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# Health care managemental practices followed by dairy owners in western Maharashtra

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#### **Abstract**

Present study was conducted in 4 districts of Western Maharashtra *viz*. Sangli, Satara, Solapur and Kolhapur. A data were collected from individual farmer on livestock health management. A total of 600 (150 from each district) livestock's owners out of that were 492 large animals and 108 small ruminants owners having at least one animal per farmer were randomly selected. Farmers were interviewed by a presented structured interview schedule from each district. Two tahsil were selected and from each tahsil three villages were selected and from that 25 respondents were' selected randomly belonging to different categories of farmers. Treatment of sick animals, deworming and control of ectoparasite, vaccination programme on FMD, HS, BQ and Tetanus and carcass disposal pattern at field level were found to be 68.17%, 33.17% regular, 46.83%, 58.00% and 67%, respectively. Kolhapur district is one of the unique district of Maharashtra having fertile land and high potentialities for the dairy development, availability of government hospitals and local assistant for treatment. In conclusion that the Kolhapur district farmer's adopted better in terms of scientific health management practices followed by Sangli, Satara and Solapur districts. So, there is future scope for improving better management practices to up gradation in dairy animal production Western Maharashtra.

Keywords: Farmers, health, Livestock, management, dairy, Maharashtra, deworming, ectoparasite

# Introduction

A Sound health is one of the most important factors for getting optimum production. The majority of farmers practiced isolation of sick animals from the herd and protection of the animals from ecto-parasites in Rudrapur block Uddham Singh Nagar district reported that (Bardhan *et al.*, 2005) <sup>[2]</sup>. Only 2.00% were regularly dewormed and taking prophylactic measures against diseases and majority of them isolated the sick animals from the healthy ones farmers in different district of MP reported that (Kumar *et al.*, 2012) <sup>[8]</sup>. Majority of the farmers vaccinated their animals against various diseases and kept their diseased animals separately in reported that Rajasthan. Major constrains faced by tribal dairy owners of South Gujarat regarding healthcare were high cost of veterinary medicine (80.5%), problems of mastitis in crossbred cows (73.50%), inadequate knowledge of disease and their control (50.50%), non availability of service of veterinary doctors etc., as reported by (Sabapara *et al*, 2012) <sup>[7]</sup>. Major constrains regarding about healthcare faced by dairy owners were high cost of veterinary medicine (80.5%), incidence of diseases, problems of mastitis in crossbred cows (73.50%), inadequate knowledge of disease and their control, non-availability of service of veterinary doctors etc. in Solapur district (Shinde *et al.*, 2011) <sup>[9]</sup>.

Lack of knowledge and information regarding deworming, vaccination and incidence of diseases amongst dairy farmers affects growth, production and reproduction performances of dairy animals. There was scanty of information regarding health management system prevelant in Western Maharashtra. So, this study was conducted in Western Maharashtra to study the livestock health management practices followed by dairy farmers in the above mentioned study area.

#### **Materials and Method**

The present study was conducted on four districts of Western Maharashtra in which include Sangli, Satara, Solapur and Kolhapur. Two tahsils were selected from each district and three villages were selected from each tahsil. From each village 25 respondents were' selected randomly belong to different categories. A total 600 livestock's owners out of that were 492 large animals owners and 108 small ruminants owners (150 from each district) having at least

one milch cattle were selected randomly to study the health management practices followed by them were collected. The parameters considered for the study were Treatment of sick animals, Deworming and control of ectoparasite, Vaccination (FMD, HS, BQ and TT) and Carcass disposal pattern.

The information collected was pooled and analyzed using standard statistical procedure (Snedecor and Cochran 1994). Based on the nature of research problem

#### **Results and Discussion**

Vaccination of animal: Regular vaccination against cattle diseases was practiced by only 32.00% dairy owners in Solapur. But in Satara district, 50.67% of owners vaccinated their animals on regular basis, 27.67% farmers vaccinated their animals sometimes and whereas 22.00% did not vaccinate their dairy animals. In Sangli district, 46.00% farmers vaccinated their animals at regular interval, 28.00% farmers vaccinated their animals sometimes and 25.00% did not vaccinate their animals. In Kolhapur area, 58.00% of farmers vaccinated their animals at regular interval, 22.00% vaccinated their animals sometimes and the rest 20.00% did not vaccinated. Overall, 46.83% of farmers in the above four districts vaccinated their animals on regularly basis.

