

## CONSTRAINTS FACED BY THE VETERINARIANS AND DAIRY FARMERS REGARDING LIVESTOCK DEVELOPMENT SCHEMES (LDS)

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### ABSTRACT

Livestock Development Schemes (LDS) are crucial programs that aim to support and promote livestock production. However, their effectiveness can be significantly limited by various constraints. A thorough investigation was carried out in the Hisar and Kurukshetra districts of Haryana to record the challenges veterinarians encountered when executing different livestock development programs. The study also aimed to identify the constraints that dairy farmers encounter when availing of these schemes. The respondents included 60 farmers and 40 veterinarians. The study identified several major constraints faced by dairy farmers, such as inadequate field staff, lack of official cooperation, lengthy procedures, enormous formalities, regulatory hurdles, lack of knowledge, and limited target of beneficiaries. In contrast, veterinarians considered the multifarious jobs of field functionaries the most important constraint. To overcome these constraints, it is suggested to simplify the procedures for availing the schemes. Such constraints can significantly impact the ability of dairy farmers and veterinarians to take advantage of opportunities, improve their operations, and promote sustainable practices.

**Keywords:** Constraints, Haryana, Livestock schemes, Veterinarians

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India has experienced rapid growth and development in recent times. In rural areas, where 54.6% of the workforce is involved in agricultural and allied sector activities, small and marginal land holdings, ranging from 0.00 to 2.00 hectares, made up 86.08% of total land holdings in 2015-16 (Annual report, 2020-21). Additionally, the livestock sector is employing 16.44 million workers in activities such as animal farming, mixed farming, fishing, and aquaculture, according to the Department of Animal Husbandry and Fisheries (DADF, 2019). The dairy sector looks much more balanced as compared to agriculture. Dairying plays a big role mainly for small and marginal farmers as a shock absorber during crop failure. Dairy production, processing, and marketing employ 80-90 million people (Rao, 2017) which helped in poverty alleviation and rural employment in the country. The Haryana state has a record of about 117.35 MT of milk in 2019-20 and ranks second in-country for per capita per day milk availability of 1118 grams (GOI, 2021). Due to diminishing land holdings and a growing population, dairy farming is emerging as a crucial pillar of support for the rural population in Haryana. Consequently, the Department of Animal Husbandry and Dairying is dedicated to enhancing milk productivity by implementing genetic improvements and reducing input costs. Livestock Development Schemes play a great role in farmers' socio-economic development.

The Department of A.H. and Dairying has been implementing various schemes over the years to support

livestock development and bring about socio-economic development. Some of these Schemes include a scheme for the conservation and development of indigenous cattle and Murrah development (CDIC and MD), a Scheme for providing employment opportunities to Scheduled Castes, Haryana Pashudhan Bima Yojana, Pashu Kisan Credit Card (PKCC scheme), Scheme for the establishment of Hi-Tech and Mini Dairy units, etc. for this sector (Haryana Govt., 2022). However, the effectiveness of such schemes has not been ascertained. Earlier, Chand *et al.* (2014) reported that Livestock services provided by SDAH were deemed moderately effective, available to a reasonable extent, and satisfactory according to farmers. However, there is a shortage of studies that systematically capture the challenges faced by beneficiaries of these schemes.

Considering these factors, a research investigation was carried out to identify the challenges encountered by farmers and veterinarians in accessing and executing these schemes, respectively. This study has the potential to offer valuable insights and essential input for enhancing the planning and implementation processes.

### METHODOLOGY

The word constraint is commonly used in most social sciences synonymous to problems or barriers. A constraint refers to anything that hinders a system from attaining a superior performance in relation to its objective. Constraints are also defined as the condition of being limited or restricted in a particular course of action.

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In the present study, constraints were defined as specific irresistible forces, as perceived by respondents and veterinarians, that served as obstacles in the utilization and execution of livestock development schemes, as perceived by beneficiaries and veterinarians, respectively.

The study was conducted in Haryana state using multistage sampling, covering both northeastern and southwestern zones. Sampling was carried out from zone to village level to evaluate the overall impact of LDS in Haryana. Random selection was made for two districts, Kurushetra and Hisar, and two sub-divisions, Thanesor and Shahbad in Kurushetra district, and Hisar-II and Barwala in Hisar district. The SDO (A.H. & D.) office of selected subdivisions provided a comprehensive list of beneficiaries of selected livestock development schemes for 2017-18, 2018-19, 2019-2020, and 2020-2021. Fifteen beneficiaries were randomly chosen from each subdivision using a simple lottery method, totaling sixty beneficiaries. A list of non-beneficiaries was prepared with the help of the veterinarian of the area from where beneficiaries were selected, and non-beneficiaries were chosen randomly from the prepared list. The selection of beneficiaries and non-beneficiaries is crucial to provide a clear picture of the effects of various schemes on farmers who are beneficiaries and those who are not. A list of veterinarians was obtained from the DD (A.H. & D.) office of each selected district, and twenty veterinarians were randomly chosen using a simple lottery method from each district, making a total of forty veterinarians selected.

