Status of Retail Meat Units In Hisar City

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ABSTRACT

A survey of Hisar city revealed that there were 43 raw meat shops/outlets and 72% of these shops were set up during the preceding 10 years. The area of the shop/ outlet ranged between 64-325 square feet with an average of 123 square feet. All these shops had cemented/ pucca floor. 84% of the shopkeepers/butchers were either illiterate or primary pass only. Animals/birds were slaughtered and sold in the same shop in 98% of the cases and the total sale of meat per day was 1363.5, 307.5, 150.0 and 25.0 kg for poultry, goat, pig and fish, respectively. Out of offals only goatskin, skull and hooves were sold; other offals were thrown away. Only 7% of the shops had a wire gauge door and the average personal hygiene was Moderately Good to Good while the equipments and shop hygiene was Neither Good nor Bad to Moderately Good. The total average investment on an outlet (excluding land) was equal to 550.0 % and monthly rent was 21.64 % of sale proceeds of one day. 16% of shopkeepers had ownership of the shop and 84% were tenants. 86% of the shops were registering increase in their business.

Key words : *Meat Outlet, Meat Sales, Meat Hygiene, Meat Economics, Food Safety*

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INTRODUCTION

Traditionally, in states like Haryana, meat eating is considered a taboo. Therefore, the meat shops are generally located at places which are not in full public view. These shops are very small and the butcher sits there with the carcass hanging besides him. He has several types of knives to cut the chunks from the carcass and then to turn it into small pieces on the wooden block which is kept in front of him. Cages having live poultry birds can also be seen outside or inside the shop just near the door. The hygienic conditions may or may not be good but the meat sold is not frozen or stored, which is not the case in western world. With the establishment of Food Safety and Standards Authority of India, all aspects of all foods are likely to be regulated and raw meat is no exception. The National Meat and Poultry Processing Board (NMPPB) has been setup under the aegis of Ministry of Food Processing Industries, Govt. of India. The board has a Meat and Poultry Food Testing Laboratory in Delhi, which is fully functional since June 13, 2010. This may play a great role in the overall betterment of such traditional meat outlets of India. Indian Council of Medical Research (ICMR) has recommended a daily allowance of meat as 34 grams per day per capita whereas the actual meat consumption in India is as low as 14 grams (Tedo, 2011).

Keeping the above concern in view, a survey was conducted by the authors in Hisar city with the objective of divulging the status of traditional meat outlets/shops on the practices, sales trends, literacy status of the shopkeeper/ butcher and infrastructures available etc.

MATERIALS AND METHODS

For the collection of information from butchers/ meat shops/ outlets of Hisar city, a performa was developed along with a 10-point Hygiene Index (Table 1). The Under Graduate Veterinary Internees of the CCS Haryana Agricultural University, Hisar were detailed to record observations on various aspects. Information was collected on the said performa in the year 2011 and data analyzed.

Table 1: 10 Point Hygiene Index

Score	Rating
10	Excellent
9	Very Good to Excellent
8	Very Good
7	Good
6	Moderately Good
5	Neither Good Nor Bad
4	Moderately Bad
3	Bad
2	Very Bad
1	Extremely Bad

RESULTS AND DISCUSSION

Some of the facts revealed during the survey are as below:

Total no. of Outlets, Shop Area, Ownership and Slaughtering Practices: There exist a total of 43 raw meat shops/ outlets in the whole of Hisar city, which has a population of about three lakh. Only 16% of the shopkeeper had ownership of shop; rests of the shopkeepers were tenants. The area of the shop/ outlet ranged between 64-325 square feet

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with an average of 123 (SD- 44.9) square feet. All these shops had cemented/ pucca floor. 98% of shopkeepers were using the same shop/ place for slaughtering the animal and only 2% slaughtered the animals elsewhere. It indicates that the government slaughterhouse in the city, built for this very purpose, is lying unutilized. This may be because of the reason that slaughtering the animals at a faraway place on the outskirts of the city and then bringing the carcass to shop is a cumbersome process. Additionally, customer purchasing poultry meat might prefer to judge the health of the live bird before purchase. It also indicates passiveness on the part of relevant Govt. agencies. This practice needs to be curbed since slaughter and sale within a small area of 123 sq. ft is grossly insufficient and leaves ample scopes of contamination of the carcass posing health risks to the consumers and the butcher as well.

