Original Research

Training Need Assessment for Veterinary Officers of Maharashtra

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Abstract

To decide suitable training courses, feedback of 290 veterinary officers of Maharashtra state was taken regarding the preference of different training courses in supplied format. Format was prepared by the scientists of the centre consisting of different courses and score in 1-10 scale. It was revealed that course entitled "Management of infertility and reproductive health in dairy cows and buffaloes", scored highest (9.13) indicating most preferred training course. Besides those, seventy three courses were listed by different trainees; out of those first important course informed by more than ten trainees was "Disease diagnosis by ultrasonography and radiography". Data were analysed as per different factors. While data were analysed as per different organization of trainees, it was observed that officials working at Disease Diagnostic Laboratory (9.67), Veterinary Dispensary (9.32) and Panchyet Samiti (9.27) preferred most the course entitled "Advances in diagnosis and treatment of important infectious diseases of livestock". While data were analysed as per designation of trainees, it was revealed that both Livestock Development Officer and Assistant Commissioner of Animal Husbandry preferred the course entitled "Management of infertility and reproductive health in dairy cows and buffaloes". While data were analysed as per service experience of the participants, it was revealed that trainees of service experience upto 5 years and trainees of experience above 5 years upto 10 years preferred the course entitled "Advances in diagnosis and treatment of important infectious diseases of livestock".

Key words: Assessment, Maharashtra, Training Need, Veterinary Officers

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Introduction

Training need assessment is a must for effective and successful training programme. Often, organizations develop and implement training without first conducting a need analysis. These organizations run the risk of overdoing training, doing too little training or missing the point completely. It is observed that refresher type of course is very much needed for keeping abreast of the latest information and technologies for the

up gradation of knowledge for better service of common people by the veterinarians working in the field and different offices of state departments. So, need of the training courses on different aspects of veterinary and animal sciences was assessed in Maharashtra with the object to decide different courses for imparting training to the officials of State Animal Husbandry and Veterinary Services Department under Government of Maharashtra as a mandate of the centre of the institute.

Materials and Methods

To decide suitable training courses, feedback of 290 veterinary officers of Maharashtra state was taken regarding the preference of different training courses in supplied format. Format was prepared by the scientists of the centre consisting of fourteen different courses and score in 1-10 scale. Participants were requested to put tick on the score lowest from 1 to highest 10 mentioned against each course as per importance and will of the individual participants. Even they were requested to mention few more courses which are not enlisted in the supplied format. Study was continued during 2015-16 for a period of one year. Afterwards score mentioned by them were analyzed statistically as per Snedecor and Cochran (1994) using SPSS package version 10.5. Analysis of the score was also done as per organization, designation, region and experience in service of the individual participants to have an overall view of need of the different training courses by veterinarians in the state of Maharashtra.

Result and Discussion

It was revealed that C4 i.e. "Management of infertility and reproductive health in dairy cows and buffaloes", scored highest (9.13 ± 0.16) indicating most preferred training course. Second and third preferred courses were C1 i.e. "Advances in diagnosis and treatment of important infectious diseases of livestock" and C2 i.e. "Management of common surgical conditions in the field" (Table1). Besides those, seventy three courses were listed by different trainees; out of those first six important courses informed by more than ten trainees were-

a) Disease diagnosis by ultrasonography and radiography,
b) Advance laboratory techniques for disease diagnosis,
c) Diseases and health management of wild animals,
d) Management of major surgical condition in the field,
e) Pharmacology of new drugs in the field and
f) Anesthesiology.

Data were analysed as per different factors. While data were analysed as per different organization of trainees, it was observed that officials working at Disease Diagnostic Laboratory (9.67), Vet. Dispensary

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(9.32) and Panchyet Samiti (9.27) preferred most the course entitled "Advances in diagnosis and treatment of important infectious diseases of livestock" (Table 2).

Table 1: Score and ranking of different training courses

Course No.	Title of Training Course	Score (Mean ± SE)	Rank
C1	Advances in diagnosis and treatment of important infectious diseases of livestock	9.03ab ± 0.17	II
C2	Management of common surgical conditions in the field	8.71cde ± 0.17	III
C3	Advances in fracture fixation techniques in animals	8.22de ± 0.20	VI
C4	Management of infertility and reproductive health in dairy cows and buffaloes	9.13a ± 0.16	I
C5	Mastitis – prevention and control strategies	8.50bcd ± 0.18	V
C6	FMD – Advances in disease diagnosis and control	7.21g ± 0.23	XIII
C7	Common infectious diseases of small ruminants, with special reference to PPR	7.73f ± 0.18	IX
C8	Role of veterinarians in control of zoonotic diseases	8.54bc ± 0.15	IV
C9	Food borne infection and intoxications	7.54f ± 0.19	XI
C10	Diagnosis and control of common poultry diseases	7.57f ± 0.18	X
C11	Stem cell therapy	6.49h ± 0.24	XIV
C12	Clinical nutrition	7.95ef ± 0.18	VIII
C13	Health care of neonatal animals	7.47f ± 0.20	XII
C14	Sample collection, storage and transportation for disease diagnosis	8.18cde ± 0.17	VII

