

Studies of housing and breeding management practices on Caprine in the Agra and Aligarh region of sub-tropical zone in India

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Abstract

Goats are an important livestock for poor farmers in India. India has the highest number of goats, ranking first in the world. Under the prevailing socio-economic conditions in India. Goats are the economic backbone of small landless farmers and migrant workers. In this case, the animals must survive almost entirely on agricultural by-products. For know Goat housing and breeding management practices The Study was conducted 16 village of Sub-Tropical zones in Agra and Aligarh Commissionery Area. The Total sample consisted of 240 households both Regions. Investigation was done in 8-8 village of both the Region. Data related to caprine was collected from 15-15 respondents from each village. The Study investigation reveals that Only at Night, Day and Night found 78.33 percent and 21.66 percent houses in Agra region respectively. And in comparison, 63.33 percent, and 36.66 percent were found in Aligarh region respectively. Present Study investigation reveals that 82.5 percent, 11.66 percent and 5.83 percent of the households in Agra area were found Covered, Half open, all open respectively. In comparison to Aligarh region got 86.66 percent, 8.33 percent and 5 percent respectively.

Key words: Breeding, Goats, Goat Keepers, Housing, Management practices

Introduction

The goat is a small dairy cow capable of producing milk, meat, hide, fiber and feces at a faster growth rate, making it one of the most important livestock species today. Today its skin is a valuable by-product of the leather industry and goat dung is rich in nitrogen, phosphorus and trace elements. Exports of live goats and their meat have increased. Therefore, it is crucial to develop national programs to further increase international recognition of goat production and its value-added products.

Goat is the main meat animal in India and its meat is the most popular and therefore the most expensive of all meats. Almost 95 percent of the country's goat meat is consumed locally, but per capita supply remains below demand. Therefore, there is great potential for the development of goat production not only for domestic consumption and export of meat, but also for the production of premium leather, of which

India ranks among the major exporting countries of goat skins. Livestock has been recognized as transformative for the economy and society, complementing the rural sector, especially for the large number of small and marginal farmers and agricultural labor force.

Goats are the economic backbone of small landless farmers and migrant workers. In this case, the animals must survive almost entirely on agricultural by-products. Research shows that farmers lack the science and technology to keep changing and improving, and many practices have yet to be widely adopted by farmers. Management has been recognized as an important tool in improving goat production.

Along with breeding management, housing plays a very important role in harnessing the true potential of dairy cattle (Sinha et al., 2009). Proper habitat reduces the energy wasted in maintaining a thermo-neutral zone as well as reduces the incidence of diseases (Sabapara et al., 2010a).

Materials and Methods

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Pradesh were selected for this study. Both the regions have been selected from the Sub-Tropical zone. There are four-four districts in both the commissionerate areas. Two-Two villages were randomly selected from each district out of a total of eight districts. Therefore 8-8 villages have been selected from both region and 15-15 households from each village were selected for the presented investigation. Total 16 Villages Selected both region and Total sample consisted of 240 households both Regions. These regions were selected purposely because the author is acquainted about the situation and the location of the regions, as well as advanced in the adoption of technology, education and having the facilities of Agriculture institution. Therefore, it was easy to collect the proper and nearly accurate information for study purposes from the selected villages. The villages were randomly selected for the research work.

The primary data were collected from the respondents by using a semi-structured interview schedule, which was pre-tested before actual application. The respondents were interviewed individually by the investigator.

Results and Discussion

Existing housing management practices

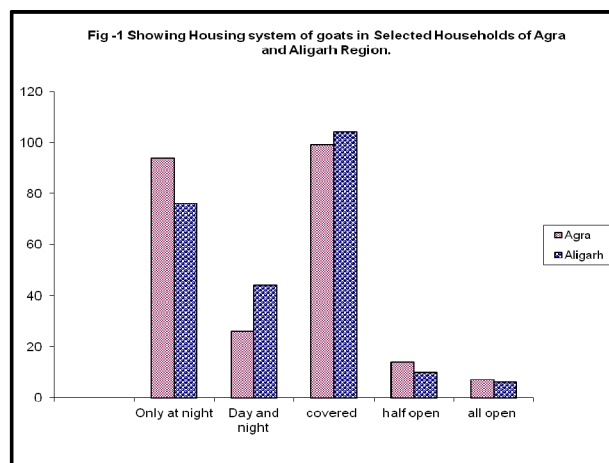
Regarding the system of housing the data has been collected on type of system only during day, only at night, day and night, Type of housing (covered, half open, all open) System from the different village of the both the region.

The present investigation indicates table 1 & figure 1 day night system and type of housing for all kids viz. covered, half open and all open were most popular in both the region. Covered and half open system was found in both the region. The present study

Table 1: Showing Housing systems of goats in Selected Households of Agra and Aligarh Region

Category	No. of Respondents			
	Agra Region (N=120)		Aligarh Region (N=120)	
	f	%	f	%
Only at Night	94	78.33	76	63.33
Day and Night	26	21.66	44	36.66
Covered	99	82.5	104	86.66
Half open	14	11.66	10	8.33
All open	07	5.83	06	5

*Only during day or none was not found in both the regions.



revealed that out of 120 households in Agra region, 94 households had arrangement to keep goat only at night as compared to 76 households in out of 120 households in Aligarh region. In Day and Night, arrangements were made in 26 and 44 households in Agra and Aligarh areas respectively. Only during day or none was not found in both the regions.

According to the present investigation, that out of 120 households in Agra region, 99 households had arrangement to keep goat kids for covered house as compared to 104 households in out of 120 households in Aligarh region. While 14 out of 120 households in Agra and 10 out of 120 houses in Aligarh area had arranged for kids to be kept in half-open housing.

