Abstract

The present study was conducted in all the six agro-climatic zones of Punjab to assess about their communication profile. A total of 240 goat farmers (40 from each agro-climatic zone) were randomly selected. The goat farmers were personally interviewed at their goat farm to assess their communication profile. In Punjab, 41.25% and 44.58% goat farmers had low and medium extension contacts respectively. 45.00% and 40.83% goat farmers of Punjab had low and medium social participation respectively. Majority (88.33 %) of the goat farmers had not taken any formal training on goat farming. Large number of goat farmers of Punjab visit Veterinary hospital after six months and were following no treatment for ill goats or sending them for slaughter. The different communication profile parameters of goat farmers were inter-correlated (0.01 level). There is dire need to strengthen the present extension and animal husbandry system for increasing extension contact, social participation, mass media exposure, trainings and frequency of visit to Veterinary hospital/ dispensary by goat farmers.

Keywords: Communication, extension, farmer, goat, Punjab

Introduction

Goat rearing plays a vital role in food and economic security of rural people, especially landless, marginal and small farmers [1]. Goats act as a ready to use economic asset at time of crisis among rural farmers [2] by providing meat, milk, hide, manure and wool. Goats have played an important role in the social life of many people being used as gifts, dowry, in religious rituals and rites of passage [3]. According to 20th Indian Livestock Census 2019, the Goat population in India is 148.88 million and in Punjab is 3.48 lakh [4]. Goat rearing has distinct economic and managerial advantages over other livestock because of less initial investment, low input requirement, shorter generation interval and ease in marketing Goat rearing can provide part time self-employment without affecting the main occupation for small and marginal farmers. Various extension activities are conducted to educate goat farmers about latest technology and to run goat farms on scientific lines for getting maximum production. However, poor productivity and lack of scientific knowledge about goat farming proves to be the lacunae behind goat production in rural India [5]. So, it is important to assess the communication profile of goat farmers (extension contact, social participation, mass media exposure, training received or not, frequency of visit to Veterinary hospital/ dispensary and consultancy agency for treatment) for better execution of extension programme. As, comprehensive and systematic study about communication profile of goat farmers of Punjab is not there. So, the present study was planned.

Materials and Methods

Punjab state has been divided into six different agro-climatic zones [6], namely Sub mountain undulating zone (Zone I), Undulating plain zone (Zone II), Central plain zone (Zone III), Western plain zone (Zone IV), Western zone (Zone V) and Flood plain zone (Zone VI). From each agro-climatic zone, 40 goat farmers were randomly selected. Thus, the total number of respondents was 240. The farmers were personally interviewed at their goat farms to know about their communication profile, which includes:

Assessment of communication profile of goat farmers of Punjab for better execution of extension programme

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(a) Extension contacts: This indicate whether the goat farmers have come in contact with the extension agency agents such as Veterinary officer/Veterinary inspector/KVK/Veterinary University/Farmers’ association in connection with seeking information. It was measured on three point continuum – often (score 2), sometimes (score 1) and never (score 0). So, the total expected score could be 10. Goat farmers were categorized in to three categories depending on extension agency contacts- Low level (score ≤3), medium level (score 4-6) and high level (score >6).

(b) Social Participation: It has been conceptualized as the participation and involvement of goat farmer in informal and formal organizations such as Animal welfare camps/ farmers meetings / Field trips / Livestock shows / Pashu Palan Melas / Kissan Melas. It was calculated on three point continuum – often (score 2), sometimes (score 1) and never (score 0). So, the total expected score could be 12. Goat farmers were divided into three categories depending upon scores of social participation- low level (score ≤ 4), medium level (score 5-8) and high level (score >8).

(c) Mass media exposure: The goat farmers were asked by direct questioning whether they were exposed to any type of mass media (television, radio, newspaper, farm magazines, books, mobile and internet). Mass media exposure of the respondents was calculated on three point continuum i.e. often, sometimes, never with scores of 2, 1 and 0 respectively. So, the total expected score could be 14. Goat farmers were divided into three categories based on scores regarding mass media exposure: Low level (score < 5), medium level (score 5-8) and high level (score >8).

