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MARKET STRUCTURE AND PERFORMANCE OF VALUE CHAIN ACTORS IN HIDES AND SKINS PROCESSING AND MARKETING IN NIGERIA

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ABSTRACT

The study was designed to investigate the Structure and Performance of value chain actors in hides and skins processing and marketing in Nigeria. Specifically, the study described the structure of hides and skins processing and marketing, estimate the marketing margin and marketing efficiency. 106 respondents were selected from Kano, Anambra and Lagos states for the study. The result of the market structure revealed that there was no barrier to entry and exit of the business of hides and skins processing and marketing. Registration was compulsory for tanners and hides and skins wholesalers while it was optional for '*pomo'* wholesalers, leather wholesalers and butchers. Result of the market performance of hides and skins processing and marketing revealed that the marketing margin for leather final consumer was 48% while that of '*pomo'* final consumers was about 44%. Marketing efficiency of tanners was about 176% while that of '*pomo'* wholesalers was 188%. There was high performance in hides and skins processing and marketing in Nigeria. Based on the findings, it was recommended that public or private market information service rendering agencies should be involved in the area of hides and skins processing and marketing in providing reliable and timely information.

Keywords: Structure, performance, value chain actors, hides and skins, Nigeria.

INTRODUCTION

Hides and skins are the main export income generators from the livestock sector in Africa. In the year 2000, Africa's share of total world production was only 5% of bovine hides, 14% of goat and kidskins and 8% of sheep and lambskins (UNDP, 2005). The potential of Nigeria in the production of hides and skins may be assessed from the slaughter statistics. On the average, Nigeria produces over one million hides and about three million skins per year from the registered abattoirs and slaughterhouses (Ihuoma *et al.*, 2001). Many animals are slaughtered outside these registered premises and the utilization of the resultant hides and skins is unaccounted for.

According to Ihuoma *et al*. (2001), a large proportion of hides and skins from slaughters that take place in registered abattoirs and slaughterhouses, are eaten by human beings as meat supplements and delicacies usually called *'pomo'* in Nigerian parlance. While the hides are flayed before reaching the *'pomo'* eaters, the skins particularly, those of goats are usually roasted together with the entire animal. This serves as special delicacies in many Nigerian homes and restaurants, thus, robbing the Nigerian tanneries of this valuable raw material.

'*Pomo'* is a hide that has undergone some processing such as roasting and boiling for human consumption as meat supplement and delicacy. The process of removing hairs from hides to become '*Pomo'* is traditionally done by roasting or by tenderizing the hides in hot water, followed by shaving with razor blade. It is then boiled in water to soften the hides before it is used in soup or stew. It has low nutritional value but many rich Nigerians enjoy eating it as delicacy.

Market structure can be defined as those characteristics of the organization of a market which seen to influence strategically the nature of competition and pricing within the market (Olukosi *et al*., 2005). According to Shaik *et al*. (2009) the market structure conduct and performance (SCP) framework was derived from the neo-classical analysis of markets. According to USAID (2008) Structure-Conduct-Performance (S-C-P) is an analytical approach or framework used to study how the structure of the market and the behaviour of sellers of different commodities and services affect the performance of markets, and consequently the welfare of the country as a whole. Among the factors considered important in determining market structures are the number and relative size of buyers and sellers, the degree of product differentiation, the ease of entry and exit of buyers and sellers into and out of the market, the degree of vertical integration in the market, status of knowledge about costs, prices and market conditions among the participants in the market (Maiangwa *et al*., 2004).

Market performance refers to the extent to which markets result in outcomes that are deemed good or preferred by society. Market performance refers to how well the market fulfils certain social and private objectives (USAID, 2008). In other words, market performance is the appraisal of the extent to which the interactions of buyers and sellers in a market stimulate results that are consistent with social purposes (Olukosi *et al*., 2005). Performance criteria are divided into two categories, those respectively related to economic efficiency and other performance objectives. These criteria are not, exhaustive and research projects may be directed at others, but it is hoped that the means of analyzing markets can be adapted for particular uses (Scarborough and Kydd, 1992).

Value chain has been defined by different authors. Chains composed of companies (or individuals) that interact to supply goods and services are varyingly referred to as production chains, value chains, filières, marketing chains, supply chains, or distribution chains. According to Kaplinsky (1999) value chain describes the full range of activities required to bring a product or service through the different phases of production, including physical transformation, the input of various producer services, and response to consumer demand. A value chain describes the full range of activities required to bring a product or service through the different phases of production, including physical transformation, the input of various producer services, and response to consumer demand (Kaplinsky and Moris, 2001). Value chain actors are the participants of the value chain from the stage of production to the stage of final consumption.