Procurement of Animals, Sales and Business Trend: 62% shops used to procure live animals/ birds from the organized farms only and 28% from local areas (which includes shepherds) and 10 % from both i.e. from different farms and local areas. It reveals that the shopkeepers have choice and animals for slaughter and sale are easily available to them. 86% of the shops registered increase in their business, 12% shops were having neither any increase or decrease,while 2% reported decreasing business. It shows that meat business is growing in Hisar city. During a week, the maximum sale of the meat was on Sunday which may be because of the obvious reason of weekend and consumers want a change in their menu. The minimum sale is on Tuesday. This is because of the reason that in this area, which is dominated by Hindu population, Tuesday is considered as the day of the Hindu deity 'Hanuman' and people refrain from taking meat on this day. During the year maximum sale of meat is on the festival of Holi which may be because of the fun and frolic associated with this festival and meat is considered a special dish. The minimum sale is during Navratras which is a period of 9 days that are considered to be very auspicious and people wish to remain holy and God fearing and do not consume any meat products during this period. Total working man hours per day per shop ranged from 3.0 to 18.0 with an average of 6.9 (SD-2.52). According to this data, it can be assumed that a shop needing 6.0 man hrs may require one full time worker thereby indicating that 57 meat workers were engaged to serve nearly 3.0 lakh people of the Hisar City. This data is based on the survey of a city in a dairy state with largely vegetarian population. On this assumption, the estimated number of workers engaged in such meat business in India with a population of about 127 crores, comes to 5.5 lakh [(57X127croreX14)/(3lakhX6.15)]; where 57 is the total number of meat workers serving a population of 3 lakh with average meat consumption 6.15 g per day and 14 g is the national average meat consumption per day of the national population.

Establishment of Meat Shops: As is evident from Fig-2, 72% of the shops have been established during the preceding 10 years. This may indicate increasing meat consumption in the city. As per Tedo (2011) also the production of meat and meat products has shown an impressive growth in the 1990s. Literacy Level of Butchers/ Shopkeepers: Most of the meat shopkeepers were either illiterate or primary pass (Fig-3). It may indicate that this profession is easy to take up and does not require any formal education. It may also indicate that the literate people do not prefer to indulge in this profession, at this level.