Figures having different superscripts in a column differ significantly (P<0.05)

Table 2: Score of different training courses as per organisation of trainees

Course No.	Organization										Overall(290)
	0 (59)	1 (27)	2 (165)	3 (11)	4 (2)	5 (3)	6 (3)	7 (14)	8 (1)	9 (3)	
C1 **	7.11	**9.67**	**9.32**	**9.27**	8.5	6.67	10.00	8.64	10.00	10.00	9.03
C2	7.85	8.96	8.82	8	9.5	10.00	10.00	7.57	10.00	7.67	8.71
C3	8.07	8.85	8.30	7.55	9.00	6.67	9.33	7.36	10.00	8.33	8.22
C4	7.89	9.00	9.22	9.20	9.00	9.33	10.00	**9.86**	10.00	9.67	9.13
C5	7.74	8.22	8.56	9.09	10.00	9.00	10.00	9.07	10.00	9.33	8.50
C6	5.96	7.59	7.23	8.00	8.50	7.67	8.33	7.36	9.00	8.67	7.21
C7	6.22	8.07	7.82	7.73	8.50	7.67	9.67	8.36	10.00	9.33	7.73
C8	7.56	9.29	8.38	8.73	10.00	10.00	10.00	8.93	10.00	9.67	8.54
C9 *	6.70	7.19	7.50	9.18	10.00	7.33	9.67	9.00	10.00	9.33	7.54
C10	6.26	7.93	7.62	8.45	9.50	9.33	9.67	8.21	10.00	9.33	7.57
C11	6.11	5.63	6.68	6.36	9.50	8.33	9.33	6.86	8.00	8.00	6.49
C12	6.96	8.37	8.19	8.09	10.00	8.00	9.33	7.14	10.00	9.33	7.95
C13	6.85	7.89	7.48	7.45	10.00	8.00	9.67	7.93	8.00	9.00	7.47
C14 **	7.05	8.89	8.33	8.18	9.50	10.00	10.00	9.21	9.00	7.33	8.18

NB: 0 = Not mentioned any organization, 1 = Disease Diagnostic Laboratory, 2 = Vet Dispensary / Vet Clinic, 3 = Panchayet Samiti / Zila Parisad, 4 = Artificial Insemination Centre, 5 = Poultry Farm / Hatchery, 6 = Slaughter House, 7 = District AH Office / Deputy Director of AH office / Assistant Commissioner Office, 8 = Maharashtra State Veterinary Council, 9 = Institute of Veterinar Biological; Bold value is the highest score. Parenthesis indicates number of observation.
** => P < 0.05, ** => P < 0.01*

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However, course entitled "Management of infertility and reproductive health in dairy cows and buffaloes" was most preferred by officials working at District Animal Husbandry Office, Deputy Director of Animal Husbandry Office and Assistant Commissioner Office (9.86). Trainees belong to organization 4, 5, 6, 8, 9 were not considered due to very less number of observations.

Veterinary officers gave feed back belong to three categories i.e. Livestock Development Officer (1), Assistant Commissioner of Animal Husbandry (2) and District Animal Husbandry Officer (3). While data were analysed as per designation of trainees, it was revealed that both Livestock Development Officer and Assistant Commissioner of Animal Husbandry preferred C4 i.e. "Management of infertility and reproductive health in dairy cows and buffaloes". However, District Animal Husbandry Officer preferred C1 i.e. "Advances in diagnosis and treatment of important infectious diseases of livestock" (Table 3).

Table 3: Score of different training courses as per designation of trainees

Course No.	Designation			Overall (290)
	1 (239)	2 (42)	3 (9)	
C1	9.00	9.00	**9.78**	9.03
C2	8.82	8.36	7.56	8.71
C3	8.31	7.98	7.00	8.22
C4	**9.04**	**9.64**	9.22	9.13
C5	8.40	9.05	8.67	8.50
C6	7.18	7.52	6.78	7.21
C7	7.64	8.29	7.56	7.73
C8	8.42	9.21	8.67	8.54
C9 **	7.30	8.64	8.78	7.54
C10	7.42	8.33	8.00	7.57
C11 **	6.18	8.29	6.33	6.49
C12 *	7.82	8.88	6.89	7.95
C13	7.34	8.17	7.67	7.47
C14	8.05	8.74	9.11	8.18

*NB: 1 = Livestock Development Officer, 2 = Assistant Commissioner of Animal Husbandry, 3 = District Animal Husbandry Officer; Bold value is the highest score. Parenthesis indicates number of observation; * => P < 0.05, ** => P < 0.01.*

There were seven regions in Maharashtra namely Amaravati, Auragabad, Latur, Mumbai, Nagpur, Nashik and Pune. While data were analysed as per different regions of the state, it was found that veterinary officers belong to Pune, Nashik and Amaravati region preferred C1 i.e. "Advances in diagnosis and treatment of important infectious diseases of livestock" most. However, in Mumbai, Auragabad, Latur and Nagpur region, C4 i.e. "Management of infertility and reproductive health in dairy cows and buffaloes", was preferred mostly by the veterinary officers (Table 4). This might be due to the reason that in first three regions infectious disease is acute problem, whereas in last four regions reproductive problems are more acute. Service experience of officers was classified in five categories i.e. up to 5 years (1), above 5 years to 10 years (2), above 10 years to 15 years (3), above 15 years to 20 years (4) and above 20 years (5).

