

Present scenario of cattle hides price at some selected areas in Bangladesh

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Abstract

The study was carried out to investigate the present market price of cattle hide and socio-economic status of slaughterer at three selected areas of Bangladesh. Data was gathered from one hundred and fifty randomly selected respondents from three areas where twenty household from each area who slaughtered cattle during Eid-al-Adha, twenty slaughterers from each area and thirty tannery from Hemayetpur, Savar through a structured questionnaire, from December, 2022 to April, 2023. During survey the considered parameters were the current cattle hide price at different level, respondent gender, age, literacy, family size, housing, source of income, monthly income and working experience. Result from the study revealed that all slaughterers were male and the average aged in Savar, Dhaka South City Corporation & Mymensingh City Corporation were 50.00, 37.16 & 43.61 respectively. For literacy rate of slaughterers it was found that about 36.11% had primary level education, 59.33% had secondary level education, 4.56% had higher secondary level education and no graduate were found. Their average family size were 5.75 and about 75.39% slaughterer lived on rent house and 24.61% on own house. About 94.40% slaughterer solely depend on meat processing but along with meat processing 5.60% were engaged with business. Average income of selected slaughterers were 40468.75 TK/month. Maximum slaughterer (42.00%) have been involved in this profession for 8-16 years. Major sources of hides were household (who slaughtered animal during Eid-al-Adha and for ceremonial purposes) slaughterhouse, meat processing industries etc. In household, slaughterer and tannery small size hides selling price were 245.00 and 295.00 Tk/piece respectively, for medium size 518.00 and 561.00 TK/piece respectively. In case of large size hide market price was 744.00 and 885.00 TK/piece respectively. In tannery, buying price of small, medium and large size hides were 443.00, 758.00 and 1515.00 TK/piece and 28.00, 32.00, 43.00 TK/sq. ft. respectively. The main reason for the rapid decline in the price of hide was low demand of hide and also flay defect.

Introduction

The number of cattle population in Bangladesh is about 248.56 lakh, buffalo 15.16 lakh, sheep 38.27 lakh and goat population is about 269.45 lakh (DLS, 2022-23). Cattle, buffalo, goat and sheep mainly produced meat, milk as well as hide/skin. Eid-al-Adha is one of the major festivals for muslim community. During Eid-ul-Adha a large number of cattle, buffalo, sheep, and goat are sacrificed each year (Hashem et al., 2020; Murshed et al., 2014, Baset et al., 2003; Kobir et al., 2022). According to the Ministry Fisheries and Livestock, 99.50 lakh cattle were sacrificed on last year in Eid-al-Adha and thus produced a large amount of by-products such as bone, hides, skin, fat and blood. As Bangladesh is a Muslim country, so here is huge demand of beef throughout the year. As a result, besides the Eid-al-Adha a large number of hides also produced all the year round. Animal hide is a very significant proportion about 9% (Huda et al., 2011; Spanghero et al., 2004) of the live weight of an animal and meat animals' hides and skins (Cattle, sheep, goat etc) are valuable byproducts of slaughterhouses that are primarily used for leather production (Jayathilakan et al., 2012). In Bangladesh the majority of hides and skins collected by traders come from butchers and families/household, similar to other developing countries without access to slaughterhouses (Brutigam et al., 2018). Traders sell these hides and skins to leather tanning companies who process them from pickling to finished leather/leather goods. Ten years ago, hides which sold at 2000 TK/piece, at present this hide sold only 700-1000 TK/piece. Although tannery collect these hides and then processed for producing several leather goods (e.g. shoes, bags) but last five years it is shown that they offer a very little amount of money for hides rather than government stipulated price. As a result, day by day demand of hides decreased and this ultimately affects the price. Nowadays, even sometimes the farmers/butchers cannot sell their hides to the buyers/traders so they either bury them or ship them off to the landfill. As a result, govt. lost revenue and farmers face economic loss. To the best of our knowledge, there are so little scholarly studies available on hide price in Bangladesh. Therefore, a comprehensive study on hide price using more recent data that give an explanation how drastically change the hide price in Bangladesh. This paper models the present scenario of hide price in Bangladesh and also the socio-economic condition of slaughterers.

Materials and methods

Study area

This study was conducted in three selected areas namely Savar, Dhaka South City Corporation and Mymensingh City Corporation from December, 2022 to April, 2023.