Tanning of hides and skins into leather is one of the main industrial activities of the North West particularly in Kano State, Nigeria. According to Nigerian Tanners Council (2009), over 85% of the tanneries in Nigeria are found in Kano State. The value chain actors in hides and skins processing of hides into leather and '*pomo'* and their marketing include the butchers, tanners, the '*pomo'* wholesalers, hides and skins wholesalers (dealers) and leather wholesalers. As processing and marketing of hides and skins is very important to the industrial activities of the region, effort is required to investigate the structure and performance of hides and skins processing into leather and '*pomo'* and their marketing in the region. Hence, this study attempts to describe and compare the structure and performance of value chain actors in hides and skins processing and marketing in North West Nigeria.

METHODOLOGY

This study was conducted in Kano, Anambra and Lagos States of Nigeria. Major tanning firms, hides and skins major wholesalers (dealers), '*pomo*' and leather wholesalers were

selected from Kano State. This was because over 85% of tanneries in Nigeria are found in Kano State (Nigerian Tanners Council, 2009). Also, most of the hides used for '*pomo*' in Nigeria are purchased in Kano State before transporting to other part s of the country like the east and west for consumption. Butchers, were selected from Kano, Anambra and Lagos States. All the thirteen functional tanneries in Kano State were used for this study. Thirty '*pomo*' wholesalers were also purposively selected from major markets in Kano, Anambra and Lagos States (ten from each state), all the eighteen registered major hides and skins wholesalers (dealers) in Kano were used. The fifteen known leather wholesalers and retailers were selected from Kano. Finally, thirty butchers were purposively selected from major markets in Kano Anambra and Lagos States (ten from each state). Purposive selections were made because information on the sample frame of '*pomo*' wholesalers and butchers were not available in the three states. In all, a total of 106 respondents were used for the study. Primary data were used for the study with the aid of structured questionnaire.

Analytical Techniques

Descriptive statistics, marketing margin and marketing efficiency were used in the analysis of the result.

i. ***Descriptive statistics:*** This was used to describe and compare the structure of value chain actors in hides and skins processing and marketing.

ii. ***Marketing margin:*** For the purpose of this work, the marketing margin was determined by calculating the average cost of marketing for each participant in the various stages involved in the transaction of hides and skins business.

Marketing margin for major hides and skins wholesalers (dealers) per tonne =

$$\text{Marketing margin (MM)} = \frac{CP - PP}{CP} X\,100 \quad \text{.....(1)}$$

Where Cp is the consumer price and PP is the producer price.

$$\frac{\text{Price paid by hides and skins dealers - price paid by butchers}}{\text{Price paid by butchers}} X\,100 \quad \text{.....(2)}$$

Marketing margin for '*pomo*' wholesalers per tonne was calculated as:

$$\frac{\text{Price paid by 'pomo' wholesalers - price paid by hides/skins dealers}}{\text{Price paid by 'pomo' wholesalers}} X\,100 \quad \text{.....(3)}$$

Marketing margin for tanners per tonne was calculated as:

$$\frac{\text{Price paid by tanners - price paid by hides/ skins dealers}}{\text{Price paid by tanners}} X\,100 \quad \text{.....(4)}$$

The marketing margin for leather wholesalers per tonne was calculated as:

$$\frac{\text{Price paid by leather wholesalers and retailers - price paid by tanners}}{\text{Price paid by leather wholesalers and retailers}} X\,100 \quad \text{..... (5)}$$

The marketing margin was calculated using the following formula:

The marketing margin for hides processed into leather by tanners to final consumer per tonne =

$$\frac{\text{Price paid by tanners - price paid by leather final consumers}}{\text{Price paid by tanners}} \text{ X } 100 \text{ .....(6)}$$

iii. ***Marketing efficiency:*** Marketing efficiency can be defined as the ratio of the total value added by marketing divided by cost of marketing services (Olukosi *et al*., 2005). It is usually expressed in percentages as.

i. $$\text{Marketing efficiency (ME)} = \frac{\text{Value added by marketing per tonne}}{\text{Cost of marketing services per tonne}} \text{ X } 100 \text{ ..... (7)}$$

RESULTS AND DISCUSSION

The Market Structure

Market structure is defined as the characteristics of the organization of a market which seem to influence strategically the nature of competition and pricing behaviour within the market (Abdulhadi, 1993; Olukosi *et al*., 2005). Examination of the marketing structure of hides and skins in Kano was concentrated on the following market structural characteristics:

(i) Relative nature and size of participants in the market (ii) barriers to entry (iii) nature of product (iv) degree of vertical integration (v) market information

i. Nature and relative size of participants in hides and skins processing and marketing

The participants of hides and skins processing and marketing included the butchers, hides and skins wholesalers (dealers), tanners, '*pomo*' wholesalers and leather wholesalers.

