

## Perceived Needs, Accessibility and Utilization of Information on Scientific Goat Husbandry

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### ABSTRACT

An *ex-post-facto* study was conducted to review the needs, accessibility and utilization of information on scientific goat rearing, with a sample of 160 respondents in Mathura district of Uttar Pradesh. Information needs were assessed on three point continuum i.e. most needed, needed and least needed for 34 aspects of goat husbandry. Accessibility of information was assessed in terms of frequency of (yes/no) responses, while, information utilization was measured on three point continuum *viz* frequently, sometimes and never. The investigation revealed that information regarding 'common goat diseases with their preventive measures', 'vaccination', 'local market', 'banking-finance for goat farms', and 'preparation of economic balanced ration' were perceived extremely needed. About 85 per cent of respondents reported they had no accessibility of relevant information in all the selected sub-areas of goat farming. Not more than 20 per cent respondents were utilizing the accessed information frequently while more than 30 per cent of them had never used the information.

**Key words:** Information, needs, goat husbandry, Uttar Pradesh

### INTRODUCTION

Lack of information on improved goat rearing practices ultimately results in production losses through morbidity and sometimes mortality- all resulting in production losses to the goat owners. Kumar (2007) reported that high mortality in goats in the initial phase was mainly due to lack of knowledge about package of practices of improved goat farming, poor management, poor preparedness of the farmers, lack of the personal attention of the entrepreneurs and poor access to veterinary services. So, improving accessibility of accurate, relevant and need based information will help goat owners to make timely decision about various aspects of their animals. Furthermore, information is viewed as a critical resource like land, labour and capital and it has become an important input for any production system and decision making process. Similarly, livestock information is a key component for increased livestock production and productivity as, critical and necessary information and infrastructure support is of vital importance for the adoption of scientific livestock practices. There is a significant and positive relationship between information sources and knowledge level about

animal husbandry practices (Sagar and Goswami, 1998). Thus, it is quite sequential that timely necessary information leads to improved awareness leading to knowledge and changed attitude, which finally may help change the practice towards improved performance in terms of quantity and quality of product and services. Also, the approved utilization of accessed information on scientific livestock rearing practices contributes effectively to make animal husbandry ecologically sustainable and economically profitable. So, the information needs of the livestock owners, especially, unorganized small scale goat keepers, are to be realistically understood to address the priorities of information accompanied with, an understanding of existing accessibility and utilization pattern of accessed information. Hence, keeping the above facts in view, the study entitled "Perceived Needs, Accessibility and Utilization of Information on Scientific Goat Husbandry" was undertaken.

### METHODOLOGY

This *ex-post-facto* study was conducted purposively in Mathura district of Uttar Pradesh during 2015. Out of 10, four highest goat populated blocks were selected for

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study and from each selected block, 2 villages were chosen in same manner. Further, 10 goat-keepers from each village were selected randomly, who were owning minimum five goats with an experience of more than 2 years of goat rearing. Thus, total 160 respondents were identified for study.

Data were collected through direct interview using a pre-tested semi-structured interview schedule. Information need, accessibility and utilization as perceived by goat farmers were ascertained in five sub-areas of goat husbandry *viz.* feeding, housing-management, health care, breeding and marketing-finance. For information need assessment, responses were taken on three point continuum i.e. 'most needed', 'needed' and 'least needed' with respective scores as 3, 2 and 1 for total 34 aspects of goat husbandry.

The percentage for each informational area was calculated and ranking was done for each category based on the total weighted mean score. Summation of scores given to particular activity by all respondents formed the total score (TS) and dividing the total score by total number of respondents shaped the total weighted mean score (TWMS).

Accessibility of relevant information related to selected sub-areas of goat rearing practices among respondents in study area was noted as available (yes) or unavailable (no) as replied by them. Extent of utilization of accessed information in different sub-areas of goat rearing was measured on a three point continuum; frequently, sometimes and never according to the response of respondents. Frequency and percentage for each category were calculated to understand accessibility and utilization extent of information.

## RESULTS AND DISCUSSION

The findings of the study and relevant discussion have been presented under following sub-heads:

### Information needs of goat rearing farmers

The results of investigation as shown in Table 1 revealed that, out of the five assessed areas of goat husbandry information, health care was perceived as top ranked followed by marketing-finance, feeding, and housing-management, while, information on goat breeding management was ranked last by goat farmers.