Selection of respondents

A total of 150 respondents were randomly selected from three areas where three types of actors/respondents namely household (20 in each area) who slaughtered cattle during Eid-al-Adha, slaughterer (20 in each area) and total of thirty (30) tannery industry.

Preparation of questionnaire

Keeping the objectives of the study in mind a structured questionnaire was prepared which was very simple, direct and easily understandable by the respondents. The draft questionnaire was pre-tested in the study area to identify the faulty/irrelevant questions in the draft schedule. On the basis of the pre-test results, necessary corrections were made.

Data collection method

The study was planned to demonstrate the current status of cattle hide price from producer to tannery and also the socio-economic status of slaughterer. The study was started in the morning in the hours of work and completed at 1:00 pm at the latest after lunch. Data were collected from respondents by one-to-one interview method. The questions were asked in a very simple manner with explanation wherever necessary. The relevant data for this study were collected without biasness. To obtain accurate and reliable data care and caution were taken during data collection. Attention was paid to the mood of respondents and cordial relationship was established between the respondents and the researcher. At the end of each interview, the researcher thanked the interviewee for their cooperation.

Data processing and analysis

At the end of data collection, the responses of the surveyed respondents that were recorded in the questionnaire were transferred into a master sheet for entering the data into the computer and compiled to facilitate the needed tabulation. Tabular technique was applied for the analysis of data using simple statistical tools like average and percentages through SPSS software.

Result and discussion

Some major characteristics were selected to find out the socio-economic condition of slaughterer which is shown in Table 1. The selected characteristics included gender, age, education level, family size, housing, income source, monthly income and working experience of slaughterer. Present market price of hide are shown in Figure 1 and Figure 2. Animal slaughtered type is shown in Figure 3 and hide production and market constraint are shown in Table 2.

Table 1. Socio-economic condition of slaughterers in three (03) areas

Parameters	Name of areas				Overall	SED	Sig.
	Savar	Dhaka	Mymensingh				
Gender	Male	100	100	100	100	-	-
	Female	-	-	-	-	-	-
Religion (%)	100	100	100	100			
Age (years)	50.00a	37.16b	43.61ab	42.59	1.81	**	
Literacy (%)	Primary	24.67	33.33	50.34	36.11	-	-
	Secondary	68.66	64.67	44.65	59.33	-	-
	Higher secondary	6.67	2.00	5.01	4.56	-	-
	Graduation	-	-	-	-	-	-
Family member (No.)	6.00	5.66	5.69	5.75	0.44	NS	
Housing (%)	Own	25.50	13.33	35.00	24.61	-	-
	Rent	74.50	86.67	65.00	75.39	-	-
Source of income (%)	Meat processing	92.35	100.00	90.20	94.40	-	-
	Agriculture	-	-	-	-	-	-
	Business	7.65	-	9.08	5.60	-	-
Monthly income (TK)	46428.57	43333.33	34615.38	40468.75	4414.77	NS	
Working experience (%)	1-2 years	12.00	13.00	9.00	11.33	-	-
	2-8 years	32.00	23.00	25.00	26.66	-	-
	8-16 years	35.00	47.00	44.00	42.00	-	-
	Over 16 years	21.00	17.00	22.00	20.00	-	-

Gender and Religion

Table 1 showed that all surveyed respondents were male. Roy et al., (2023) reported the same results. Also, all of them were from Muslim community due to high percentage of Muslim population in Bangladesh.

Age

Average ages of slaughterer in Savar, Dhaka South City Corporation & Mymensingh City Corporation were 50.00, 37.16 and 43.61 years respectively. The average age of slaughterers among the studied area was 42.59 years. The results found from this study are similar with the result reported by Wambui et al., (2017) that most of the meat handlers in Kenya were middle-aged (31-40 years). Alam et al., (2020) also reported that a majority of slaughterer were middle-aged (31-40 years) in Mymensingh and Gazipur district of Bangladesh.

Education level

It was found from the above Table 1 that 59.33% slaughterer had secondary level of education, 36.11% had primary level of education, 4.56% had higher secondary level education and no graduate were found. Current educational situation is improving in Bangladesh. The national enrolment rate of secondary education and tertiary education is 63.00% and 17.33%, respectively (UNESCO, 2017). Comparing to the national average of education, the educational level of workers in slaughterhouses and meat selling centers are low which matches with the above result. Siluma et al., (2023) found that about 68.00% participants at the supermarket butcheries studied up to secondary level education and only 6.00% from the village butcheries obtained primary education.

