

Satisfaction Level of Livestock Owner towards Delivery of Veterinary Services

A. K. Chaturvedani*, Niranjan Lal and Kalpana Dhruw

ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh (243 122), India

Article History

Manuscript No. AR1641

Received in 16th July, 2016

Received in revised form 25th October, 2016

Accepted in final form 26th November, 2016

Correspondence to

*E-mail: ajay.chaturvedani001@gmail.com

Keywords

Livestock owner, satisfaction, veterinary services

Abstract

A study was conducted with exploratory research design in Bilaspur district of Chhattisgarh (India) to assess satisfaction level of the livestock owner about delivery of veterinary services, provided by department of animal husbandry. The department of animal husbandry deals with welfare of livestock and is responsible for matters related to livestock treatment, production, protection and improvement of breeding stocks, and dairy development. Information was collected with the help of a pretested structured interview schedule from 180 livestock owners, who had at least two milch animals at the time of investigation. Large proportion of livestock owners (45.56%) had medium level of satisfaction with state veterinary services followed by low and high category of satisfaction, 38.33% and 16.11% respectively. Livestock owners were found 'very satisfied' with efficiency and effectiveness of treatment i.e. compatibility in performance with minimum expenditure of time and effort to treatment of animals, information about disease outbreak and vaccination of animal whereas, 'dissatisfied' with Consultancy services on animal husbandry, veterinary services at village level, awareness campaign regarding diseases, insurance of animals, infertility camps and post-mortem. There was vast difference in level of satisfaction among livestock owners which may be overcome by reducing coverage area under each hospital. Hence, fulfilling the livestock owners' demand by timely satisfactory veterinary service delivery in cost effective manner is very important for the success of veterinary services.

1. Introduction

India ranks first in terms of livestock population in the world (BAHS, 2015). Livestock plays an important role in the national economy as well as in the socio economic development by augmenting family income and generating gainful employment in rural areas, particularly for land less, small and marginal farmers (GOI, 2006). India is rapidly emerging as one of the biggest markets in the world. Livestock sector contributes approximately 4% to GDP and 27% to agriculture GDP (DAHDF, 2015a). Therefore, livestock sector turns out to be a main source of income as well as nutrition for most of the rural population.

Chhattisgarh having 15.04 million livestock, with 9.81 million cattle, 1.40 million buffalo, producing milk yield of 1231 mt and 17.95 million poultry producing 1473.2 million eggs (GOI, 2016a). Department of animal husbandry in general and their hospitals in particular provide facilities of various technical inputs and services to livestock owners through a large network of veterinary hospitals, stockman centers and regional centers (DAHDF, 2015b). The department

is responsible for matters related to livestock production, preservation, protection and improvement of breeding stocks and dairy development. Livestock Development Department Chhattisgarh, equipped with one polyclinics, 275 Veterinary hospitals (VH), 795 veterinary clinics/sub centre, 22 Artificial insemination centre's, 253 A.I. sub centers, 18 district centre for diagnostic laboratory and 25 mobile veterinary unit (GOI, 2016b). Department performed 253.21 lakhs vaccination against diseases i.e. Foot and Mouth Disease (FMD) 52.36 lakhs, Hemorrhagic Septicemia (HS) 48.33 lakhs Black Quarter (BQ) 19.32 lakhs, Anthrax 2.97 lakhs vaccinations and attained 22.77 lakhs cases of various ailments during 2014-15 (GOI, 2016c).

Linder-Pelt (1982) Postulated that satisfaction is mediated by personal beliefs and values about service as well as expectation about service. Satisfaction or dissatisfaction is client's judgment on quality/quantity of service in all its aspect. In India as like in most of the developing countries, the veterinary services have been traditionally funded, managed and delivered by the public sector with significant subsidies or on free basis by state government, central government and NGOs (Kumar



et al., 2006). Here, timely and efficacy supply of quality inputs and services to livestock owners is a pre-requisite for increasing production. Livestock owners need quality services of technical personnel on which they depend for adopting most of improved technologies in dairy farming. Henceforth, the present study was carried out to know the degree of satisfaction of livestock owners about veterinary services provided by department of animal husbandry.

2. Materials and Methods

The study was conducted with exploratory research design in Bilaspur district of Chhattisgarh (India) during January to March, 2015. The selected Bilaspur district has seven blocks, out of which three Blocks; Masturi, Takhatpur and Bilha, were selected randomly. From each selected Block, three villages were selected by applying simple random sampling technique. A total of 9 villages were selected viz., Masturi- (Pachpedi, Pakhariya, Newari), Takhatpur- (Uslapur, Ameri, Lokhandi), Bilha- (Jhal, Nawagaon, Pondi). Information was collected from 180 livestock owners, 20 from each selected village, who had at least two milch animals at the time of investigation.

