations that the more experienced marketers are, the higher profits accrued to marketing. This is further buttressed by the fact that the marketers are able to master the market intricacies and thus, reduce losses because of inexperience.

The multiple regression result also showed that cost of storage was negatively related to profits. This is in line with economic theory of costs, i.e, as cost increases, profit reduces. Thus, a 1% increase in cost, will reduce the profits by about 89%. Transportation cost on the other hand was positively related to profits. This negates a priori expectations. However, in developing countries, this is obtainable because every 1% increase in transportation cost, marketers take advantage of this increased cost and thus make excess profits. Patronage size positively and strongly increased profits. This conforms to already

known facts. Thus, as patronage size of marketers increased, profits increased as well.

The results of the regression analysis are presented in table 9 for retailers in the study area.

Table 9: Multiple Regression Results for Factors Affecting the Profitability of Honey Marketers in the Study Area.

Variables	Linear	Exponential	Semi-Log (+)	Double-Log
Constant	0.581	0	0	0
	(-.558)	(11.715)***	(13.953)***	(-12.844)***
X1 (Age)	0.543	0.646	0	0
	(-.614)	-0.463	(7.570)***	(29.490)***
X2 (Marketing Experience)	0.608	0.156	0	0
	(-.518)	(-1.451)	(3.654)***	(-5.041)***
X3 (Cost of storage)	0.947	0.044	0	0
	(-.067)	(-2.091)**	(-4.557)***	(-4.951)***
X4 (Cost of transportation)	0.02	0.081	0	0.001
	(2.434)**	(1.800)*	(7.680)***	(5.222)***
X5 (Patronage size)	0	0	0	0
	(4.691)***	(6.474)***	(4.557)***	(6.929)***
X6 (Level of Education)	0.726	0.682	0.012	0
	-0.354	(-.413)	(-2.209)**	(-1.324)
X7 (Household size)	0.969	0.693	0	0
	-0.039	-0.398	(-4.907)***	(-3.010)***
X8 (Marital Status)	0.116	0.202	0.004	45
	(1.612)*	-1.3	-1.441	-1.221
X9 (Distance, Km)	0.59	0.736	0.755	0.753
	(-.543)	(-.039)	(-2.002)**	(-.322)
R ²	0.51	0.667	0.896	0.794
Adjusted R ²	0.384	0.587	0.888	0.692
F-Ratio	4.042***	7.806***	8.786***	7.688***

Source: Survey Data, 2014.

Note: Value in parentheses is student's error.

*** =Significant at 1%; **=Significant at 5%; *=Significant at 10%

Level of education negatively affected profits at 5% level of significance. This result is against a priori expectation. It is believed that marketers with high education level would attract more profits. However, it is not so. This could be because retail marketers did not take the business seriously, possibly as leisure or part-time business and consequently, had a negative effect on profits. Household size was also negatively related to profits at 1% significance. This implies that households with a high level of dependency had poor profits. Conventionally, this is true as the income of the family was almost spent on household expenses like feeding and medical care. Another reason for this might have been under-utilization of labour. Marital status remained insignificant as it had no effect on profits. Distance was negatively related to profits at 5%. This implies that retailers who purchased from distant places incurred more costs and thus negatively affected profits.

Conclusion

Based on the findings of this research, it is concluded that, honey marketing was profitable, efficient and competitive in the study area. However, was affected positively by the socio-economic factors such as age and experience of the honey marketers (retailers) while household side, level of education and marital statuses negatively affect the profit, efficiency and competitiveness of the marketers (retailers). The cost of transportation was



also have a positive relationship with profit of the marketers in the area; this is because marketers tend to double the price of their products (honey) as the product has no close substitute. Based on the empirical findings of this work, the following recommendations are made: Government should provide marketers with market grants and loans at a very low interest rate to acquire improved storage facilities to enhance the viability of honey in the study area. There is need to curb the anomaly of excess hike in transport cost by transporters which in turn led to exploitation by honey marketers. This would be achieved by putting up a working mechanism to regulate transport cost and as well deal with offenders. Marketers on their own are advised to form cooperatives. This would make for acquisition of loans and grants, interactions and transfer of ideas on market intricacies for improving overall profits.

References

1. Hasan V, Süleyman K (2010) Socio-economic analysis of beekeeping and the effects of beehive types on honey production. *African Journal of Agricultural Research* 5(22): 3003-3008.
2. Abebe A (2009) Market Chain Analysis of Honey Production: in Atsbi Wemberta District, Eastern Zone of Tigray National Regional State. A Thesis Submitted to College of Agriculture Department of Agricultural Economics, School of Graduate Studies Haramaya University.
3. Wenning CJ (2001) The economics of overwintering honey bees. *Am Bee J*, 141(2): 92-97.
4. Mendoza G (1995) A Primer on Marketing channels and margins. In Scott GJ (Eds). *Prices, Products, and People; Analyzing Agricultural markets in Developing Countries*. Lynne Publishers, Boulder, London. Pp. 257-275.
5. Imoudu PB, Afolabi JA (2002) An assessment of the performance of plantain marketing in Ondo State. *Journal of Applied Science* 5: 2690-2697.
6. Scarborough V, Kydd (1992) *Economic Analysis of Agricultural Market: A Manual Marketing Series 5*. Chatham. UK: Natural Resource Institute. pp.172.
7. Ranchman DJ, Mescon MH (1985) *Business Today*. New York: Random House Inc.
8. Bain JS (1986) The profit rate as a measure of monopoly power. *Quarterly Journal of Economics* 55: 271-293.
9. Olukosi JO, Isitor SU (1990) *Introduction to Agricultural Marketing and Prices. Principles and Application Living Series G.U. Publishers Abuja FCT* pp. 37-46.
10. Ozougwu FC (2002) *Economic Analysis of Rice Marketing Margin among Participants in the Marketing Channel of Rice in Adani in Uzo-Uwani LGA*. Unpublished M.Sc Thesis, Department of Agricultural Economics, University of Nigeria, Nsukka.