Family size

Average family member's number in selected areas were 6.00, 5.66 & 5.69 respectively which was higher than that of the national average of 4.9 (BBS, 2008).

Housing, source of income and income/month

About 75.39% slaughterer lived on rent house & 24.61% on their own house. Most (94.40%) of the slaughterer solely engaged with meat processing, 4.60% were dependent on both meat processing and business. Monthly income of a slaughterer was 40468.75 TK/month. Average monthly wage of private sector workers are 156 USD/month in 2017 (Trading Economics, 2018) and the minimum wage of Government employees in Bangladesh was 174 USD/month in 2015 (Ministry of Finance, 2015). Siluma et al. (2023) reported that in South Africa, most of the butchery workers belonged to the poor and lower middle class income.

Working experience

It was found that 42.00% slaughterer had 8-16 years of working experience, 26.66% had 2-8 years, 20.00% had more than 16 years and 11.33% had less than 2 years of experience. Smigic et al., (2016) found in a study examining Serbian meat establishment that most of the workers possessed 2-8 years of work experience. Compared to Serbia, older and more experienced slaughterer are working in the meat sector of Bangladesh.

Sources of hides

Major sources of hides were household (who slaughtered animal during Eid-al-Adha and for ceremonial purposes) slaughterhouse, meat processing industries, some renowned super shop etc.

Marketing of hides

From field study it was also found that hides produced by household were bought by local faria/middle man without any processing. Hides which were produced in slaughterhouse and meat processing industries were bought by faria/middle man/contact agent either raw hides or salted hides. After collection, contact agent/faria/middle man sold these hides in tannery.

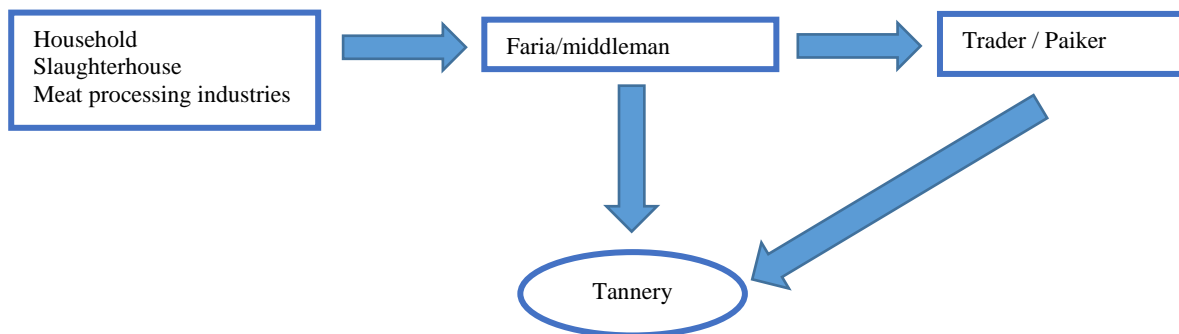


Figure 1. Marketing channel of hides in Bangladesh.

Market price

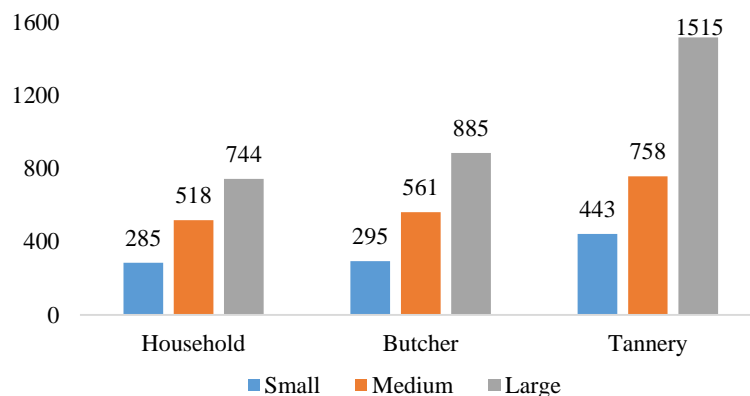


Figure 2. Price of hides in household, butcher & tannery.

Price of hides varies according to size and type of respondent (e.g. household, butcher, tannery). Figure 2 showed that small size hide price were 285.00, 295.00, 443.00 TK/piece, medium size were 518.00, 561.00, 758.00 TK/piece and for large size hide were 744.00, 885.00, 1515.00 TK/piece in case of household, butcher and tannery respectively.

