Constraints perceived by the tribal dairy farmers of Ranchi, Jharkhand in animal health care and management practices

Minu Singh, Ritu Chakravarty, Adhiti Bhanotra and Sajad Ahmed Wani

Abstract The present study was undertaken purposively in Ranchi district of Jharkhand to identify and prioritize the constraints faced by tribal dairy farmers in adopting improved animal healthcare and management practices. Three blocks and, two villages from each block were selected at random. From each village 30 tribal respondents were selected randomly, constituting a total number of 180 respondents. The tribal respondents having atleast one milch animal were selected. For the purpose of prioritizing the constraints Garretranking technique has been used. The results of the study revealed that "lack of fodder and scarcity of clean drinking water" was the most important perceived constraint followed by "lack of knowledge about disease and improved dairy farming practices". In addition "distant location of Veterinary hospital and non availability of staff" was perceived as the third most important constraint in maintaining animal health. The study found that the suitable policy interventions on part of Government are need of the hour to redress the condition of the poor and backward tribal dairy farmers. Further the concerned KVK's and agriculture and veterinary university should take the coordinated efforts for increasing the awareness about scientific dairy farming consequently improving the knowledge and adoption of the tribal farmers about improved farming practices.

Keywords: Constraints, tribal dairy farmers, animal healthcare and management practices

Introduction

Dairy farming is one of the most important means of providing livelihood and nutritional security to rural masses of India. The milk productivity of bovines is, by and large, low because of poor genetic make-up, shortage of feed and fodder and inadequate health cover. Although, India have a vast network of over 54,906 veterinary institutions (BAHS,2010). But, the outreach of veterinary healthcare services is low, which results in high incidence of diseases and epidemics. The poor status of animal health stems from the limited attention paid to preventive healthcare services and inefficiencies in provision of curative health services (DAHF,2010). In view of the above situation, the present study was undertaken to identify and prioritize the constraints as perceived by the tribal dairy farmers in animal healthcare and management practices. The present study was purposively undertaken in Ranchi district of Jharkhand state, as it has the highest concentration of tribal population (Census, 2001) and 2nd highest livestock population (BAHS, 2010). Through simpler and om sampling technique, 180 tribal dairy farmers from six villages of three blocks (Sonahatu, Angara and Kanke) were selected as respondents (having atleast one milch animal at the time of investigation). For the purpose of identifying the constraints semi-structured pretested interview schedule was used. The respondents were asked to rank each of the factors relevant to them according to the degree of importance. The prioritization of constraints was done by means of Garretr Ranking Technique.

The formula for percent position as suggested by Garret (1981) is:

\[
\text{Percent position}=100 \left( \frac{R-0.5}{N} \right)
\]
Where R is the rank of the individual item in the series and N is the number of individual items ranked.

**Results and Discussion**

The tribal dairy farmers perceived "lack of fodder and scarcity of clean drinking water" as the first (with a mean score of 63.21 (Table 1) and most important constraint, in maintaining health of the dairy animals. The primary reasons for the shortage of fodders were less area under fodder production and shrinking of area under permanent pastures and other grazing land in the state. The finding was in line with that of Kale et al. (2013) who also reported high cost of concentrate feed and inadequacy of green fodder round the year as the major constraints by the dairy farmers in Nagpur district of Maharashtra. Similar finding was reported in Bihar by Umar et al. (2011).

The second important perceived constraint, with a mean score of 59.53 (Table 1), was "lack of knowledge about disease and animal health practices". Prevention of diseases and timely veterinary services as one of the most important technical constraint in Nagpur.

"High cost of medicine and nonavailability of medicines in Veterinary Hospitals" were ranked as fifth (Table 1) major constraint by the respondents. Manoharan et al. (2003) in Pondicherry also reported costly veterinary treatment and aid as one of the major constraints faced by respondents in dairy farming of crossbred and indigenous cattle.

According to the respondents "lack of space for isolation of sick animals" was the sixth important constraint with a mean score of 47.30 (Table 1), which prevented them from isolating their sick animals. Similar finding was observed by Eqbal et al. (2013), who in his study area found "no isolation of diseased animals" as one of the constraint perceived by the tribal dairy farmers.

"Lack of artificial insemination (AI) facilities (30.95)" was perceived as seventh constraint (Table 1) in maintaining reproductive health of the dairy animals. Similar finding was reported by Umar et al. (2011) at Bihar. Since the villages selected as sample were interiorly located so the AI facilities were scarcely available to the respondents, and also the dairy farmers lack awareness regarding the benefits of artificial insemination, so where not motivated to adopt the AI facilities.

**Table 1** Ranking of constraints perceived by respondents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Constraints</th>
<th>Meanscore</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lack of fodder and scarcity of clean drinking water</td>
<td>63.21</td>
<td>I</td>
</tr>
<tr>
<td>2.</td>
<td>Lack of knowledge about disease and animal health practices</td>
<td>59.53</td>
<td>II</td>
</tr>
<tr>
<td>3.</td>
<td>Distant location of Veterinary hospital and nonavailability of staff</td>
<td>59.17</td>
<td>III</td>
</tr>
<tr>
<td>4.</td>
<td>Untimely visit of Veterinary Assistant Surgeon and Mobile Veterinary Unit</td>
<td>53.85</td>
<td>IV</td>
</tr>
<tr>
<td>5.</td>
<td>High cost of medicine and nonavailability of medicines in Veterinary Hospitals</td>
<td>47.84</td>
<td>V</td>
</tr>
<tr>
<td>6.</td>
<td>Lack of space for isolation of sick animals</td>
<td>47.30</td>
<td>VI</td>
</tr>
<tr>
<td>7.</td>
<td>Lack of Artificial Insemination (AI) facilities</td>
<td>30.95</td>
<td>VII</td>
</tr>
</tbody>
</table>

maintaining good health of animals requires many strategies. The respondents perceived that lack of knowledge regarding prevention of different diseases and improved dairy farming practices prevented them from maintaining good health of the dairy animals. Eqbal et al. (2013) also reported lack of awareness of animal healthcare practices as one of the major constraint faced by tribal dairy farmers in Jharkhand.

"Distant location of veterinary hospital and nonavailability of staff" were perceived as third (Table 1) important constraint in maintaining health of the dairy animals. Similar result was reported by Patil et al. (2009) who reported non-availability of veterinary services as an important lacuna in dairy farming in Nagpur district of Maharashtra.

The constraint "untimely visit of Veterinary Assistant Surgeon and Mobile Veterinary Unit" ranked as fourth (Table 1), prevented the respondents from taking complete advantage of the Animal Husbandry facilities provided by the Government. Patil et al. (2009) also reported nonavailability of

**Conclusions**

The study concluded that "lack of fodder and scarcity of clean drinking water" was the most important perceived constraint faced by the tribal dairy farmers in adopting improved animal healthcare and management practices followed by "lack of knowledge about disease and improved dairy farming practices". Since the most important constraint was found as lack of fodder and scarcity of clean drinking water, therefore steps should be taken for cultivation of fodder crops and for provision of clean water. Awareness camps and training programmes should be arranged regarding scientific animal health care and management practices to minimize the knowledge gap of the dairy farmers.
References

DAHF (2010) Department of Animal Husbandry, Dairying and Fisheries (DAHF). (www.dahd@nic.in.), Government of India