Butchers: The structure of market for butchers in hides and skins processing and marketing was similar to that of purely competitive market in which many participants were involved and they produce similar products. There is no barrier to entry and exit into and out of the business.

Hides and skins wholesalers (dealers): The relative size of hides and skins wholesalers were not very large and there are constraints to entry into the business. Firstly, one must register and become a member of the association before one can get involved in hides and skins wholesaling.

Tanners: In the tanning business, there are relatively few sellers and the products they produced are differentiated. There is also barrier to entry in the business of tannery because one must register with government before engaging in it. Also the major barrier to entry in the tannery business is the huge initial capital required to start the business.

'Pomo' wholesalerss*:* The business of '*pomo'* wholesaling can be described as similar to that of purely competitive markets where many buyers and sellers were involved, selling homogeneous products. In '*pomo*' wholesaling business, there is no barrier to entry and exit

from the business, either for retailer or wholesaler. What seems to be a restriction is the activity of the trade unions in the market. '*pomo*' wholesalers were expected to pay ₦200/ month to the local government authorities. Also, registration into any association in '*pomo*' wholesaling business is voluntary. All that is required to enter into '*pomo*' wholesaling business is sufficient money according to the desired scale of operation. The '*pomo*' wholesalers sold to the '*pomo*' retailers. The '*pomo*' retailers sold on a smaller scale to final consumers who now boil the '*pomo*' and cut into smaller pieces before they are sold to final consumers.

The leather wholesalers: The business of leather wholesalers can be described as the one with free entry and exit into and out of the business where many producers are involved and producing differentiated products. The leather wholesalers operate on a large scale who then sold to leather retailers. The leather retailers sold on a small scale and their profit level is low. There is no barrier to entry and exit into and out of the business for both leather wholesalers and retailers.

ii. Nature of the product

The tannery industry tanned hides and skins to leather. There are differences in the quality of leather produced by the tanneries. This led to some variations in the prices of the leather produced from one tannery and the other (1.1$ to 1.3$ per foot square). The leather produced also vary in colours from one tannery to the other. The reasons for the variation in the leather produced by different tanneries may be technical knowhow, the quality of flaying of the hides and skins before processing and the final polishing of the leather after tanning.

The products handled by '*pomo*' wholesalers and hides and skins wholesalers are homogenous. The hides and skins supplied to '*pomo*' wholesalers are very similar before any value addition is made. The '*pomo*' wholesalers did the roasting of the '*pomo*' before they sold to '*pomo*' retailers. The '*pomo*' retailers boil the '*pomo*' and cut into smaller pieces before they are sold to final consumers.

In leather wholesaling business, the products they bought are somehow differentiated. The leather wholesalers sold to leather retailers who make some value addition before the products are sold to final consumers. The products of the leather retailers are differentiated in the eyes of the consumers. This depends on the type of value addition made into leather before they are sold to final consumers.

In butchering business, the skins and hide are not differentiated among butchers and the value addition made before selling to hide and skins dealers is salting. Therefore, the products are homogeneous because the hide and skins are from the same local breed of goat, sheep and cattle.

iii. The degree of vertical integration

The study revealed that there was some degree of vertical integration performed particularly by some leather retailers. Some leather retailers combine the works of buying leather from leather wholesalers and process it into leather finished products. Also, some butchers did the work of slaughtering, selling meat and '*suya*' making. Among other value chain actors such as tanners, '*pomo*' wholesalers and hides and skins wholesalers, no vertical integration was done.

iv. Market information in hide and skins processing and marketing

The study revealed that all the value chain actors in hides and skins processed into leather and '*pomo*' seek market information. The major information sought were price and available markets for the sales of their products. The respondents generally indicated that any information about price changes or new market got to them but sometimes very late. In some cases, it is not all information that got to them at the time they needed it most.

The major sources of market information available to the various value chain actors were friends and colleagues (38%), members of their association (42%) and some buying agents (20%). The study also revealed that market information was hardly obtained from radio, government agents and extension agents. As there was information flow among the marketers, it was not easy for a single buyer to influence the price of hides and skins.

