



Enhancing livestock health services in India: An analytical study of para-veterinary workforce and service delivery

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Supplementary Table 1. Table of random index

n	1	2	3	4	5	6	7	8	9	10
RI	0	0	0.58	0.9	1.12	1.24	1.32	1.41	11.45	1.49

(Saaty and Forman, 1993)

Supplementary Table 2. Chi-square values for Competency Assessment Index of para-vets to ensure active participation with vets for effective delivery of animal health services (perspective of para-vets themselves) (n=160)

Sl. No.	Dimensions and statements	Low	Medium	High	χ^2 value
I	Controlling and handling of animals				
	Skills to make animals cooperate during handling to ensure no accidents.	64 (40.00)	70 (43.75)	26 (16.25)	21.350**
	Knowing about the flight zone, point of balance of the animal, and hold the animal securely and safely.	133 (82.15)	20 (12.50)	07 (04.35)	180.088**
	Minimum stress and injury to the animal during handling and treatment	101 (63.12)	46 (28.75)	13 (08.13)	74.113**
	Following the prescribed procedures related to the use of each tool and equipment.	83 (51.87)	50 (31.26)	27 (16.87)	29.713**
	Use of personal protective materials.	133 (83.12)	20 (12.50)	07 (04.38)	180.088**
II	Participation in preventive animal health care programmes				
	Regularly submit health, production, and breeding data related to animals to veterinarians on time	109 (68.13)	35 (21.87)	16 (10.00)	90.538**
	Conducting self-evaluation of infrastructure for storage and use of vaccines from a credible source.	60 (37.50)	88 (55.00)	12 (07.50)	55.400**
	Maintaining cold chain and rotate vaccine stock so those oldest vaccines are used first, and no vaccine is used after expiration date.	42 (26.25)	92 (57.50)	26 (16.25)	44.450**
	Use only permissible products as per the directive of a veterinarian regarding appropriate dose and procedure of administration	45 (28.12)	93 (58.13)	22 (13.75)	49.213**
III	Assistance in veterinary extension and outreach				
	Organizing extension events based on farmer convenience and seasonal suitability	25 (15.63)	55 (34.39)	79 (49.38)	87.300**
	Scout sources, plan, and organize farmers for intelligent procurement of inputs.	28 (17.50)	84 (52.50)	48 (30.00)	30.200**
	Contribute in making farm school activities ‘targeted’ and ‘need based’	112 (70.00)	40 (25.00)	08 (05.00)	106.400**
	Use of modern communication devices and audio-visual aids to explain farmers.	132 (82.50)	23 (14.38)	05 (03.12)	177.088**

contd.

Supplementary Table 2 Concluded

Sl. No.	Dimensions and statements	Low	Medium	High	χ^2 value
IV	Assistance in implementation of development programmes				
	Promoting awareness programs and help in the selection of targeted beneficiaries for the project/program.	104 (65.00)	46 (28.75)	10 (06.25)	84.350**
	Encouraging panchayat's endeavor to ensure convergence of development projects for synergy.	100 (62.50)	53 (33.12)	07 (04.38)	81.088**
	Motivating for the formation of self-help groups.	35 (21.88)	54 (33.74)	71 (44.38)	12.163**
	Guiding farmers on business prospects and basic economics of livestock-linked activities.	96 (60.00)	52 (32.50)	12 (07.50)	66.200**
	Providing real-time information on livestock farm inputs, supplements, and livestock insurance, etc.	48 (30.00)	46 (28.75)	66 (41.25)	04.550*
	Explaining the stakeholders about protection strategies related to animal cruelty and common conflict situation.	120 (75.00)	28 (17.50)	12 (07.50)	127.400**
	Engagement with interested breeding farms/goshalas for the conservation of purebred animals.	113 (70.62)	41 (25.62)	06 (03.76)	111.613**
V	Doorstep delivery of services				
	Reporting animal movement as per standard format	40 (25.00)	102 (63.75)	18 (11.25)	71.150**
	Following farm safety, hygiene, and animal welfare protocols.	138 (86.25)	16 (10.00)	06 (03.75)	202.550**
	Ensuring aseptic handling and protection of the prolapsed organs before the arrival of the veterinarian.	84 (52.50)	63 (39.37)	12 (07.50)	51.736**
	Guiding implementation of approved government guidelines related to the market operation, cleaning, etc.	139 (86.87)	19 (11.87)	02 (01.25)	209.113**
	Applying judgment regarding nature of trade /frequency of movement/animal holding areas etc.	150 (93.75)	08 (05.00)	02 (01.25)	263.150**

Table values of the chi-square test at 2 degrees of freedom were 05.99 and 09.21 at 5 and 1 % level of significance, respectively. * Significance at 5 %, ** significant at 1 % (Figures in parenthesis indicate %age)

Supplementary Table 3. Index value for various dimensions of the Competency Assessment Index

Sl. No.	Competency Dimension	Index Value	Relative Proficiency
I	Controlling and handling of animals	0.410	Moderate
II	Assisting in veterinary extension services	0.401	Moderate
III	Participation in preventive animal health care programmes	0.379	Moderate-Low
IV	Development program implementation and marketing	0.307	Low
V	Services at farmer's doorstep	0.187	Critical Deficit

Supplementary Figure 1. Comparative representation of priority weights of SWOT concerning prospects for efficient delivery of animal health services (as perceived by para-vets)