Further satisfaction was operationalised as fulfillment of a need or desire (Oliver, 2014). For the purpose of exploring the satisfaction level of livestock owners regarding veterinary services an open ended schedule was developed. In the preliminary survey; experts, veterinary officers and livestock owners were asked to list out the distinct dimensions of veterinary services provided by the hospitals of Department of Animal Husbandry. After final screening and sorting; ten statements were selected and the responses of the individual on each statement were taken on three point continuum as 'Very satisfied', 'Satisfied' and 'Not satisfied' with scores 3, 2 and 1, respectively. The score for each statement was summed up and the livestock owners were classified into three categories viz. low, medium and high level of satisfaction based on range method and veterinary services were ranked on the basis of weighted mean percent.

$$\text{Weighted mean \%} = \frac{\text{Obtained weighted score of statement} \times 100}{\text{Maximum possible score of statement}}$$

3. Results and Discussion

Collected data were analyzed and results obtained are presented below:

3.1. Distribution of livestock owners based on level of satisfaction regarding veterinary services

It is clear from the (Table 1) that 45.56% of livestock owners were found in medium category of satisfaction followed by low and high category of satisfaction, 38.33% and 16.11% respectively. The data showed that majority of livestock owners belonged in low to medium level of satisfaction towards

Table 1: Distribution of livestock owners based on level of satisfaction regarding veterinary services

Categories	Frequency	Percentage
Low (<15)	69	38.33
Medium (15–20)	82	45.56
High (>20)	29	16.11
Mean	18.20	

veterinary services. This may be due to less availability of in-time veterinary services at every village as each institution needs to cover larger area (Rathor et al., 2014). Nishi et al. (2011) reported that majority of dairy livestock owners were found to be in moderate category of satisfaction regarding activities of dairy cooperatives.

3.2. Satisfaction of the livestock owners about veterinary services

Data in the (Table 2) clearly depict that, of the provided veterinary services, 47.44% owners were found 'very satisfied' whereas, and 28.94% were 'satisfied' while 23.61% were 'dissatisfied' in the study area. The overall satisfaction of livestock owners regarding veterinary services was 74.61%. Chand et al. (2014) reported that 48.08% of the livestock

Table 2: Satisfaction of the livestock owners regarding veterinary service

Veterinary services	VS	S	D	WM %
Efficiency of treatment of disease	75.00	13.89	11.11	87.96
Effectiveness of treatment	72.22	16.11	11.67	86.85
Vaccination of animal	68.89	19.44	11.67	85.74
Information about disease outbreak	64.44	26.67	8.89	85.19
Cost of treatment and breeding paid	48.89	36.11	15.00	77.96
In time availability of veterinary services	44.44	38.33	17.22	75.74
Consultancy services on animal husbandry	36.11	32.22	31.67	68.15
Veterinary services at village level	30.56	34.44	35.00	65.19
Awareness campaign (disease, insurance etc)	21.67	30.56	47.78	57.96
Post-mortem of dead animal	12.22	41.67	46.11	55.37
Overall Satisfaction	47.44	28.94	23.61	74.61

VS: Very satisfied; S: Satisfied; D: Dissatisfied; WM: Weighted mean

owners were found 'very satisfied' with service delivery and only 16.82% were in the category of 'dissatisfied' with service delivery.

It was found that (Table 2) efficiency of treatment of disease i.e. compatibility in performance with minimum expenditure of time and effort to treatment of animals was ranked first with 87.96 weighted mean per cent and in this 75.00% respondents were found 'very satisfied' whereas 13.89% and 11.11% were found 'satisfied' and 'dissatisfied', respectively. Effectiveness of treatment i.e. quality of being successful in treatment of animals was ranked second with 86.85 weighted mean per cent and in this 72.22% respondents were found 'very satisfied' whereas 16.11% and 11.67% were found 'satisfied' and 'dissatisfied', respectively. Vaccination of animals was third most important service benefits to respondents as 68.89% livestock owners were found 'very satisfied' whereas 19.44% and 11.67% were found 'satisfied' and 'dissatisfied', respectively. Information about disease outbreak which obtained 85.19 weighted mean per cent was ranked fourth, in which 64.44% respondents were found 'very satisfied' whereas 26.67% and 8.89% were found 'satisfied' and 'dissatisfied', respectively.

Cost of treatment and Breeding, they paid for A.I. and medicines those not available from government supply, was ranked fifth with 77.96 weighted mean per cent. In this case 48.89% of livestock owners were found 'very satisfied' whereas 36.11% and 15.00% were found 'satisfied' and 'dissatisfied', respectively similar finding was also reported by Shweta (2014). Sixth rank was given to in-time availability of veterinary officer with 75.74 weighted mean per cent, in which 44.44% livestock owners were found 'very satisfied' whereas 38.33% and 17.22% were found 'satisfied' and 'dissatisfied', respectively. Consultancy service on animal husbandry practices was ranked seventh with 68.15 weighted mean per cent, in which majority of livestock owners were found 'very satisfied' whereas 32.22% and 31.67% were found 'satisfied' and 'dissatisfied', respectively concurred with the finding of Ahuja (2008) and Ponnusamy (2015) towards livestock service delivery. Mertens et al. (2008) reported that livestock owners were positive about the manner in which advice was given and its effect on dairying.

