

## **PERCEPTION OF CONSTRAINT BY PARAVETS IN EFFECTIVE DELIVERY OF ANIMAL HUSBANDRY SERVICES IN UTTAR PRADESH**

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**Abstract:** Poor livestock health services remain one of the main constraints to livestock production in many developing countries like India. A study was conducted in Mathura district of Uttar Pradesh to find out the constraints perceived by Paravets to deliver the animal husbandry and health service. A total of 60 respondents were selected for the study. Data were collected through structured interview schedule and analysed through different statistical tools. The study revealed that low paying capacity of farmers due to of small livestock farming size and inadequate transport facilities for Para-vets for their field visit were found to be most serious constraints. Among the technical constraints, inadequate policies and regulation and inadequate knowledge of scientific livestock farming, which weighted 98.33 & 96.66 was the most serious constraint as perceived by Paravets. It was further revealed that low or no incentives paid by the department and high cost of inputs like medicine and equipment's are perceived as serious constraints. Poor linkage of Paravets with other institution not only made hindrance in the execution of door step delivery of animal health services but also in its outcome which ultimately affect the performance of Paravets

**Keywords:** Animal Health Services, Constraints, Paravets, Uttar Pradesh.

### **Introduction**

Livestock keeping is an intergral part of family farming systems in our country, where majority of the farming belongs to landless, small and marginal farmers. Livestock holding is crucial for them – the poorest 60% of rural households own 65% of all milk animals. Regardless of the cash value of livestock, animals play a substantial role in the livelihoods of poor households and the use of livestock as a source of food, income, transport, hides and skins, draught power and manure is well documented, as are their numerous social and cultural functions. However the condition like ill health, production losses and reproductive losses leads to a substantial loss to the farmers and apart from this, huge production risk associated with animal husbandry sector make this business a risky proposition for the low income farmers. Prevention of economic losses from various diseases remains a recurrent

issue for livestock keepers as it affects the farmer development and profitability. Even if the Government offers a public animal health service, the human resources remains insufficient and are especially focused on large animals which don't satisfy the demand. Government services are at present inadequate to cover huge areas even with a vast network of over 50,000 veterinary dispensaries and centres which, together, employ over 100,000 veterinarians and para-veterinary staffs (Ahuja *et al.*, 2003). For these reasons, if appropriate primary level services become available to rural communities which can provide basic animal health services under expert guidance like: Artificial Insemination followed by pregnancy diagnosis (PD), vaccination, deworming, dehorning etc. Yadav *et al.*, (2018) also stressed that good support services are critical for enhancing livestock productivity and for enabling the poor to gain access to expanding markets. Therefore, it is imperative to register such skilled persons to work under the supervision of Government Veterinarians (NAVS, 2018). Para-veterinarians (Paravets) are skilled professionals who have undertaken training in artificial insemination, first aid, administration of medicines and vaccines, assisting veterinarians in various activities etc. These work forces are now considered as one of the most promising means for increasing the provision of animal health services in the rural areas of many developing countries (Schillhorn van Veen T.W. 1984). Though, paravets provide various type of services to farmers, they face lots of problems in day to day activities which reduce their work efficiency and hence this study was conducted to analyse the constraints perceived by the paravets in field condition and the factors influencing the constraints.

### **Research Methodology**

Ex post facto research design was used for the present study as the phenomena has already occurred. The study has been carried out in the state of Uttar Pradesh, which has the highest (12.67%) livestock population in the country. The effective delivery of veterinary services to farmers is constrained mainly by an inadequate human resources, physical facilities, distance located hospitals etc in the state. The study was taken up for 60 selected paravets from animal Husbandry department of Uttar Pradesh. Constraint, which is operationalized as to analyze something that imposes a limit or restriction or that prevents something from occurring. The constraints were studied in 3 categories as Infrastructural, technical and administrative constraints. A pre-tested closed structured interview schedule was used to collect the data from respondents. The constraints perceived by the paravets in delivering basic animal husbandry services to the farmers and their responses was collected in there continuum viz, A

(Agree), UN (Undecided), D.A. (Disagree) and given scores as 2,1and 0 respectively. The Mean percentage score can be derived from the formula

$$\bar{x} = \frac{w_1x_1 + w_2x_2 + \dots + w_nx_n}{w_1 + w_2 + \dots + w_n}$$

Where,

**x** is the repeating value

**w** is the number of occurrences of x (weight)

**$\bar{x}$**  is the Mean percentage score

Following the completion of data collection, the collected data were coded, tabulated, classified and mean weighted scores was calculated and accordingly rank were assigned. The collected data was analyzed with help of suitable statistical test on the basis of mean weighted scores & ranking and valuable inferences were drawn.