**Table 1: Perceived information needs of goat rearing farmers  
n=160**

| Goat Husbandry Information Areas                     | MN (%) | N (%)  | LN (%) | TS  | TWMS | Rank |
|--|--------|--------|--------|-----|------|------|
| <b>FEEDING MANAGEMENT PRACTICES</b>                  |        |        |        |     |      |      |
| Feeding according to age, sex, weight                | 38.12  | 40.625 | 21.25  | 347 | 2.17 | IV   |
| Preparation of economical & balanced ration          | 52.50  | 41.25  | 6.25   | 394 | 2.46 | I    |
| Mineral mixture supplementation                      | 40.00  | 46.25  | 13.75  | 362 | 2.26 | III  |
| Importance of colostrum feeding                      | 45.62  | 40.625 | 13.75  | 371 | 2.32 | II   |
| Importance of clean feeding and watering             | 23.12  | 46.25  | 30.62  | 308 | 1.92 | VI   |
| Fodder production for goat                           | 31.25  | 46.875 | 21.87  | 335 | 2.09 | V    |
| Enrichment of poor quality roughage & its storage    | 9.37   | 53.75  | 36.87  | 276 | 1.72 | VIII |
| Nutritional management of breeding problems          | 10.00  | 55.00  | 35.00  | 280 | 1.75 | VII  |
| <b>HOUSING-MANAGEMENT PRACTICES</b>                  |        |        |        |     |      |      |
| Scientific & low cost animal shed preparation        | 25.00  | 55.62  | 19.38  | 329 | 2.06 | V    |
| Care of does (before, during & after kidding)        | 44.38  | 49.37  | 6.25   | 381 | 2.38 | I    |
| Care of new born kid                                 | 32.50  | 58.13  | 9.37   | 357 | 2.23 | II   |
| Weaning  | 7.50   | 56.25  | 36.25  | 274 | 1.71 | VI   |
| Castration   | 32.50  | 53.75  | 13.75  | 350 | 2.19 | III  |
| Hygiene in the shed                                  | 30.00  | 48.12  | 21.88  | 333 | 2.08 | IV   |
| Manure management                                    | 16.88  | 36.25  | 46.87  | 262 | 1.64 | VII  |
| Record keeping                                       | 0      | 33.13  | 66.87  | 213 | 1.33 | VIII |
| <b>HEALTH MANAGEMENT PRACTICES</b>                   |        |        |        |     |      |      |
| Common goat diseases and preventive measure          | 85.00  | 12.50  | 2.50   | 452 | 2.83 | I    |
| Care of sick animal                                  | 52.50  | 35.63  | 11.88  | 385 | 2.41 | IV   |
| Control of external and internal parasites           | 58.75  | 38.13  | 3.13   | 409 | 2.56 | III  |
| Vaccination  | 76.88  | 19.38  | 3.75   | 437 | 2.73 | II   |
| First aid/home remedies                              | 38.75  | 53.13  | 8.13   | 369 | 2.31 | V    |
| <b>BREEDING MANAGEMENT ASPECTS</b>                   |        |        |        |     |      |      |
| Breed selection                                      | 21.25  | 66.25  | 12.50  | 334 | 2.09 | I    |
| Selection of parent stock and breeding strategy      | 7.50   | 45.00  | 47.50  | 256 | 1.60 | VI   |
| Care of breeding buck                                | 11.25  | 52.50  | 36.25  | 280 | 1.75 | V    |
| Heat detection and correct time of mating            | 2.50   | 50.62  | 46.88  | 249 | 1.56 | VII  |
| Pregnancy diagnosis                                  | 25.62  | 47.50  | 26.88  | 318 | 1.99 | III  |
| Practice of increasing twinning/triplet and flushing | 21.25  | 56.88  | 21.87  | 319 | 1.99 | II   |
| A.I. in goats and its importance                     | 0      | 42.5   | 57.5   | 228 | 1.42 | VIII |
| Infertility problems                                 | 18.13  | 45.62  | 36.25  | 291 | 1.82 | IV   |
| <b>MARKETING &amp; FINANCE ACTIVITIES</b>            |        |        |        |     |      |      |
| Current information of local market                  | 63.75  | 25.63  | 10.63  | 405 | 2.53 | I    |
| Marketable age of animal                             | 25.63  | 53.75  | 20.63  | 328 | 2.05 | V    |
| Insurance of animal                                  | 26.88  | 53.13  | 20.00  | 331 | 2.07 | IV   |
| Finance (Banking) for goat farm                      | 53.75  | 40.63  | 5.63   | 397 | 2.48 | II   |
| Knowledge about Government scheme                    | 41.88  | 48.75  | 9.38   | 362 | 2.26 | III  |