(d) Training received in goat farming: This means that the goat farmers have received formal training regarding goat farming from Department of Veterinary and Animal Husbandry Extension Education; GADVASU, Animal Husbandry department, Punjab or any other organized agency. The farmers who have attended training were given ‘One’ score and those who have not attended were given ‘Zero’ score.

(e) Frequency of visit to Veterinary hospital/ dispensary: This means that after how much time a goat farmer is visiting Veterinary hospital after 4-6 months, > 6 months, > 6- 1 year, more than 1 year and rarely.

(f) Consultancy agency for treatment: This means that for treatment of sick goat, which change agent is consulted. The consulted person can be Veterinary officer, Veterinary pharmacist, Self-medication, Sent for slaughter or No treatment.

Results and Discussion

Table 1 indicates that 41.25% and 44.58% goat farmers in overall Punjab had low and medium extension contacts respectively. Also, the most of the farmers in zone I, II, III, IV, V and VI had low to medium extension contacts. 45.00% and 40.83% goat farmers of Punjab had low and medium social participation respectively. The mass media exposure for most of the goat farmers in all the six zones and in overall Punjab was low to medium. Majority (88.33 %) of the goat farmers had not taken any formal training on goat farming. This indicate dire need of organizing training programme for goat farmers and encouraging them for participation in these training programme for adoption of latest scientific knowledge by goat farmers. Similar results were observed in earlier study in rural areas of Bugesera District in Rwanda, where nearly all respondent had no training on goat production [7]. Only 15.41 % goat farmers were visiting Veterinary hospital/dispensary after 0-3 months, while 25.41 % were visiting veterinary hospital after 4-6 months. Large number of goat farmers of Punjab visit Veterinary hospital after six months. Also, large chunks of farmers were following no treatment for ill goats (32.08 %) or sending them for slaughter (17.08 %). This suggests that field functionaries should make encouraging arrangement for extensive participation of goat farmers for health related issues. In Qwaqwa, South Africa, it was also reported that the policy should be formulated that further accelerate the diffusion of Veterinary surgeon services by means of the development of a better infrastructure. There should be reintroduction of subsidized Veterinary surgeon services at the sheering sheds as well for better flow of information to farmers [8]. Also, the main limitations to effective goat health management in Bihar were an inadequate focus on preventive measures, lack of medicines and equipment in rural veterinary clinics and ignorance among the farmers [9]. In adopted villages of Block Farah of District Mathura (Uttar Pradesh), the factors restraining in the adoption of scientific goat farming include lack of grazing land, lack of veterinary services, non – availability of medicines and non –availability of vaccination facility [8]. Against contagious diseases. In Osmanabad district of Maharashtra, non-availability of Veterinary services in the village in time (80.55 %) followed by costly Veterinary services (76.38), inadequate and untimely loan supply (68.05 %) were major problems faced by the goat keepers [10].

Table 2 indicates that different communication profile parameters of goat farmers were inter-correlated (0.01 level). It means a goat farmer having more extension contact will have more social participation, more mass media exposure, his chances of obtaining training are more and he visit veterinary hospital earlier than other goat farmers.