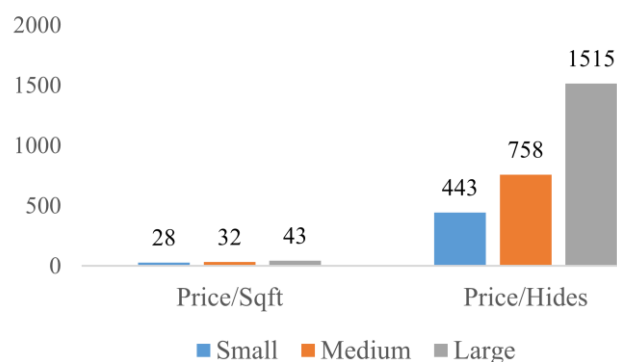


Figure 3. Hides price/piece and price/sq ft. in tannery.

Tannery owner buys hides from traders who collect hides from household and local butcher. They determine the price of hide in two ways. Mainly according to approximate size (small, medium & large). Also determine price according to accurate measurement and the measuring unit is square feet. Tannery bought small, medium and large size hide at 443.00, 758.00, 1515.00 TK/piece and 28.00, 32.00, 43.00 TK/sq. ft. respectively. In 2022, price of a small size cattle hide varied from Tk 200 to Tk 250 in Posta on the day of Eid-ul-Azha while price of a medium size varied from Tk 300 to Tk 750 and a large size cattle hide was sold at a price from Tk 800 to Tk 1150, majority of the traders were reluctant to buy small size cattle hide with many traders even offering Tk 100 for a small size cattle hide (Prothom Alo, 2022).

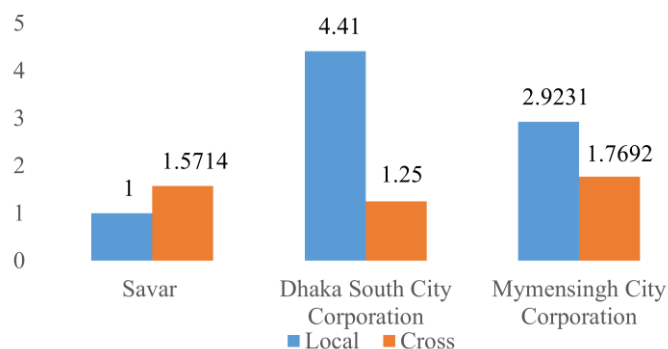


Figure 4. Type of cattle slaughtered/day in selected areas.

The availability of hides through slaughtering of livestock is of particular importance to the leather industry. Figure 4 offers information on type of animal slaughtered/day per slaughterhouse in selected areas. It shows that the average number of local animal slaughtered in Savar, Dhaka South City Corporation & Mymensingh City Corporation were 1.00, 4.41 and 2.92 respectively. Number of cross animal slaughtered in selected areas were 1.57, 1.25 and 1.76 respectively. Alemnesh et al., (2018) found that in Adamitulu Jidokombolcha and Bora Woreda in East Shewa Zone of Oromia Regional State, Ethiopia the mean number of cattle slaughtered was 2.55/day.

Table 2. Cattle hide production and market constraint

Problems		Respondents (%)
Production problem	Flay defect	52.00
	Disease	27.50
	Injury	20.50
Market problem	Low price	55.50
	Lack of competitive market	19.35
	Fluctuating price	15.50
	Lack of price information	10.75

Table 2 showed cattle hide production related problem were flay defect (52.00%), diseases (27.5%), injury (20.5%) and marketing problems were lack of competitive market (19.35%), price fluctuation (15.50%), lack of price information (10.75%). In

favor of this study, Kaguny et al., (2011) who reported that the problems faced by hides and skins traders include poor quality, low price offer, administrative problems and unstable prices, government facilitating and regulatory support and lack of information flow on price. This finding goes in line with Urgessa (2014), who noted that presently the quality of hides and skins is generally low, a greater proportion being in lower grades and rejects due to external parasites (mange mites, ked), other diseases, post-slaughter defects and putrefaction.

Conclusions

It can be concluded that majority of the butchers had secondary level of education, smaller family size, marginal and their source of income is mainly associated with meat processing. It is also shown that day by day market price of hides decreased drastically. To bring back the fair price of hides/restore the price of hides, focus should be given on increasing global demand by reducing pollution in leather processing. The government should take necessary step to pay dues to warehouse keepers and hide traders from owners of the tanneries and can arrange special/preferential loan to tannery owners to overcome their economic recession.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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