A well-structured interview schedule was used as a tool for collecting data from selected respondents which contain the provision for assessment of constraints perceived by beneficiary farmers in availing the LDS. Similarly, a questionnaire was developed for the ascertaining constraints perceived by veterinarians in implementing the livestock development schemes. Under the direction of subject matter experts and members of the scheme's implementing agency, constraint items were selected in accordance with the limited scope of the plan, resource availability, regulatory requirements, time limits, technical limitations, etc. Participants and veterinarians were requested to assess constraints using a three-point scale, indicating 'agree,' 'neutral,' and 'disagree,' with corresponding score values of 3, 2, and 1. Subsequently, the scores for each constraint item were totaled.

## RESULTS AND DISCUSSION

Data regarding constraints faced by the beneficiary respondents is summarized in the table-1 indicates that a majority of beneficiaries considered inadequate field staff in village as major constraint with mean score value 2.98.

Earlier other workers like Chaudhary and Intodia (2000), Smitha *et al.* (2019) and Maria Poullose and Veerakumaran (2022) also reported that low accessibility to veterinary services and a lack of sufficient veterinary officials were the main problems faced by dairy farmers. The unavailability of staff when farmers visit could be the cause for respondents identifying this as a constraint. Since the officials felt the shortage of the staff members to implement the scheme, special staff particularly for implementation of scheme need to be appointed. The respondents' perception of this constraint was quite logical as many posts in 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 manpower hampers the implementation of these schemes under the ambit of the institution.

Lack of official's co-operation with a mean score of 2.97 ranked as second most serious constraint (Table 1). Again 98.3 per cent beneficiaries perceived it as constraint. Heavy workloads specially on financing agencies and banks while availing these schemes and lack of coordination among different livestock service delivering agencies might be probable reason for this constraint. The finding is in the accordance with the study of Manoharan *et al.* (2003), Bardhan and Tiwari (2007), Bushetti and Biradar (2019), Smitha *et al.* (2019) and Singh and Chandel (2020) who reported that a significant constraint was the insufficient assistance received from the department and the delayed response from the government department when accessing benefits.

Lack of sufficient interest to complete formalities with mean score 2.85 was third major constraint followed by a lot of time is required (delay in processing of application), limited target number of beneficiaries, lack of knowledge about various schemes, lack of confidence level of beneficiaries and poor internet connection in village etc. (Table 1). The majority of farmers may be reluctant to approach various government departments, possibly because of their non-cosmopolitan background.

The schemes administered by the Department of Animal Husbandry and Dairying (DAHD) of the Haryana Government require adherence to numerous documentation procedures to provide benefits to farmers. Documents such as bank certificates, animal insurance, veterinary health certificates, PPP, PAN, AADHAR, Below Poverty Line (BPL) cards, and others must be submitted. Moreover, these documents undergo verification by designated committees consisting of local elected representatives. These procedures are established to ensure the fair identification of suitable beneficiaries. This tedious

**Table 1. Constraints perceived by beneficiaries in availing livestock development schemes (N=60)**

Sr. No.	Constraints	F (%) of agreement	ME $\pm$ SD	Rank
1	Do you think inadequate field staff in village creates hindrance in availing these schemes?	59 (98.3)	2.98 $\pm$ 0.13	I
2	Do you think that lack of official's co-operation is a major constraint in availing these schemes?	59 (98.33)	2.97 $\pm$ 0.26	II
3	Do you think that you have sufficient interest to complete formalities for availing these schemes?	54 (90)	2.85 $\pm$ 0.48	III
4	Do you think that a lot of time is required for availing these schemes?	55 (91.67)	2.83 $\pm$ 0.55	IV
5	Do you think that number of beneficiaries is limited in these schemes?	49 (81.67)	2.75 $\pm$ 0.57	V
6	Do you think that lack of knowledge about various schemes hinders their availability?	47 (78.33)	2.67 $\pm$ 0.67	VI
7	I am confident that I can avail schemes	37 (61.67)	2.62 $\pm$ 0.49	VII
8	Do you think that poor internet connection in village is main constraint in availing these schemes?	37 (61.67)	2.47 $\pm$ 0.74	VIII
9	Do you think that you have sufficient skill to complete formalities for availing these schemes?	15 (25)	2.12 $\pm$ 0.61	IX
10	Do you think that improper record keeping is major constraint in availing these schemes?	05 (8.33)	1.64 $\pm$ 0.63	X
11	Do you think that there is favoritism in disbursement of schemes?	0 (0)	1.02 $\pm$ 0.13	XI