On the basis of weighted mean per cent (65.19%) veterinary services at village level i.e. accessibility of veterinary services was ranked eighth, in which 35.00% of livestock owners were found 'dissatisfied' whereas 34.44% and 30.56% were found 'satisfied' and 'very satisfied', respectively. Awareness campaign regarding diseases, insurance of animals, infertility camps, etc. was ranked ninth with 57.96 weighted mean percent, in which majority of livestock owners were found 'dissatisfied'

whereas 30.56% and 21.67% were found 'satisfied' and 'very satisfied', respectively. Lastly, post-mortem was ranked tenth; in which 46.11% of livestock owners were found 'dissatisfied' whereas 41.67% were found 'satisfied' only.

It is evident from above findings that there is need of improvement in veterinary services like veterinary services at village level, awareness campaign regarding important diseases, loan for dairying, insurance of animals, etc. and post-mortem of dead animal in collaboration with veterinary universities and State department of animal husbandry, similar finding was also reported by Rao et al. (2015) in improving the delivery of veterinary services in India.

4. Conclusion

Majority of livestock owners were having low to medium level of satisfaction regarding veterinary services. So to improve satisfaction level, in-time availability of veterinary services, increased frequency of visits to livestock owners' door for better productivity. It is also desired that veterinary officers not only concentrate on treatment of animals but also on extension activities like consultancy service for scientific animal husbandry practices and awareness campaign about loans, insurance of animals, etc. to make venture profitable for livestock owners with minimum investment.

5. References

- Ahuja, V., Kurup, M.P.G., Bhasin, N.R., Joseph, A.K., 2008, Assessment and reflections on livestock service delivery systems in Andhra Pradesh. CALPI programme series 4. Inter cooperation in India, Hyderabad.
- BAHS, 2015. Basic animal husbandry and statistics, department of animal husbandry, dairying and fisheries, ministry of agriculture, Government of India, Krishi Bhawan, New Delhi, India, 1.
- Chand, S., Meena, B.S., Verma, H.C., 2014. A study on farmer's satisfaction with delivery of veterinary services. Indian Journal of Animal Sciences 48(1), 67–70.
- DAHDF, 2015a. Annual report 2014–15. Department of animal husbandry, dairying and fisheries ministry of agriculture, Government of India, New Delhi, India, 4.
- DAHDF, 2015b. Annual report 2014–15. Department of animal husbandry, dairying & fisheries, ministry of agriculture, Government of India, New Delhi, India, 33.
- GOI, 2006. Report of the working group on animal husbandry and dairying for the eleventh five year plan 2007–2012. Planning Commission, Government of India, New Delhi, 15–17.
- GOI, 2016a. Annual Administrative Report 2014–15. (Prashaskiya Prativedan), Livestock Development Department Chhattisgarh, India, 2.



- GOI, 2016b. Livestock development department Chhattisgarh, India (Pashudhan Vikash Vibhag). <http://ahd.cg.gov.in/ahd.cgEnglish/template1.htm>.
- GOI, 2016c. Annual Administrative Report 2014–15. (Prashaskiya Prativedan), Livestock Development Department Chhattisgarh, India, 43–44.
- Kumar, S.R., Reddy, K.V.R., Rao, B.S., 2006. Opinion towards privatization of veterinary services. *Indian Journal of Animal Sciences* 40(2), 143–146.
- Linder-Pelt, S., 1982. Towards a theory of patient satisfaction. *International Journal of Health Care Quality Assurance* 8(6), 32.
- Mertens, H., Vreeburg, N.A., Kremer, W.D., 2008. Evaluation of veterinary advice given to dairy farmers. *Tijdschr Diergeneeskde* 133(9), 382–385.
- Nishi, Sah, A.K., Kumar, R., 2011. Dairy farmers' satisfaction with dairy cooperative societies: a case study. *Indian Research Journal of Extension Education* 11(1), 74–78.
- Oliver, Richard L. 2014. Satisfaction: A behavioral perspective on the consumer, (2nd Edn.). Routledge (U.K.), 135.
- Ponnusamy, K., Singh, K., Balasubramani, B., 2015. Burning issues in animal husbandry sector of India, All India animal husbandry officers' workshop cum training program on "enabling extension functionaries to address field level problems in animal husbandry" October 26–29, ICAR-National Dairy Research Institute Karnal, Haryana, India, 136–144.
- Rao, S.V.N., Rasheed Sulaiman, V., Natchimuthu, K., Ramkumar, S., Sasidhar, P.V.K., 2015. Improving the delivery of veterinary services in India. *Revue Scientifique et Technique (International Office of Epizootics)* 34(3), 767–777.
- Rathod, P.K., Nikam, T.R., Landge, S., Hatey, A., 2014. Farmers perception towards livestock health care service delivery by dairy cooperatives: A case study of Western Maharashtra, *Karnataka Journal of Agricultural Sciences* 27(1), 95–96.
- Shweta, K., 2014. Artificial insemination for dairy development in Ranchi district of Jharkhand. *Indian Research Journal of Extension Education* 14(1), 90–92.