Table 1: Distribution of goat farmers according to communicational profile in different agro-climatic zones of Punjab

| Attributes                  | Parameters | I (n=40) | II (n=40) | III (n=40) | IV (n=40) | V (n=40) | VI (n=40) | Over all (n=240) |
|-----------------------------|-----------|----------|-----------|------------|-----------|-----------|------------|-----------------|
| Extension contacts          | Low (≤ 3) | 18 (45.00) | 24 (60.00) | 16 (40.00) | 12 (30.00) | 12 (30.00) | 17 (42.50) | 99 (41.25)      |
|                             | Medium (4-6) | 17 (42.5) | 13 (32.50) | 18 (45.00) | 20 (50.00) | 17 (42.50) | 22 (55.00) | 107 (44.58)     |
|                             | High (≥ 6) | 5 (12.5) | 3 (7.50) | 5 (12.50) | 6 (15.00) | 8 (20.00) | 11 (27.50) | 34 (14.16)      |
| Social participation        | Low (≤ 4) | 17 (42.50) | 26 (65.00) | 19 (47.50) | 15 (37.50) | 14 (35.00) | 17 (42.50) | 108 (45.00)     |
|                             | Medium (5-8) | 16 (40.00) | 12 (30.00) | 16 (40.00) | 16 (40.00) | 17 (42.50) | 21 (52.50) | 98 (40.83)      |
|                             | High (≥ 8) | 7 (17.50) | 2 (5.00) | 5 (12.50) | 9 (22.50) | 9 (22.50) | 2 (5.00) | 34 (14.16)      |
| Mass media                  | Low (≤ 5) | 21 (52.50) | 24 (60.00) | 21 (52.50) | 14 (35.00) | 16 (40.00) | 16 (40.00) | 112 (46.66)     |

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Table 2: Correlation coefficient between different communication parameters of goat farmers of Punjab

| Training received in goat farming | Frequency of visit of goat farmer to hospital and dispensary | Consulting agency for treatment | Ext. Correlation coefficient |
|----------------------------------|----------------------------------------------------------|---------------------------------|-----------------------------|
| Exposure                        | yes                                                      | Frequency of visit to Veterinary hospital |                         |
| 13 (32.50)                      | high (*8)                                               | 36 (90.00)                      | 6 (15.00)                |
| 12 (30.00)                      | yes                                                     | 38 (95.00)                      | 4 (10.00)               |
| 11 (27.50)                      | no                                                      | 34 (85.00)                      | 2 (5.00)                |
| 19 (47.50)                      | rarely                                                  | 37 (92.50)                      | 3 (7.50)                |
| 14 (35.00)                      | > 1 year                                                | 30 (75.00)                      | 10 (25.00)              |
| 23 (57.50)                      | > 6-1 year                                              | 37 (92.50)                      | 1 (2.50)                |
| 92 (38.33)                      | 4-6 months                                              | 212 (88.33)                     | 36 (15.00)              |
|                                 | 0-3 months                                              |                                 |                            |
|                                 | self medicated                                          |                                 |                            |
|                                 | no treatment                                            |                                 |                            |

**Pearson Correlation Sig. (2-tailed)**

| Extension contacts | Social participation | Mass media exposure | Training | Frequency of visit to Veterinary hospital |
|-------------------|----------------------|---------------------|----------|------------------------------------------|
| Ext. Correlation coefficient |
| 1                 | 0.886*               | 0.806*              | 0.629*   | 0.888*                                   |
| Social participation |
| 0.886*             | 1                    | 0.810*              | 0.627*   | 0.857*                                   |
| Mass media exposure |
| 0.806*             | 0.810*               | 1                   | 0.612*   | 0.800*                                   |
| Training           |
| 0.629*             | 0.627*               | 0.612*              | 1        | 0.549*                                   |

Frequency of visit to Veterinary hospital

| 0.888*              | 0.857*               | 0.800*              | 0.549*   | 1                                        |

(*) - Correlation is significant at the 0.01 level (2-tailed).

**Conclusion**

The present study suggest that for most of the goat farmers, the extension contact, social participation and mass media exposure falls in low to medium category. Majority of the goat farmers had not taken any formal training on goat farming. Large number of goat farmers of Punjab visit Veterinary hospital after six months and were following no treatment for ill goats or sending them for slaughter. There is dire need to strengthen the extension education and animal husbandry strategies to increase the communication profile of goat farmer, so as to disseminate latest technology to them for their socio-economic upliftment.

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