(Figures in parentheses indicate percentage)

**Table 2. Constraints perceived by Veterinarians in implementing livestock development schemes (N=40)**

Sr. No.	Constraints	F (%) of agreement	Hisar MS $\pm$ SD	Kurukshetra MS $\pm$ SD	MS $\pm$ SD	Rank
1.	Multifarious jobs of Animal Husbandry field functionaries	38 (95)	3 $\pm$ 0	2.85 $\pm$ 0.48	2.92 $\pm$ 0.34	I
2.	Incomplete documentation on the part of farmers	37 (92.5)	2.8 $\pm$ 0.61	2.9 $\pm$ 0.45	2.85 $\pm$ 0.53	II
3.	Frequent rejection of application by banks	34 (85)	2.75 $\pm$ 0.55	2.85 $\pm$ 0.49	2.8 $\pm$ 0.51	III
4.	Lack of transport facilities for extension work	33 (82.5)	2.6 $\pm$ 0.68	2.95 $\pm$ 0.22	2.77 $\pm$ 0.52	IV
5.	Delay in processing of applied application	31 (77.5)	2.7 $\pm$ 0.65	2.65 $\pm$ 0.67	2.67 $\pm$ 0.65	V
6.	Improper distribution of targets per GVH	28 (70)	2.6 $\pm$ 0.75	2.45 $\pm$ 0.82	2.52 $\pm$ 0.77	VI
7.	Larger area per extension officer	28 (70)	2.35 $\pm$ 0.87	2.65 $\pm$ 0.74	2.5 $\pm$ 0.80	VII
8.	Lack of extension staff for Animal Husbandry Extension Activities	27 (67.5)	2.25 $\pm$ 0.96	2.6 $\pm$ 0.75	2.42 $\pm$ 0.86	VIII
9.	Technical problems in saralhyana.gov.in portal	22 (55)	2.05 $\pm$ 0.99	2.4 $\pm$ 0.82	2.22 $\pm$ 0.91	IX
10.	Superstitious belief about schemes	20 (50)	2.45 $\pm$ 0.82	1.95 $\pm$ 0.88	2.2 $\pm$ 0.87	X
11.	Record keeping is a difficult task in field	18 (45)	1.9 $\pm$ 0.96	2.25 $\pm$ 0.85	2.07 $\pm$ 0.91	XI
12.	Negative feedback from farmers	12 (30)	1.95 $\pm$ 0.89	1.7 $\pm$ 0.86	1.82 $\pm$ 0.86	XII
13.	Communication barrier with farmers	10 (25)	1.9 $\pm$ 0.91	1.5 $\pm$ 0.76	1.7 $\pm$ 0.84	XIII
14.	Frequent transfer of field staff	9 (22.5)	1.7 $\pm$ 0.92	1.5 $\pm$ 0.76	1.6 $\pm$ 0.83	XIV

(Figures in parentheses indicate percentage)

procedure for availing benefits from these schemes was the one of major constraints which were faced by the beneficiaries. Hence, steps should be taken to make procedure for availing various livestock schemes more relaxed and simplified. Rana and colleagues (2019) reported comparable results. On the other hand, favoritism in disbursement of these schemes with mean score 1.02 was lowest ranked constraint. This was followed by improper record keeping and sufficient skill to complete formalities for availing the schemes. The success of the Hi-tech and Mini Dairy Unit Establishment Scheme and the PKCC Scheme relies on the subsidy amount, which necessitates a certificate from bank authorities. Beneficiaries identified a lack of understanding about banking activities as a constraint. Additionally, a significant constraint was perceived to be the lack of awareness among farmers about the scheme. Therefore, there is a need to conduct awareness programmes so that more number of the farmers get benefit

from such dairy development schemes.

Apart, each item analysis of perceived constraints showed that more than 90 per cent beneficiaries agreed that inadequate field staff in village creates hindrance in availing these schemes; Lack of official's co-operation, lot of time is required and sufficient interest to complete formalities as constraints. Above 60 per cent beneficiaries agreed that poor internet connection in village, confidence level of beneficiaries, and lack of knowledge about various schemes and limited target in Livestock development schemes as constraints. Favouritism in disbursement of these schemes, improper record keeping and sufficient skill to complete formalities perceived as least valuable constraints because of less than one fourth of beneficiaries were agreed with them. The findings align with the research conducted by Rana *et al.*, 2019, which investigated the implementation of the Doodh Ganga Yojana in the Kangra District of Himachal Pradesh. The study identified constraints faced

