# **Present Status of Goat Rearing Under Rural Conditions**

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#### **ABSTRACT**

The study was conducted in five adopted villages namely, Bhai, Pingari, Gadaya, Jhandipur and Sanora of Block-Farah, Distt. Mathura, U.P. The goat population was observed to be second largest livestock population in the adopted villages and found to be 1435, goats followed by desi cow (971 nos.) and lowest population was observed in case of sheep (614 nos.). In all the five adopted villages, there were 1639 farm families. Out of this, 306 families were rearing goats. On an average, the number of goats per household was 4.69 goats. Berseem, guar, lobia, pea, arhar, bajra, sorghum, oat, doob grass, motha, bathua, wheat straw, barley straw, bajra stover, sorghum stover, deshi babool, neem, pipal, bargad, siris, subabool and ber were major available legume and non- legume green and dry fodder and fodder trees for goats in adopted villages. The maximum number of goats (30.93%) in adopted villages was affected by the PPR followed by diarrhoea (29.30%), pneumonia (11.86%), lice (11.40%), FMD (8.60%), tympany (3.72%), anorexia (1.63%), conjunctivitis (1.40%), oedematous swelling (0.70%), mange (0.23%) and mastitis (0.23%).

Key words: Present status; Goat rearing

Rural population of the Mathura district depends on livestock for their milk and meat requirement. Goats have a sizable population of total livestock strength in the district. Total goat population in the district was 71044 when compared with 43596 sheep and total livestock population of the district is 950753 (17th livestock census, 2003). Most of the small ruminants in the village condition were kept on natural available feed resources i.e. tree leaves, grasses, residues of vegetable crops and food grain crops. Goats mainly depend on grazing in common lands, village waste lands, irrigation canals and channels, ravines of Yamuna river, and agricultural land during the lean period of agriculture crops. Diseases in goats inflict a heavy loss to the goat keepers and make a significant drain on the resources of poor goat keepers affecting their earning capacity and food security situation (Kumar et al., 2002). Keeping the above facts in view, the present study was undertaken on present status of goat rearing under rural conditions.

## **METHODOLOGY**

Five villages namely, Bhai, Pingari, Gadaya, Jhandipur and Sanora were identified and adopted to study the present status of goat rearing in village condition in the nearby area of Central Institute for Research on Goats, Makhdoom, Farah, Mathura, U.P. To collect data on livestock population, above villages were surveyed door

to door with the help of structured personal interview schedule. The data were collected from the heads of the households. A total of 1639 households available in the village Bhai (443), Pingari (391), Gadaya (296), Jhandipur (267) and Sanora (242) were interviewed for collection of data. Information about fodder and fodder trees for goats in adopted villages and health problems in goats in field flocks was collected through interaction with villagers, field visits and health camps. The collected data and information were tabulated and statistical tools like number and percentage were used for logical conclusion.

## **RESULTS AND DISCUSSION**

The data given in Table-1 reveal that the buffalo population in all the five adopted villages were highest as compared to desi cow, goat and sheep. The goat population was observed to be second largest livestock population in the adopted villages and found to be 1435 goats, followed by desi cow (971 nos.) and lowest population was observed in case of sheep (616 nos.) in all the adopted villages. In this context, Kumar and Singh (2006) stated that the socio-economic value of goat rearing as compared to other livestock species has been immense, for the poor farmers. It is mainly because the low input, high fecundity, easy marketing and unprejudiced social acceptance of their products are few of many advantages of this enterprise that provides assured higher income. Further, goats are also among

the main meat producing animals in India, whose meat is readily preferred irrespective of caste, creed and religion.

Table-1: Livestock population in adopted villages

|     |           |         |         | •       |         |          |
|-----|-----------|---------|---------|---------|---------|----------|
| S.  | Villages  |         | Live    | stock N | os.     |          |
| No. | 2         | Goat    | Sheep   | Cow     | Buffalo | Total    |
| 1.  | Jhandipur | 178     | 310     | 119     | 748     | 1355     |
| 2.  | Sanora    | 71      | -       | 81      | 390     | 513      |
| 3.  | Gadaya    | 356     | 48      | 151     | 427     | 889      |
| 4.  | Pingari   | 249     | 125     | 60      | 627     | 1061     |
| 5.  | Bhai      | 581     | 133     | 560     | 123     | 1395     |
|     | Total     | 1435    | 616     | 971     | 2315    | 5213     |
|     |           | (25.15) | (11.82) | (18.62) | (44.41) | (100.00) |
|     |           |         |         |         |         |          |

In all the five adopted villages, there were 1639 farm families. Out of which, 306 families were rearing goats (Table-2). The highest number of goat keepers were

observed in village Bhai and found to be 132 numbers whereas in village Jhandipur, Sanora, Gadaya and Pingari, it was 25,24,64 and 61 goat keepers respectively. The goat population in all the adopted villages were 1435 goats. Out of them, the maximum (581) goats were observed in village Bhai and found to be 581 goats, followed by Gadaya (356 goats), Pingari (249 goats), Jhandipur (178 goats) and lowest number of goats was noticed in village Sanora (71 goats). The average number of goats per household was highest (7.12 goats) in village Jhandipur, followed by Gadaya (5.04 goats), Bhai (4.39 goats), Pingari (4.08 goats) and the average number of goats per household was low in village Sanora (2.96 goats). On an average, the number of goats per household was 4.69.

