



Constraints Perceived by Veterinarians of Tamil Nadu State of India in Providing Veterinary Services

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Objective: To determine the constraints faced by veterinarians in rendering services to the livestock farmers.

Study Design: Ex-post facto study design

Methodology: Data were collected from the Veterinarians in State Department of Animal Husbandry (SDAH) of Tamil Nadu, India during the year 2019 through pre-tested semi-structured questionnaire and Garret ranking was used for analyzing the data. A total of 36 constraints were identified through focused group discussion and included in the questionnaire under different heads viz., Organizational, Job content Psychological, Institutional and Information delivery and administrative related constraints.

Results: The results revealed that inadequacy of front line officers, arbitrary fixation of targets, less avenue for promotions, inadequate supporting staff and inadequate research extension linkages were identified as the major constraints that hinders the service delivery.

Conclusion: this study suggested that the effectiveness of service could be further accentuated if the policy makers address the above constraints by strengthening research extension linkage, filling up of vacancies, down top approach in planning pro-poor livestock development policies with due recognition to the veterinarians.

Keywords: Constraints; veterinary services; veterinarian; animal husbandry department.

1. INTRODUCTION

In India, livestock sector is one of the fastest growing segments of the agricultural and allied sector. Livestock is also one of the most important productive assets in the rural areas and an insurance mechanism to cope with household related crisis [1]. As per estimates of the Publication "National Accounts Statistics 2019" of Central Statistics Office (CSO), the value of output from livestock sector is about 33.25% of the value of output from agricultural and allied sector. At constant prices, the value of output from livestock was about 31.81% of total agriculture and allied sector. The challenges faced by animal husbandry sectors are disease outbreaks, feed and fodder scarcity, extinction of diverse genetic resources and decreased productivity due to gap in dissemination of technology, skills and quality services [2,3]. Demand for livestock products is likely to increase rapidly and the ability of the poor to participate in the opportunities presented by this growth is linked critically to the availability of good service support, both on the input and output side [4]. State department of Animal husbandry department is having the commitment in addressing the above challenges and also in achieving sustainable development goals viz., No poverty, Zero Hunger, Good health and well-being, Gender equality and Climate action by rendering range of veterinary services to livestock farmers [5]. Whereas, the job environment and content of veterinarians in department of animal Husbandry is multidimensional, changing and challenging [6,4,1]. The quality of livestock support services remains poor and disease surveillance, control, diagnostics and reporting continue to be weak [1]. Sen and Chander [3] reported that public institutions are coming under pressure all over the world for not performing adequately. Multitudes of research are being focused to improve the availability and accessibility of veterinary services from farmers' perspectives. Furthermore, it is also inevitable to address the constraints perceived by the veterinarians' for improving while rendering the services to livestock farmers. In pursuit of improving service delivery to the farmers, this study was conducted with the specific objective of determining the constraints perceived by veterinarians that hamper effective service delivery and suggestions based by them.

2. METHODOLOGY

The study was conducted purposively in Tamil Nadu state of India during the year 2018- 2019 considering the vast livestock population and production, high number of veterinary institutions and high number of pro-poor livestock development schemes . Five districts were selected purposively in such a way to represent different work environment, Questionnaire survey methods were used for collecting the data. An exhaustive list of constraints that restrains the work performance was prepared from literature review through Google scholar database and informal discussion with the veterinarians. Out of which, a total of thirty-six constraints were identified and included in the semi-structured questionnaire under different heads viz., Organizational, Job content Psychological, Institutional and Information delivery and administrative related constraints. Twenty Veterinarians were selected randomly from each district thus making a total sample size of 100 respondents by considering five per cent of the population. A total of 100 questionnaires viz., 20 to each district were mailed through post to the respondents residing in the study area. For ranking Garret ranking technique is followed to analyze the constraints perceived by the veterinarians. These orders of merit were transformed into units of scores by using the formula.

According to Henry Garret [7] ranking method,

$$\text{Per cent position} = 100 (R_{ij} - 0.50) / N_j$$

Where, R_{ij} - Rank given for the i^{th} factor by the j^{th} individual N_j - Number of factor ranked by the j^{th} individual. The percent position is converted into scores by referring to the table given by Garrett and Woodworth. Then for each constraint the scores of the respondents were added together and divided by the total number of respondents. These mean scores for all the constraint were arranged and the most influencing constraints were identified through the ranks assigned.

3. RESULTS AND DISCUSSION

The response rate outcome is 81 per cent for this study. Out of which 12 were incomplete. Table 1 to 5 elicits the rank given by Sixty-nine veterinarians of state department of animal husbandry to various constraints they face while

rendering veterinary services under different sub-heads viz., Organizational, Job content Psychological, Institutional and Information delivery and administrative related constraints. .