by various stakeholders and concluded that the cumbersome loan application process, delays in loan approval, and a lack of awareness among farmers about the scheme were considered significant constraints. Data regarding constraints perceived by veterinarians in implementing LDS is presented in the table 2. A majority of Veterinarians (95%) perceived multifarious jobs of Animal Husbandry field functionaries as the most serious constraint with mean score value 2.92 (table 2). Veterinarians are involved in implementation of many livestock development programmes under their ambit. Most often, veterinarians are involved in treating the ailing animals, attending disease outbreaks, implementation of livestock development programmes and disease control programmes. 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 schemes. Jadoun *et al.* (2017), Verma *et al.* (2020), Subash *et al.* (2021) and Sharma *et al.* (2022) reported similar findings that various administrative workloads was perceived as top reported constraints by the Vets. Incomplete documentation on the part of farmers (92.5%) with a mean score of 2.85 ranked as second most serious constraint (Table 2). The results obtained were consistent with the findings of the study by Channappagouda and Sasidhar (2018) and Sangameswaran *et al.* (2019) who found that low and untimely availability of input documents was one of major constraint.

As we know, many documents like PAN, AADHAR, PPP, No dues certificate from various banks etc. have to produce to complete formalities of these schemes which itself is tedious procedure. This might be logical reason for incomplete documentation on behalf of farmers. Frequent rejection of application by banks (85%) ranked as third most serious constraint followed by lack of transport facilities for extension work. Frequent rejection of application may be due to incomplete documentation on behalf of farmer. Poor budget allocation to DAHD may results in lack of transport facilities. Veterinarians serving at grassroots level find it very difficult to serve the needy farmers due to shortage of many basic facilities. In order to improve livestock service delivery, adequate transport facilities with budgetary allocation for maintenance was suggested by vets. They were not given vehicles and travel allowances for field visits. This discovery aligns with the results reported by Rajput (2006), who highlighted that inadequate transport facilities in villages and a lack of medicinal resources in hospitals were major challenges for pastoralists in accessing animal health services. These were followed by delay in processing of applied application, improper distribution of targets, larger area per extension

officer and lack of extension staff. Similarly, Jadoun *et al.* (2017), Channappagouda and Sasidhar (2018), Sangameswaran *et al.* (2019) and Sahu *et al.* (2019) reported that insufficient number of veterinary professionals at field, inadequate supporting staff, more area of coverage, poor transportation facilities, fewer avenues for promotion and veterinarians identified insufficient linkages between research and extension services as a significant constraint. Arbitrary fixation of targets might be due to inadequate baseline information about the village. Most often, livestock development programmes are aimed at targeted approach in rendering inputs 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.* (2014) and Yadav *et al.* (2017). On the other hand, frequent transfer of field staff (22.5%) was least perceived constraint by veterinarians followed communication barrier with farmers, negative feedback from farmers, record keeping is a difficult task in field, superstitious belief about schemes, technical problems in [www.saralharyana.gov.in](http://www.saralharyana.gov.in) portal etc. This probably reflects good communication skills of vets and a greater confidence in the inter-relationship with beneficiary farmers. Phand *et al.* (2020) also revealed that Skill, communication and technical barrier were most remarkable constraints. Besides, Goyal *et al.* (2018) revealed that veterinarians considered financial constraints to be the most severe, followed by situational, technological, motivational, administrative, and human resource development constraints. Additionally, they identified policy, system, and regulation constraints, social constraints, and infrastructural constraints.

## CONCLUSIONS

In the present paper, an attempt has been made to document the constraints perceived by veterinarians and dairy farmers. The overall analysis indicates that major constraints faced by dairy farmers were inadequate field staff followed by lack of official co-operations, time consuming process, lack of interest and knowledge and limited coverage of beneficiaries. Perhaps, the farmers aspire for more of such schemes. Therefore, it is suggested that there should be expansion in coverage of such schemes. The major constraints faced by veterinarians were multifarious job of field functionaries followed by incomplete documentation, frequent rejection of application, lack of transport facilities, and delay in processing and improper distribution of targets. To overcome these constraints, it is essential to invest in education and outreach programs to increase awareness about LDS programs, provide access to resources and



infrastructure, simplify regulatory processes, and promote sustainable practices that ensure long-term success for both dairy farmers and veterinarians. There also appears a certain degree of gap in formulation and implementation of such schemes. It can be conjugated that regular interaction and stakeholder involvement in planning schemes including target fixation can be considered to ensure enthusiastic participation and in turn motivating the veterinarians. By mitigating these constraints, Livestock Development Services (LDS) programs can exert a more substantial influence on the advancement of the livestock industry, thereby contributing to the broader economic and social development of rural communities.

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