Table 1: Summary of the market structure for the various value chain actors of hides and skins processing and marketing.

Value chain actors	Barriers to entry	Nature of product	Degree of vertical integration	Market information
Tanners	There was barrier to entry	Differentiated products. -Monopolistic competition	No vertical integration	Seek market information - Price information - Available markets
***'Pomo'* wholesalers and retailers**	No barrier to entry	Homogeneous products -Pure competition	No vertical integration	Seek market information - Price information - Available markets
Hides and skins wholesalers (dealers)	There was barrier to entry	Homogeneous products -Pure competition	No vertical integration	Seek market information - Price information - Available markets
Leather wholesalers and retailers	No barrier to entry	Homogeneous products -Pure competition	There was vertical integration	Seek market information - Price information - Available markets
Butchers	No barrier to entry	Homogeneous products -Pure competition	There was vertical integration	Seek market information - Price information - Available markets

Marketing Margin Analysis

For the purpose of this work, the tool that was used for analyzing market performance were marketing margins and marketing efficiency.

The marketing margin was calculated for leather producers (tanners) and the '*pomo*' wholesalers. The marketing margin for each value chain actor in hide and skins marketing was also calculated and presented below:

Marketing margin for hides and skins wholesalers per tonne =

$$\frac{252150 - 221185}{252150} \text{ x } 100 = 12.28\%$$

Marketing margin for '*pomo*' wholesalers per tonne was calculated as:

$$\frac{407600 - 322150}{407600} \text{ x } 100 = 20.96\%$$

Marketing margin for tanners per tonne was calculated as:

$$\frac{395000 - 322150}{395000} \text{ x } 100 = 18.44\%$$

The Marketing margin for leather wholesalers and retailers per tonne was calculated as:

$$\frac{547915 - 395000}{547915} \text{ x } 100 = 27.91\%$$

The marketing margin for leather final consumer per tonne was:

$$\frac{427600 - 222500}{427600} \text{ x } 100 = 48\%$$

The marketing margin for '*pomo*' final consumers per tonne was:

$$\frac{39500 - 222500}{395000} \text{ x } 100 = 43.67\%$$

The study revealed that leather wholesalers and retailers had the highest (28%) marketing margin among the various value chain actors. This was due to the fact that leather wholesalers and retailers transformed the leather to various high valued products such as bags, shoes and upholstery which are attractive to the customers. The study also revealed that '*pomo*' final consumers had lower marketing margin than the leather final consumers because '*pomo*' processing involve very little value addition as compared to leather processing. The marketing margin of each value chain actor was relatively low, which is an indication of good performance. The difference in the marketing margin of a particular product should be a good reflection of the cost of adding value to that product and other transaction cost.

Marketing efficiency analysis:

The marketing efficiency for tanners = $\frac{92,579,312}{52,708,363} X \ 100 = 175.6\%$

Marketing efficiency for '*pomo'* wholesalers = $\frac{3{,}654{,}200.72}{1{,}937{,}248.22} X\ 100 = 188\%$

This shows that '*pomo'* wholesaling was more efficient than tanning business. This also implies that the ratio of the naira value added by marketing to the cost of marketing was higher in '*pomo'* wholesaling than in tanning business. There was high marketing efficiency in both tanners and '*pomo'* wholesalers. The high efficiency in hides and skins processing and marketing into leather and '*pomo'* is an indication of good performance in hides and value chain.

CONCLUSION AND RECOMMENDATIONS

The market structure of hides and skins was near pure competition, with free entry into and exit from the business, especially in '*pomo'* marketing, leather marketing and butchering. There are some barriers in tanning and hides and skins wholesaling business. The study also revealed that the marketing margin of each value chain actor was generally low in Nigeria, which is an indication of good market performance hides and skins value chain. Leather marketers had the highest marketing margin among the value chain actors. Also, the marketing efficiency of '*pomo*' wholesalers was relatively higher than the marketing efficiency of tanners. Generally, there was good performance in hides and skins processing and marketing in Nigeria. Based on the findings, the following recommendations have been advanced:

1. The existing hides and skins markets are loosely integrated due to lack of accurate and timely information. Therefore, public or private market information service rendering agencies should be involved in the area of hides and skins marketing in providing reliable and timely information.
2. Market research is necessary to identify the detailed problems encountered in the production and marketing system of hides and skins and to know the requirements of the national and international markets in Nigeria.

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