## **Result and Discussion:**

### **Factors governing the utilization of paravets**

The results presented in Table 1 revealed that Doorstep and round the clock services provided by paravets because of the variable distance from Animal Husbandry Institution is one of the significant factors making the farmers more dependence on paravets and present a positive influence on the choice of paravets. The findings are in accordance with Gupta *et al.*, (2015). In case of emergencies, the paravets can visit any time at the home of the livestock owners (at-home service) and the charges are to be limited to the transport/vehicle charges incurred in reaching the farmer's home at night. It was further revealed that due to limited number of Veterinary Institution in nearby areas and low fee charged by the paravets for treatment were making the farmers more dependence on paravets. This finding is in consonance with that of Ahuja *et al.* (2003b), who reported that government veterinarians attend even ordinary sickness cases at farmers' homes and majority of these visits were undertaken in private capacity. The key socio-economic factors, viz. lack of awareness, illiteracy, poor economic status, lack of faith in government programmes, village politics and subsidy culture affect the people's participation to a large extent (Brahmi and Thakur 2011).

**Table 1:** Perceiving factors involved in utilization of paravets by farmers

(n=60)

Sr. No	Dependence factors	A	UN	DA	Weighted mean score	Rank
1.	Doorstep services provided by paravets	60	0	0	100	I
2.	Round-the-clock services provided by paravets	60	0	0	100	I
3.	Limited number of veterinary doctors in nearby areas	57	1	2	95.83	III
4.	Limited availability of Veterinarian due to other administrative work	28	0	32	46.66	VI
5.	Dependence of farmers on paravets	59	0	1	98.33	II
6.	Unawareness of farmers about the role of paravets	25	0	35	41.66	VII
7.	Less fee is charged by the paravets for treatment	57	0	3	95.00	IV
8.	Reliable source of information	32	0	28	53.33	V

A=Agree, UN= Undecided,  
DA=Disagree

Apart from that (53.33%) respondents reported that farmers considered as one of the reliable source of information. Due to homogeneity in their location, language etc they may be considered as more reliable. Limited availability of Veterinarian due to other administrative work (46.66%) was also considered as one of the important factor for dependence towards paravets. McDermott *et al.*, (1999) found that Veterinarians are unwilling to work in these areas for reasons of personal discomfort and insecurity, and economic analysis reveals that the high transaction costs related to business are not easily recovered, due to the relatively low monetary value of livestock in many rural communities.

### **Constraints Perceived by Paravets in Performing Their Duties**

Constraints are difficulties experienced in carrying out assigned duties and responsibilities. So, it is essential to identify and prioritize the various factors that hamper the performance of Paravets.

#### **A. Infrastructural Constraints:**

A perusal of the table 2 reveals that the Paravets of semiarid zone perceived that low paying capacity of the farmers (98.33) as important constraints in delivery of Animal Husbandry Services. This may be due to small agricultural and livestock farming size. Apart from this inadequate transport facilities (95.00) was the second major constraint as perceived by

Paravets. They were not provided with the vehicles and travelling allowances for the field visit. Rajput (2006) also observed that poor transport facilities in villages and lack of medicinal availability in hospitals as the major problem of pastoralists for utilizing the animal health services.

**Table 2: Infrastructural constraints perceived by paravets in delivery of services**

(n=60)

Sr. No	Constraints	A	UN	DA	Weighted mean score	Rank
1.	Poorly equipped in delivering the services	30	0	30	50.00	III
2.	Low paying capacity of farmers	59	0	1	98.33	I
3.	Inadequate transport facilities available during field visit	57	0	3	95.00	II
4.	Insufficient Paravets in the field	23	0	37	38.33	IV

A= Agree, UN= Undecided, DA= Disagree

It was observed that the paravets are poorly equipped (50.00) with the inputs in delivering the series and perceived it as third major constraints. According to Chander *et al* (2006), there is inadequate financing by government for the provision of veterinary services and major proportion of budget allocated was spent on the direction and administration rather than veterinary services and animal health. Meena *et al.*, (2013) also focussed on poor availability of equipment as well as inadequate paravets as serious constraint in the field. Though, Paravets had the skill to perform the first aid facility but due to lack of proper equipments they were unable to perform their duties.