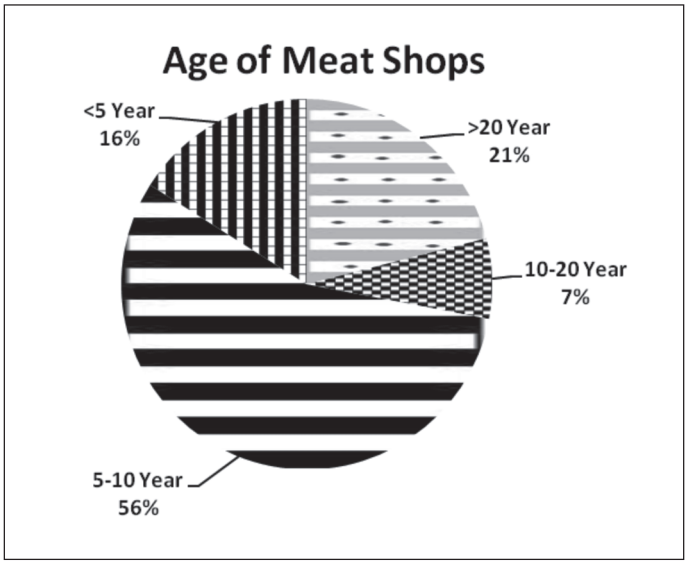

Fig. 2: Establishments of meat shops in years

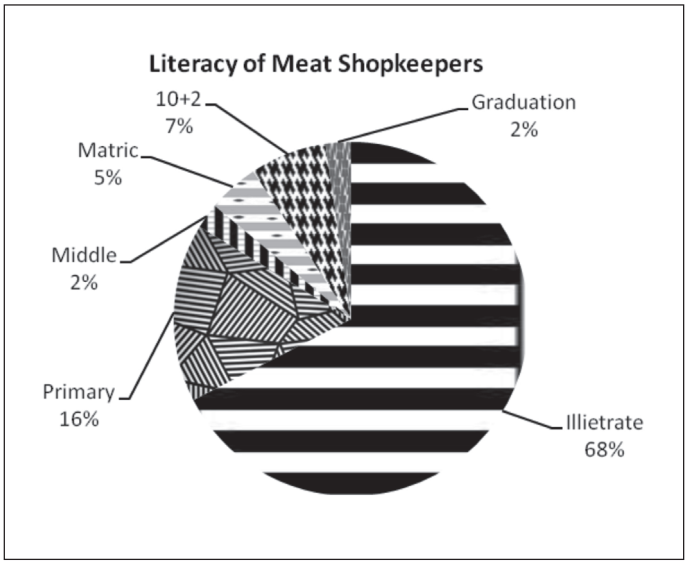

Fig. 3: Literacy level of meat shopkeepers

Sale of Different Varieties of Meat at Outlets: Poultry meat is sold at maximum number of meat shops/ outlets followed by goat meat (Fig-4a). It indicates the consumer preference to poultry and goat meat. Poultry rearing is being taken up very fast in this area because of its close proximity to Delhi, where there exists a huge market for poultry meat. This makes availability of birds easy for consumption in the local area also. The low number of outlets selling fish may also be because of the reason that in Northern India fish dishes are not popular. Similarily pig meat is used only by the lower strata of the society. Sheep meat sale has been shown "zero" as none of the shopkeeper admitted selling sheep meat. It appears that they were substituting or adulterating the goat meat with sheep meat since the liking of sheep meat in this area is poor as compared to goat meat. Only 2% shops sold 3 types of meat i.e. poultry, goat and fish meat combination (Fig-4b). There were no separate shops for fish meat. Pig meat shops had pig meat sale only and location of these outlets were confined to an area inhabited by a very low income group community.