(MN - Most Needed, N - Needed, LN - Least Needed, TS - Total Score, TWMS - Total Weighted Mean Score)

It is also reflected from table 1 that, based on TWMS among 34 identified goat farming activities, information regarding; 'common goat diseases with their preventive measures' (2.825), 'vaccination' (2.731), 'local market' (2.531), 'banking finance for goat farm' (2.481), 'preparation of economic and balanced ration' (2.462), 'care of does' (2.382) and 'breed selection' (2.087) were perceived with higher intensity of need. Scores assigned by respondents to different informational aspects of goat husbandry clearly indicates that goat farmers are in real and immediate need of timely, accurate and relevant information about improved goat rearing. Regarding feeding of goats, information related to preparation of economic and balanced ration was top ranked followed by importance of colostrum feeding (rank II) and mineral mixture supplementation (rank III). Information related to care of does (rank I), care of new born kids (rank II) and castration (rank III) were perceived as highly needed by goat farmers in case of goat housing-management activities. In the sub-area of goat health care, perceived information need was maximum for 'common goat diseases with their preventive measures' followed by vaccination (rank II) and control of parasites (rank III). Breed selection, practices of increasing twinning/triplet and pregnancy diagnosis were ranked I, II and III respectively; among eight activities on which information needs were assessed related to breeding management of goats. Among five activities related to marketing-finance; information about local market was top ranked followed by financial/banking information (II rank) and information related to Government schemes (III rank). These findings are partially in line with findings of Durggarani and Subhadra (2009) and Balaraju (2013).

### Accessibility of information on improved goat rearing among respondents

Obtained results clearly indicate that accessibility of information related to improved goat rearing was not satisfactory among the respondents.

**Table 2: Accessibility of information on improved goat rearing n=160**

| Information Area     | Accessibility |            |           |            |
|----------------------|---------------|------------|-----------|------------|
|                      | Yes           |            | No        |            |
|                      | Frequency     | Percentage | Frequency | Percentage |
| Feeding              | 20            | 12.50      | 140       | 87.50      |
| Housing & management | 22            | 13.75      | 138       | 86.25      |
| Health care          | 25            | 15.62      | 135       | 84.38      |
| Breeding             | 17            | 10.62      | 143       | 89.38      |
| Marketing & finance  | 15            | 9.37       | 145       | 90.63      |

Data shown in table 1 reveals that more than 85 percent of goat rearing farmers in study area had not accessibility of relevant information across all the selected sub-areas of goat husbandry. Maximum accessibility was in case of health care, while,

information related to marketing-finance was least accessible. Only 15.62 percent respondents were getting information on goat health care followed by housing-management (13.75%), feeding (12.5%) and breeding (10.62%) while, marketing-finance information was accessible to less than even ten percent (9.37%) respondents. The results strengthen the need to identify the factors responsible for this low accessibility of goat management information along with powering the information delivery system. Results are partially in line with NSSO survey (2006) which revealed that only 5.1 per cent of the farmer households in India are able to access the information on animal husbandry.

### Utilization of accessed information on improved goat rearing among respondents

Data presented in table 3 reveal that in all five sub-areas of goat husbandry, the utilization of accessed information was not regular. The percentage of respondents who were utilizing the accessed information frequently was even less than 20 per cent, while, more than 30 per cent of them had never used the accessed information. Maximum utilization of information was recorded in marketing and finance area because fewer options were available to respondents in this area, while, information related to breeding were least used, probably due to less human intervention was required in goat breeding.

**Table 3: Utilization of accessed information among respondents**

| Information Area          | Extent of Utilization |       |           |       |           |       |
|---------------------------|-----------------------|-------|-----------|-------|-----------|-------|
|                           | Frequently            |       | Sometimes |       | Never     |       |
|                           | Frequency             | %     | Frequency | %     | Frequency | %     |
| Feeding (n=20)            | 4                     | 20.00 | 10        | 50.00 | 6         | 30.00 |
| Housing-management (n=22) | 3                     | 13.64 | 10        | 45.45 | 9         | 40.91 |
| Health care (n=25)        | 5                     | 20.00 | 12        | 48.00 | 8         | 32.00 |
| Breeding (n=17)           | 3                     | 17.65 | 7         | 41.18 | 7         | 41.18 |
| Marketing-finance (n=15)  | 4                     | 26.67 | 8         | 53.33 | 3         | 20    |

### CONCLUSION

The study highlights that goat farmers in the surveyed area had high need, low accessibility and further low utilization extent of accessed information related to improved goat rearing. Information related to marketing and finance along with goat health care was perceived as immediate need by goat farmers.

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