#### **B. Technical Constraints:**

Among the technical constraints, inadequate policies and regulation and inadequate knowledge of scientific livestock farming, which weighted 98.33 & 96.66 was the most serious constraint as perceived by Paravets. NAVS, (2018) also recommended setting up of a National Level Regulatory Authority on priority basis to function under the control and direction of the Veterinary Council of India to maintain and regulate the working of institutions imparting para-veterinary education and thus can have a cadre of trained para-veterinary personnel whose services can be streamlined for providing essential health care to livestock. It was also documented that absence of adequate training and capacity building is one of the probable reasons for improper time of insemination, poor health conditions,

physiological problems and manual error by the Paravets. This broad group of workers comprises any type of animal health worker without a university veterinary degree, who may have received training, varying from few weeks duration to few years (Catley *et al.*, 2004).

**Table 3: Technical constraints perceived by paravets in delivery of services**

(n=60)

Sr. No	Constraints	A	UN	DA	Weighted mean score	Rank
1.	Absence of adequate training and capacity building	29	0	31	48.33	III
2.	Poor practices followed during the delivery of animal health service delivery	2	0	58	03.33	V
3.	Inadequate knowledge about scientific livestock farming	58	0	2	96.66	II
4.	Poor adoption of animal husbandry innovation	26	0	34	43.33	IV
5.	Inadequate policies and regulation	59	0	1	98.33	I

A= Agree, UN= Undecided,  
DA= Disagree

There is poor adoption of animal husbandry technologies by the farmers, resulting in low economic gain by the farmers and hinder the utilization of Animal Husbandry service providers. Jitendra *et al.*, (2018) also revealed that majority of the farmers were unaware about advance resulting in low adoption of Animal Husbandry Technologies. Thus it was suggested to improve reach of extension services related to animal husbandry to the grassroots level by setting the small institution in the areas and by improving the funding.

### C. Administrative Constraints:

Paravets perceive that low or no incentives paid by the department and high cost of inputs like medicine and equipment's (91.66) emerged as the most important constraints. Ravikumar and Mahesh (2011) reported that inadequate availability of drugs, vaccines, professional and para professional staff and infrastructure facilities in the veterinary institutions as main problem as perceived by livestock owners in utilization of public livestock services. The next major constraint was weak linkages with organisation (Veterinary Officer). Linkage plays an enormous role in controlling and managing animal health service work efficiently and effectively.

**Table 4: Administrative constraints perceived by paravets in delivery of services****(n=60)**

Sr. No	Constraints	A	UN	DA	Weighted mean score	Rank
1.	Low incentives paid by the department	55	0	5	91.66	I
2.	Weak linkages with organisation (veterinary officer)	53	0	7	88.33	II
3.	High cost of equipments and inputs	55	0	5	91.66	I
4.	Lack of confidence of farmers towards Para-vets	3	0	57	05.00	IV
5.	Poor networking with other Institutions	27	0	33	45.00	III

A= Agree, UN= Undecided,  
DA= Disagree

Poor linkage of Paravets with other institution not only made hindrance in the execution of door step delivery of animal health services but also in its outcome which ultimately affect the performance of Paravets (Gupta *et al.*, 2015). It was also observed that few farmer's lack confident towards of the service provided by the Paravets.

### Conclusion

The study conclude livestock services delivered by various agencies are being hindered by the various constraints in rural areas. Similarly the paravets faces the Infrastructural, technical and administrative constraint in providing basic animal health services to the farmers. Though they possess less technical knowledge in the area of animal husbandry, efforts are needed to improve same by introducing the refresher and other training courses enriching their knowledge and skill. Hence it was suggested that the line departments should gear up their activities by strengthening their linkages with other organizations by active involvement of personnel involved in providing Animal Husbandry Services for the better productivity of the animals.

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