A Survey on Preferred Slaughter Age of Goats in Tamil Nadu, India

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Abstract

A survey was conducted to record the preferred age of slaughter of goat in meat related four district zones in Tamil Nadu. In eight districts, age of the goats was assessed based on the dentition pattern of milk tooth and number of permanent incisors before slaughter. Most of the goats slaughtered were less than one year age with an average body weight of 14-15 Kg and with a carcass weight of 6-7 Kg. In this study, it is observed that animals mostly slaughtered in different slaughter houses across meat related zones in Tamil Nadu are below one year of age which indicates consumers’ preference to tender meat over tougher meat from old animals. Hence, a need based approach has to be made to improve the practices in goat rearing to attain desirable body weight at an early age which will fetch good returns.

Keywords

Goats, Slaughter age, Live weight.

Introduction

Goat meat is consumed by all the sections of society without any religious and social taboos hence it serves as a main source of red meat in the country. Sheep and goats are involved in the development of rural poor and about 5 million families subsist on activities related to sheep and goat rearing and utilising their produce. India is the largest exporter of sheep and goat meat, it has exported 23611.55 MT sheep and goat meat for a value worth Rs. 828.11 crores during the year 2014-15 (APEDA). Major export destinations (2014-15) are United Arab Emirates, Saudi Arabia, Qatar, Kuwait and Oman. Goat is one of the major sources of meat in India, 37% of goats are slaughtered per year and the meat production is 941 million kg (FAOSTAT, 2015). In spite of large potential, the meat trade in our country has not reached its due position as an industry because of unscientific rearing and slaughtering operations and improper recording of details of animals slaughtered as age of goat influences eating quality of meat and the need to document the age of animal is of importance in consumer perspective.

Since the meat of young animals tend to be tender when compared with mature animals.

Hence a survey work has been carried in the districts of Tamil Nadu to document the age of the animal, different breeds slaughtered, weights of animals and carcass.
Materials and Methods

Tamil Nadu state has been classified into four distinct zones based on meat related variables. Two corporation/municipal slaughter houses from each zone were selected for the study. The primary data like breeds most slaughtered, Average live and carcass weight and age of the animals recorded by its dentition in animals presented to the respective slaughter houses in each district from the following corporation/municipal slaughter houses viz., Zone-1 (Villupuram and Salem), Zone-2 (Nilagiri and Kanyakumari), Zone-3 (Trichy and Kancheepuram) and Zone-4 (Madurai and Coimbatore).

Results and Discussion

Results of the present study revealed that different slaughtered in the Districts of Tamil Nadu are Salem black, Kanni, Kodi, Tellicherry. Average live weight of the animals ranged between 10-20kgs whereas carcass weight ranged between 5-10kg which varied with breeds. Similarly Sivakumar et al., (2014) studied the effect of preslaughter weight on carcass characteristics and organoleptic characteristics of kanni goat meat and found that the pre slaughter weight in Gr-II (15-18 kg) was significantly (P<0.01) higher than Gr-I (12-15 kg). Sivakumar et al., (2014) studied the effect of preslaughter weight on carcass characteristics and organoleptic characteristics of kanni goat meat and found that the hot carcass weight in Gr-II (15-18 kg) was significantly (P<0.01) higher than Gr-I (12-15 kg).

Dadi et al., (2005) studied the effect of slaughter age on carcass characteristics of Borana male goat (12 months old) reared under intensive management in Ethiopia and reported that 15 months old goats had significantly higher (P<0.05) dressing percentage (Live weight) (44.68 ± 0.01 %) than 15 months old goats (44.57 ± 0.01 %).

Table.1 Data recorded in different slaughter houses

| Districts    | Average slaughter per day        | Breed                                    | Average live weight (kg) | Average carcass weight (kg) | Age (months) |
|--------------|---------------------------------|------------------------------------------|--------------------------|----------------------------|--------------|
| Kanchipuram  | -20-25 normal days, -Sundays,   | Salem black, kanni and Non descriptive   | 10-20                    | 5-10                       | 6-8          |
|              | holidays and festival season -40-50 | goats                                    |                          |                            |              |
| Villupuram   | -10-15 normal days, Sundays,    | Salem black, kanni and Non descriptive   | 10-16                    | 5-8.5                      | 6-12         |
|              | holidays and festival season -40-50 | goats                                    |                          |                            |              |
| Trichy       | 20-30, Sundays, holidays and    | Kanni, Salem black and Non descriptive   | 12-18                    | 5-9                        | 6-9          |
|              | festival season -60-70          | goats                                    |                          |                            |              |
| Salem        | -30-40 normal days, -Sundays,   | Salem black, kanni and Non descriptive   | 12-16                    | 5.5-8                      | <12          |
|              | holidays and festival season -50-60 | goats                                    |                          |                            |              |
| Coimbatore   | -40-50 normal days, -Sundays,   | Salem black, kanni and Non descriptive   | 10-13                    | 4.5-6                      | <6           |
|              | holidays and festival season -100-120 | goats                                    |                          |                            |              |
| Kanyakumari  | 2-3, normal days, -Sundays,     | Kanni, Tellicherry, Jamunapari and Non    | 10-14                    | 5-8                        | 6-8          |
|              | holidays and festival season -8-10 | descriptive goats                        |                          |                            |              |
| Madurai      | -40-60 normal days, Sundays,    | Salem black, kanni, kodi and Non         | 11-14                    | 6-8                        | <12          |
|              | holidays and festival season -100-120 | descriptive goats                        |                          |                            |              |
| Nilgiris     | 10-15- normal days, -Sundays,   | Salem black, and Non descriptive goats    | 13-15                    | 5-6.5                      | 6-9          |
|              | holidays and festival season -25-30 |                                     |                          |                            |              |
Hence it is observed that animals mostly slaughtered in different slaughter houses across meat related zones in Tamil Nadu are below one of year age which indicates consumers’ preference to tender meat over tougher meat from old animals. Hence a need based approach has to be made to improve the practices in goat rearing to attain desirable body weight at an early age which will fetch good returns.

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