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Table 4: Score of different training courses as per region of trainees

Course No.	Region								Overall (290)
	0 (12)	1 (49)	2 (52)	3 (48)	4 (37)	5 (22)	6 (23)	7 (47)	
C1	8.67	9.12	**9.46**	**9.07**	8.43	9.09	**9.17**	8.87	9.03
C2 *	8.33	8.29	9.19	8.04	8.86	9.14	8.52	9.17	8.71
C3	7.75	7.49	8.69	8.08	8.11	8.82	8.3	8.49	8.22
C4	8.67	**9.18**	9.27	8.96	**9.05**	**9.32**	9.00	**9.26**	9.13
C5	7.67	8.24	8.75	8.71	8.30	8.18	8.61	8.77	8.50
C6	7.58	6.80	7.19	7.44	6.78	7.14	7.35	7.66	7.21
C7	7.75	7.55	7.77	7.94	7.49	7.87	7.65	7.85	7.73
C8	7.83	8.51	8.92	8.27	8.16	8.45	8.83	8.83	8.54
C9	6.83	7.16	7.42	7.65	7.41	7.27	8.78	7.74	7.54
C10	6.42	7.53	7.52	7.23	7.30	7.91	8.48	7.91	7.57
C11	5.50	6.08	6.50	6.54	6.03	6.77	6.39	7.38	6.49
C12	7.33	7.49	8.50	8.10	7.43	7.27	8.22	8.40	7.95
C13	7.42	7.35	7.58	7.54	7.14	7.45	7.74	7.57	7.47
C14	8.08	8.12	8.44	7.92	7.95	8.05	8.30	8.45	8.18

*NB: 0 = Not mentioned any region, 1 = Mumbai Region, 2 = Pune Region, 3 = Nashik Region, 4 = Aurangabad Region, 5 = Latur Region, 6 = Amaravati Region and 7 = Nagpur Region, Bold value is the highest score, * => P < 0.05, Parenthesis indicates number of observation*

While data were analysed as per service experience of the participants, it was revealed that trainees of service experience upto 5 years and trainees of experience above 5 years upto 10 years preferred C1 i.e. "Advances in diagnosis and treatment of important infectious diseases of livestock", but rest of the trainees belong to other three groups preferred most C4 i.e. "Management of infertility and reproductive health in dairy cows and buffaloes" (Table 5). So, young veterinarian's preferred C1 course and aged veterinarians expressed fascination for the C4 course.

Table 5: Score of different training courses as per service experience of trainees

Course No.	Service Experience						Overall (290)
	0 (6)	1 (162)	2 (63)	3 (17)	4 (21)	5 (21)	
C1	9.17	**8.93**	**9.11**	9.53	8.86	9.29	9.03
C2	8.67	8.77	8.86	9.12	7.57	8.67	8.71
C3 *	7.83	8.36	8.14	8.94	6.48	8.62	8.22
C4	9.17	8.98	9.00	**9.88**	**9.57**	**9.67**	9.13
C5	7.83	8.47	8.22	9.00	8.81	9.05	8.50
C6	8.00	7.20	6.89	8.47	6.86	7.43	7.21
C7	7.50	7.64	7.62	8.18	7.57	8.67	7.73
C8	7.83	8.39	8.56	9.06	8.76	9.29	8.54
C9 *	5.67	7.30	7.51	8.00	7.95	9.19	7.54
C10	7.83	7.57	7.02	7.76	7.71	8.81	7.57
C11 **	4.33	6.10	6.48	8.53	6.67	8.29	6.49
C12	6.67	7.88	7.97	8.29	7.67	8.81	7.95
C13	5.83	7.50	7.10	9.76	7.05	8.24	7.47
C14	7.00	8.09	7.94	9.24	8.71	8.62	8.18

*NB: 0 = Not mentioned any experience, 1 = Up to 5 years, 2 = above 5 years to 10 years, 3 = above 10 years to 15 years, 4 = above 15 years to 20 years, 5 = above 20 years; bold value is the highest score. Parenthesis indicates number of observation; * => P < 0.05, ** => P < 0.01.*

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Conclusion

To implement effective training programme, assessment of training needs of veterinary officers was done. So, course entitled "Management of infertility and reproductive health in dairy cows and buffaloes" should be given top priority for imparting training to the officials of state departments followed by the course entitled "Advances in diagnosis and treatment of important infectious diseases of livestock". So, professional organizations who are going to design and plan training programme for the veterinary officers, would keep in mind about the preference of above mentioned training courses.

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