Table-2: Classification of goats in adopted villages

| Villages  | No. of  |      | Goats Nos. |      |        | Total | Av. No. of        |
|-----------|---------|------|------------|------|--------|-------|-------------------|
|           | goat    | Α    | dults      | Kic  | ds     |       | goats / household |
|           | keepers | Male | Female     | Male | Female |       | · ·               |
| Jhandipur | 25      | 7    | 145        | 8    | 18     | 178   | 7.12              |
| Sanora    | 24      | 2    | 37         | -    | 32     | 71    | 2.96              |
| Gadaya    | 64      | 21   | 178        | 33   | 124    | 356   | 5.04              |
| Pingari   | 61      | 22   | 143        | 8    | 76     | 249   | 4.08              |
| Bhai      | 132     | 35   | 372        | 17   | 157    | 581   | 4.39              |
| Total     | 306     | 87   | 875        | 66   | 407    | 1435  | 4.69              |

Table-3: Major fodder for goats in adopted villages

|         |   | Green Fodder |       |                                     |
|---------|---|--------------|-------|-------------------------------------|
| SI. No. | Legume  |              |       | Non-legume                          |
| 1.      | Berseem (Trifolium alexandrinum) Egyptian clover) |              | 1.    | Bajra (Pennisetum typhoides)        |
| 2.      | Guar (Cyamopsis teragonoloba) (Cluster bean)      |              | 2.    | Sorghum (Sorghum bicolor)           |
| 3.      | Lobia (vigna sinensis) (cow pea)                  |              | 3.    | Oat (Avena sativa)                  |
| 4.      | Pea (Pisum sativum)                               |              | 4.    | Grasses and other                   |
|         | ·   |              | (i)   | Doob grass (Cynodon dactylon)       |
| 5.      | Arhar (Cajanus cajan)                             |              | (ii)  | Montha (Cyperus rotundus)           |
|         | (Pigeon pea)                                      |              | (iii) | Bathua (Chenopodium album)          |
|         |   | Dry Fodder   |       |                                     |
| SI. No. | Legume  | •            |       | Non-legume                          |
| 1.      | Arhar (Cajanus cajan)<br>(Pigeon pea)             |              | 1.    | Wheat straw (Triticum aestivum)     |
| 2.      | Pea (Pisum sativum)                               |              | 2.    | Barley straw (Hordeum vulgare)      |
|         | ,   |              | 3.    | Bajra stover (Pennisetum typhoides) |
| -       |   |              | 4.    | Sorghum stover (Sorghum bicolor)    |

Tables-3 and 4 show major available legume and non-legume green and dry fodder and fodder trees for goats in adopted villages viz., berseem, guar, lobia, pea, arhar, bajra, sorghum, oat, doob grass, montha, bathua, wheat straw, barley straw, bajra stover, sorghum stover, desi babool, neem, pipal, bargad, siris, subabool and ber. This study confirmed by Tripathi et al., 2005 who reported that cultivated fodder and straws in villages were offered to goats only by some small farmers who kept goats only few in number (2-4) but they mainly raised fodder for large ruminants and goat keepers also utilized

tree loppings in the summer and winter months to fulfill fodder requirements of the goats.

Table -4: Major fodder trees in adopted villages SI. No. Fodder Trees

|    | Hindi /English name | Botanical name       |
|----|---------------------|----------------------|
| 1. | Deshi babool        | Acacia nilotica      |
| 2. | Neem                | Azadirachta indica   |
| 3. | Pipal               | Ficus religiosa      |
| 4. | Bargad              | Ficus glomerata      |
| 5. | Siris               | Albizia lebbeck      |
| 6. | Subabool            | Leucaenaleucocephala |
| 7. | Ber                 | Zvzvphus sp.         |

Table 5. Incidence of goat diseases in field flocks in adopted villages (2002-05)

| SI. No. | Name of the disease  | No. of affected | %<br>affected |
|---------|----------------------|-----------------|---------------|
| 1.      | Anorexia/Dyspepsia   | goats<br>7      | goats<br>1.63 |
| 2.      | Pneumonia/Bronchitis | ,<br>51         | 11.86         |
| 3.      | Oedematous swelling  | 3               | 0.70          |
| 4.      | Corneal Opacity /    | 6               | 1.40          |
|         | Conjunctivitis       |                 |               |
| 5.      | Diarrhoea            | 126             | 29.30         |
| 6.      | Mange                | 1               | 0.23          |
| 7.      | Peste des Petits     | 133             | 30.93         |
|         | Ruminants (PPR)      |                 |               |
| 8.      | Lice infestation     | 49              | 11.40         |
| 9.      | Tympany              | 16              | 3.72          |
| 10.     | Foot and Mouth       | 37              | 8.60          |
|         | Disease (FMD)        |                 |               |
| 11.     | Mastitis             | 1               | 0.23          |
|         | Total                | 430             | 100.00        |

Table 5 indicates that maximum number of goats (30.93%) in adopted villages were affected by the Peste des Petits Ruminants (PPR) followed by diarrhoea (29.30%), pneumonia/bronchitis (11.86%), lice infestation

(11.40%), Foot and Mouth Disease (FMD) (8.60%), tympany (3.72%), anorexia/dyspepsia (1.63%), corneal opacity/conjunctivitis (1.40%), oedematous swelling (0.70%), mange (0.23%) and mastitis (0.23%). The findings of the study are almost similar in line with the contentions of Mallick et al., 2004 reported that the diseases occurred in goats mostly are worm, cold, FMD, tympany, ticks and lice in the area under study.

### CONCLUSION

The findings of the study revealed that in the adopted villages goat population ranked second after buffalo and on an average the number of goats per household was 4.69 goats. Available fodder crops, trees, grasses etc., were enough for goats in these villages. Further, goats were observed to be affected by the diseases i.e. PPR followed by diarrhoea, pneumonia, lice infestation, FMD, typmany, anorexia, conjunctivitis, oedematous, swelling, mange and mastitis. Hence time to time treatment facilities were needed to provide by the Veterinary Hospitals for saving the goats from these ailments.

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