In all open housing, 7 and 6 out of 120 households in Agra and 120 households in Aligarh area were not found to have any arrangement for keeping kids. The Present Study indicates table 1 & figure 1 that Only at Night, Day and Night found 78.33 percent, and 21.66 percent houses in Agra region respectively. And in comparison, 63.33 percent, and 36.66 percent were found in Aligarh region respectively. Who only had arrangements to keep goats at night and Day and Night.

The Present Study investigation reveals that 82.5 percent, 11.66 percent and 5.83 percent of the households in Agra area were found Covered, Half open, all open respectively. And in comparison Aligarh region got 86.66 percent, 8.33 percent and 5 percent respectively. The investigator come to know from the farmers that covered and half open system were extensively used at winter and rainy season. While open system was used at summer season. This study is close agreed with P. S. Tanwar et al. (2008) and

Dharmendra kumar et al. (2018). The similar results have been reported by S. B. Deshpande et al. (2009) and M. Prabu et al. (2011).

Existing breeding practices

The Present Study indicates table 2 & figure 2 that there was only natural service in practice in both the Region for breeding of the animals, the age of maturity of Male was slightly higher (303.26 days) in Aligarh region however it was found to (296.75 days) in Agra region.

The average of age at first oestrus was 337.5 days in female goats of Agra region while the average value of age at first oestrus was found to be 357.45 days in Aligarh region.

The average of oestrus cycle duration was 21.91 days in female goats of Agra region while the Table 2: Showing the reproductive performance of goat in Agra and Aligarh Region

Particulars	Region	
	Agra	Aligarh
Mating method		
Natural Service %	95.875	96.5
Artificial Insemination %	4.125	3.5
Male		
(A) Average Age at first mating (Days)	296.75	303.26
Female		
(a) Average Age at first oestrus (Days)	337.5	357.45
(b) Average Oestrus cycle duration (Days)	21.91	21.67
(c) Average Oestrus duration (Hours)	33.72	34.22
(d) Average Age of first kidding (Days)	497.22	500.20
(e) Average Kidding interval (Days)	326.25	335.27
(f) Litter size (Average/Animal)	1.06	1.08

average value of oestrus cycle duration was found to be 21.67 Days in Aligarh region. The average of oestrus duration was 33.72 hours in female goats of Agra region while the average of oestrus duration was found to be 34.22 hours in Aligarh region.

The average of age of first kidding was 497.22 days in female goats of Agra region while the average age of first kidding was found to be 500.20 days in Aligarh region. The average of kidding interval was 326.25 days in female goats of Agra region while the average kidding interval was found to be 335.27 days in Aligarh region.

The average of litter size was 1.06 in female goats of Agra region while the average litter size was found to be 1.08 in Aligarh region. According to the present study, the Natural Mating method of goats in Agra and Aligarh regions was found to be 95.875 percent and 96.5% respectively. Some farmer shows the interest artificial insemination for goat 4.125 percent in Agra region and 3.5 percent in Aligarh region.

According to the present study, the age at first mating of goats in Agra and Aligarh regions was found to be 9.89 months and 10.12 months respectively.

In the present study it was found that the age at first oestrus of goats in Agra and Aligarh regions was found to be 11.25 months and 11.91 months respectively.

The present study revealed that the age of first kidding of goats in Agra and Aligarh regions was found to be 16.57 months and 16.67 months respectively.

The present study shows that the kidding interval of goats in both the regions Agra and Aligarh regions were found to be 10.87 months and 11.17 months respectively.

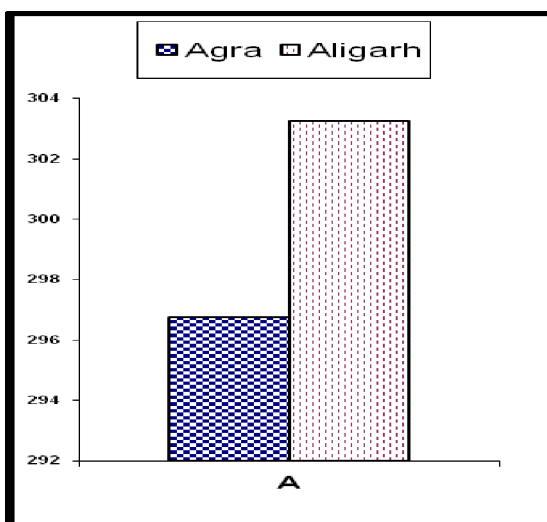
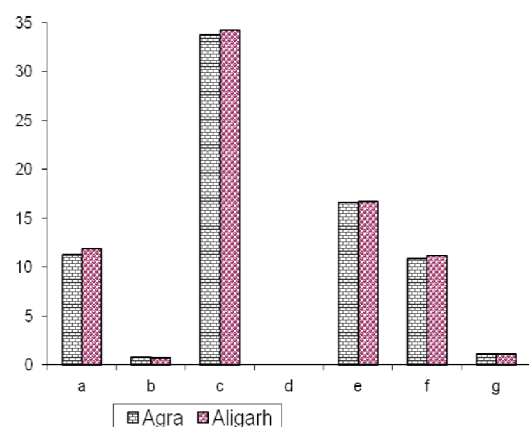


Fig. -2 Showing the reproductive performance of goat in Agra and Aligarh Region



This result supported by Kumar Shalendra et al. (2006), Arun Kumar et al. (2002), and similar to M. Moaen-ud-din et al. (2008) and Birari Dinesh et al. (2019).

Conclusion

It can be concluded that overall except for existing housing and breeding practices and the availability of a qualified veterinary services should be ensured. Goat keeper was poor, and needs improvement. Awareness camps and training programs regarding scientific animal management should be organized which will help in improving housing and breeding management practices, thereby improving animal husbandry practices in future.

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