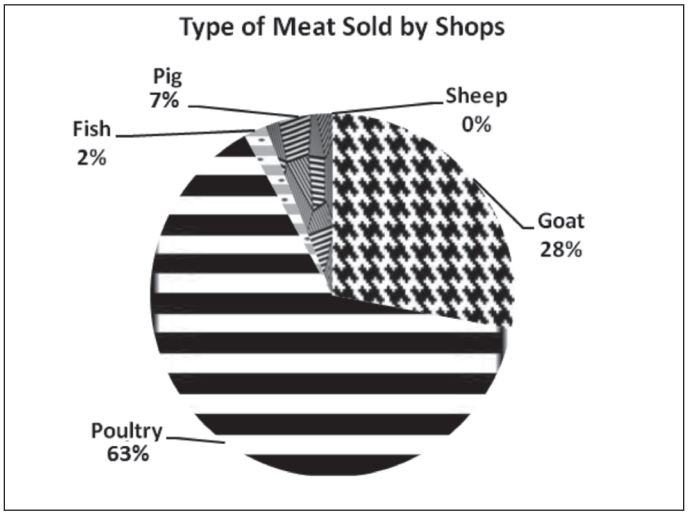

Fig. 4a : Availability of meat species on outlets

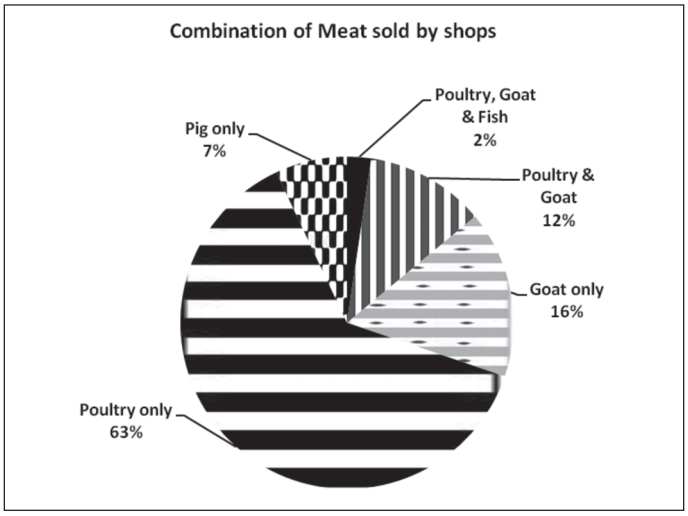

Fig. 4b : Availability of multiple meat species on outlets

Carcass Weight & Dressing Percentage: The variations in carcass weight of the animals within same species being sold may be because of the age and breed of the animals slaughtered. The dressing percentage reported for desi breed in pigs is 75.91% (NIIR Board, 2004) while the dressing percentage of Goat breeds. i.e 'Sirohi & Beetal' prevalent in this area is 47.3±0.9 and 49.68%, respectively. The dressing percentage in various breeds of poultry has been reported from 73-77% (http://www.indg.in/agriculture/animalhusbandary/poultry/breeds-of-poultry-and-their-availability). The average dressing percentage of various species slaughtered in the meat outlets studied is comparable or higher than these figures which shows that the animals being slaughtered are well built and healthy.

Status of Hygiene: Only 7% of the shops had a wire gauge door and 93% did not have any such door; however in 84% of the shops the carcass was covered by a muslin cloth to prevent flies sitting on it. The butchers gave more attention to their personal hygiene in comparison to the equipments and shop as is evident from Fig-6. The average personal hygiene comes between Moderately Good to Good while the equipments and shop hygiene was between Neither Good nor Bad to Moderately Good.

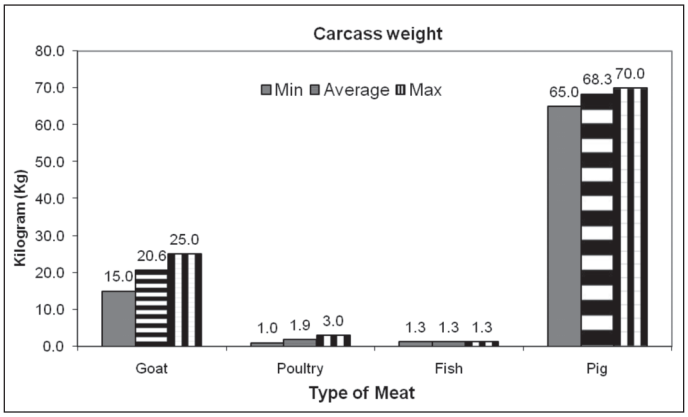

Fig. 5a: Carcass weight of different meat species

Total Sale of Meat : The sale of poultry meat on the shops which were selling this variety of meat was minimum 7 kg and maximum 100 kg with an average of 43 kg per day while these figures for goat, pig and fish meat were 13, 35 & 22; 45, 55 & 50 and 25 & 25 and 25, respectively.

As far as the total sale of meat is concerned, it is observed that more than 90% of the total meat sold is from Poultry and Goat. The minimum sale is that of fish. The per capita purchase of raw meat on the basis of total sale from Fig-7 in Hisar city having a population of about 3 lakh comes to 6.15 g per capita per day. Although this excludes the cooked meat served at various hotels and restaurants (which is not expected to be

substantial), the figure is utterly low in comparison to the ICMR recommended level of meat consumption of 34 gms and also the actual average consumption of 14 gms (Tedo, 2011) in India. Reddy and Raju (2010) also reported that in Hyderabad the average meat consumption was low as compared to the recommended per capita comsumption.

Utilization of Offals: The survey revealed that only in case of shops which were selling goat meat the skin, skull and hooves were being utilized for sale. Other offals from goat and all other offals from other meat species were being thrown away. It is a matter of great concern that the offals emanating from these outlets cause civic nuisance as no system is in place for such disposal.