3.1 Organizational Constraints

The organizational constraints are the stressors that affect the individual's job performance through decreased motivation and increased workload. Out of the total nine constraints, "Inadequacy of front line officers" emerged as most important as the rest. The respondents' perception of this constraint was quite logical as many institutions are vacant. Most often, the veterinarians are being involved in rendering of veterinary services with the coverage area of 6-10 villages. Obviously, the fact of inadequate of manpower hampers the quality of the veterinary services to livestock farmers under the ambit of the institution. Thus, technical manpower should be increased to improve the effectiveness of service delivery. With regards to the second and third constraints, communication gap about livestock development programmes and less cooperation from the farmers in availing extension services were the perceived second and third most serious constraints, respectively. Less budget allocation for extension programmes, inadequate importance for programme evaluation and little consultation of veterinarians in programme planning were the other serious constraints expressed by the veterinarians. Constantly, veterinarians are involved in implementation of many livestock development programmes under their ambit. Thus, this study suggest that integration in planning, implementation and evaluation with due cooperation from all the actors is inevitable for the success of livestock development programmes. The least perceived organizational constraints by veterinarians were elite farmers get all benefits, inadequate knowledge about administrative rules and inadequacy in supervision of subordinates by veterinarians.

3.2 Job Content Related Constraints

The job content related are the stressors that directly reflect the quality and timeliness of services to livestock farmers. Arbitrary fixation of targets followed by inadequate baseline information about the village was perceived as the top most restraints that affect their work performance. Integrated Sample Survey 2018-19 also opined that the records on breeding, productivity, treatment and vaccination of

animals were not properly maintained by the State Animal Husbandry Departments as no such system is evolved in the country. Most often, livestock development programmes are aimed at targeted approach in rendering inputs such as feed; fodder seeds etc., to the pro-poor farmers. But as expressed by the respondents of the study, the fixed targets should match the baseline data of the village for the successful implementation of the programme. Similar finding was reported by Goyal et al. [8], Ratnayake et al. [9], Jena et al. [10] and Verma et al. [11]. Much number of development programmes at a time, inadequate awareness and interest among the farmers were ranked as the third and fourth constraints respectively. The respondents perception for this constraint might be that farmers participation and involvement is inevitable for the success of development / livelihood programmes that are being implemented. The least perceived constraints by the veterinarians were non-availability of inputs in time and inadequate supply of inputs.

3.3 Psychological Constraints

The psychological constraints refer to the stressors that affect the employees' work-related outcomes such as job satisfaction, job involvement, and job performance in their work environment. Table 03 presents the ranking pattern of the constraints faced veterinarians as per their perceived severity. The first three top most constraints received maximum priority were: less avenue for promotions, inadequate recognitions and less opportunity for professional development. The probable reason could be that the promotional opportunities, recognition procedure and available opportunity for professional developments are not in consonant with their counter parts working in health services, agriculture and allied sectors. Hence, their attitude towards rendering services will adversely affect to certain extent. The findings are in line with the findings of Nagananda [12], Sandika, et al. [13], Ratnayake et al. [9], Jena et al. [10] and Verma et al. [11]. The fourth and fifth major constraints were inadequate motivation for veterinarians followed by intentional petitions lodged by farmers. The probable reason might be that the veterinarians were perceiving that promotions/ motivation is upward growth in the job as a consequence of their recognition of past performance and better scope for future performance. The other constraints which received minimum rankings were inadequate support from their peers in their work place.

Table 1. Ranking pattern of organizational constraints (n=69)

S. No.	Organizational Constraint	Mean Score	Rank
1.	Inadequacy of front line officers	41.45	I
2.	Communication gap about livestock development programmes	40.38	II
3.	Less cooperation from the farmers in availing extension services	39.65	III
4.	Less budget allocation for extension programmes	37.3	IV
5.	Inadequate importance for programme evaluation	35.92	V
6.	Little consultation of veterinarians in programme planning	35.41	VI
7.	Elite farmers get all benefits	35.25	VII
8.	Inadequate knowledge about administrative rules	35.04	VIII
9.	Inadequacy in supervision of subordinates by veterinarians	34.68	IX

Table 2. Ranking pattern of Job content related constraints (n =69)

S. No.	Constraint	Mean Score	Rank
1.	Arbitrary fixation of targets	44.11	I
2.	Inadequate baseline information about the village	43.6	II
3.	Much number of programmes at a time	34.74	III
4.	Inadequate awareness & Interest among the farmers	32.22	IV
5.	Non-availability of inputs in time	27.76	V
6.	Inadequate supply of inputs	21.77	VI

Table 3. Ranking pattern psychological constraints (n =69)

S. No.	Psychological constraint	Mean Score	Rank
1	Less avenue for promotions	44.39	I
2	Inadequate recognitions	43.11	II
3	Less opportunity for professional development	42.88	III
4	Inadequate motivation for veterinarians	39.95	IV
5	Intentional petitions lodged by farmers	37.84	V
6	Inadequate support from the officers	33.97	VI
7	Inadequate support from the farmers	33.13	VII
8	Inadequate support from the other veterinarians	31.72	VIII
9	Inadequate support from the subordinates	30.09	XI

3.4 Institutional Constraints

Table 4 elicits the ranks given by the veterinarians to various institutional related constraints they face while rendering services. Inadequate supporting staff, minimal diagnostic facilities and delay reporting of disease by farmers were the three top most constraints perceived by veterinarians. Most often, veterinarians are involved in treating the ailing animals, attending disease outbreaks, implementation of livestock development programmes and disease control programmes. Besides, to improve the diagnostic stewardship, diagnostic services need to perform and there is in need of equipments at the field level which are often not disposal at the field level. Furthermore, due to inadequate supporting staff and minimal diagnostic facilities, rendering of timely and quality of services is at stake. This finding is in

line with the study conducted by Jena et al. [10] who reported that less diagnostic facility is perceived as one of the serious constraints faced by MVU professionals of Odisha. Among rest of the constraints, the mean score were distributed without showing any inclination to the perceived constraints. Ill equipped dispensaries, inadequate quality medicines and lack of logistics were the other constraints perceived by veterinarians which hampers their quality service delivery to livestock farmers. The least perceived constraint was inadequate medicines in terms of quantity. But as expressed by the respondents, at present, dispensaries are being equipped with better infrastructure and logistics for providing door step service delivery. This finding is not in line with findings of Biradar [14] who has reported that inadequate supply of medicine followed by lack of transport facility were the top most constraints faced by the service providers.

Table 4. Ranking pattern of institutional constraints (n =69)

S. No.	Constraint	Garret Score	Rank
1.	Inadequate supporting staff	46.13	I
2.	Minimal diagnostic facilities	40.06	II
3.	Delay reporting of disease by farmers	38.83	III
4.	Ill equipped dispensaries	37.1	IV
5.	Inadequate quality medicines	36.16	V
6.	Lack of logistics for rendering services in field level	35.68	VI
7.	Inadequate medicines in terms of quantity	34.26	VII

Table 5. Ranking pattern of information delivery and administrative constraints (n =69)

S. No.	Constraints	Garret Score	Rank
1	Inadequate research extension linkages	37.72	I
2	Inadequate interdepartmental collaborations	33.06	II
3	Less timely communication about A.H programme implementation guidelines	32.76	III
4	Inadequate ICTs facilities	31.78	IV
5	Time limitations in programme execution	24.8	V

3.5 Information Delivery and Administrative Related Constraints

Information delivery and administrative related constraints play an important role in increasing the effectiveness of the organization to improve the quality of the services and lower its costs. Furthermore, it positively affects the behavior of the professionals in promoting organizational learning. Data (Table 04) revealed that inadequate research extension linkages were the top most constraint followed by inadequate interdepartmental collaborations. The effective delivery of veterinary services to farmers is constrained mainly by an inadequate number of graduates but also inability of Veterinary Universities and Animal Husbandry departments to collaborate with each other [2]. Less timely communication about Animal Husbandry (A.H) programme implementation guidelines, inadequate ICTs and time limitations in programme execution were the other constraints perceived by veterinarians that affect the quality and timely veterinary services to livestock farmers. The probable reason could be that veterinarians are overstretched with the responsibility of implementation and execution of animal husbandry programmes within short time frame leads to negative implication in reaching the target beneficiaries.

4. CONCLUSION

The emerging challenges faced by animal husbandry sectors are disease outbreaks, feed

and fodder scarcity, extinction of diverse genetic resources and decreased productivity due to gap in dissemination of technology, skills and quality services. It is concluded that that inadequacy of front line officers Communication gap about livestock development programmes, Arbitrary fixation of targets, Inadequate baseline information about the village Less avenue for promotions and Inadequate recognitions, Inadequate supporting staff , inadequate logistics for diagnostic facilities, Inadequate research extension linkages, Inadequate interdepartmental collaborations were the most serious constraints perceived by veterinarian of animal husbandry department that hampers the service delivery. Hence, this study suggested that the effectiveness of service could be further accentuated if the policy makers address the above constraints by giving special emphasis to:(i) integration of all stakeholder in planning, implementation and evaluation of livestock development programmes; (ii) Strengthening the existing laboratories/ Disease intelligence unit to take up the challenges of emerging animal diseases (iii) Manning mobile veterinary services to increase the availability and accessibility of preventive veterinary services in remote and resource poor areas.

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author (s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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