Investment, Rent and Economics of Meat Shops: As per Table 2 and Table 3, the total avaerage investment(excluding land) on an outlet is equivalent to sale price of 248.17 kg of poultry meat which is equal to total sale proceeds of 5.5 days of an outlet. Similarily, the monthly rent is equivalnt to sale price of 9.76 kg of poultry meat which is only 21.64% of sale proceeds of one day of an outlet. Thus the total investment as well as the monthly rent is quite low; thereby indicating that this business can be taken up very easily even by the poorer sections of the society. Assuming that a net profit of 15% on the total sale proceeds, it comes to Rs. 40599/- (45.11X200X30X15/100 where Rs. 200 is the current sale price of poultry meat per kg) per month per outlet or Rs. 30627/- (40599X43/57) per meat worker which is a respectable figure for an illiterate or primary pass person.

CONCLUSION

Running a meat outlet is a low investment; low risk and high return business. This profession is easy to take up and does not require any formal education. This meat business is registering increase. It may become a paradigm for employment generation and entrepreneur development particularly for the weaker sections. There are an estimated 5.5 lakh meat workers in India and they have to be trained and guided regarding Good Hygienic Practices, Food Safety and other aspects of meat business so that they can provide safe and quality meat to the consumers of the country. The various organizations like National Meat and Poultry Processing board, Ministry of food Processing Industries, National Institute of Food Technology Entrepreneurship and Management and Food Safety and Standards authority of India come into picture here.

ACKNOWLEDGEMENT

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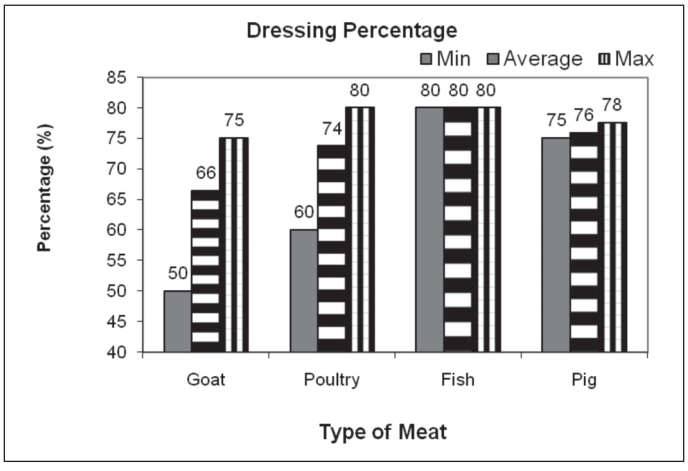

Fig. 5b: Dressing percentage of different meat species

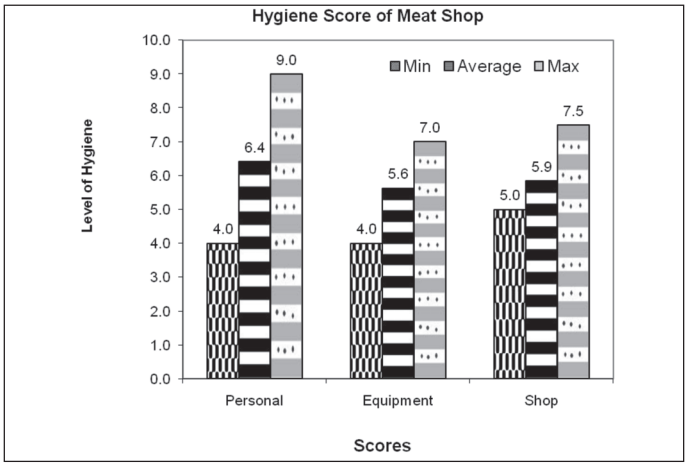

Fig. 6: Hygiene score of meat shops

Table 2: Total Sale of Raw Meat per day in Hisar City

Meat Species	Sale (kgs)	Equivalence to Meat Price	Poultry Kgs
Poultry	1363.50	1.00	1363.50
Goat	307.50	1.49	458.69
Pig	150.00	0.67	100.00
Fish	25.00	0.71	17.71
Total	1846.00		1939.90
Average (43 shops)	42.93		45.11

Table 3: Investment & average rent in terms of kilograms of poultry meat in Hisar city

	Investment (Kg)	Rent (kg)
Min.	45.83	6.67
Max.	475.00	16.67
Average	248.17	9.76