Some respondents were more aware off vaccination practices in U.S Nagar district of Uttaranchal (Arora *et al.*, 2006) <sup>[1]</sup>. It was reported that few respondents practices (31.00%) of FMD and (32.00%) of HS vaccination in their dairy animals in jaisinagar district of Madhya Pradesh (Kumar *et al.*, 2009) <sup>[8]</sup>. The prophylactic measures adopted against diseases by dairy farmers were FMD vaccination in Kolhapur 90.00%, Sangli 82.00%, Satara 76.00%, and Solapur 49.00% respectively. The HS vaccinated practices of dairy owners in their animals were Kolhapur (22.00%), Sangli (15.33%), Satara (13.33%) and Solapur (8.00%) districts respectively, however, vaccination against tetanus is not available with government veterinary hospitals still overall only 20.00% in all the districts.

#### Deworming and control of ectoparasite of dairy animals:

In Solapur district were 48.00% of dairy owner who never deworming their animals, (30.67%) of dairy owners dewormed sometimes and 21.33% deworming were regular. Similarly in Satara district were 40.67% of dairy owner's practices deworming sometimes in their animals, 35.33% deworming regularly and 24.00% of farmers who never dewormed in their animals. In Sangli 45.33% of dairy owners

were practices dewormed sometimes in their animals, 30% farmers deworming regularly and 24.67% of deworming never and In Kolhapur 46.00% dairy farmers were deworming regularly their animals, 36.67% of dewormed sometimes and 17.33% of deworming never. The less number of farmers practicing deworming might be due to lack of knowledge regarding the harmfulness caused by parasite. The present findings are encouraging than reported by (Biswas, 2014, Kumar *et al.*, 2014) <sup>[3, 8]</sup>. Overall the 36.67% of share of farmers was deworming sometimes in their animals. The ectoparasites eradicated was in Kolhapur district were 80.67%, Sangli 74.00%, Satara 68.00% and Solapur 45.00% farmer's were using insecticide.

Treatment of sick animals: Most of the dairy owners observed their animals every day for any signs or symptoms of diseases in Kolhapur (85.33%), Sangli (74.00%) and Satara (68.00%) bu in Solapur only (45.33%). The present results revealed that only 44.00% farmers taking advice from veterinary doctor, 34.00% from livestock attendants/ AI staff and 22.00% from local/others in Solapur district. In Satara district dairy owners availed the help of 52.00% from local/others, 40.00% from Veterinary doctors and (8%) from the livestock attendant/ AI staff. In Sangli area dairy owners take help of 54% Veterinary doctors, 42% from livestock attendant/ AI staff and local/ and 4% others, This was in contrary to Kokate and Tyagi (1991) [6]. This might be due to less number of veterinary hospitals as well as high cost of treatment. In Kolhapur area 76.00% farmers take help of from veterinary doctors, 22.00% from livestock attendant/ AI staff and 2% from local/others. Due to Kolhapur area was well developed cooperatives dairy network, available of government hospitals, veterinary doctor and assistant for treatment.

Carcass disposal pattern: The disposal patterns of carcass were satisfactory in dairy farmers of Kolhapur (81.00%), Sangli (58.00%) and Satara (50.00%) but not satisfactory in Solapur were its only 42.00% of a burial method. The findings were in disagreement with (Rathore *et al.*, 2010), reported that majority of 91.75% farmers were through the carcass as such on the ground in Churu district of Rajasthan and were as other case in Biswas (2014) [3] reported that 34.32% of farmers were leave their animal carcass as such in the open area of West Bengal.

<b>Table 1:</b> Health care management practices	followed by dairy	y farmers in four distric	cts of Western Maharashtra
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Sl. No.	Healthcare practices	Sangli (%) (n=117)	Satara (%) (n=119)	Solapur (%) (n=125)	Kolhapur (%) (n=131)	Overall (%) (N=492)
1	Daily observation for disease symptoms					
	Yes	74.00	68.00	45.33	85.33	68.17
	No	26.00	32.00	54.67	14.67	31.83
2	Seeking animal treatment mainly from					
	Veterinary doctor	54.00	52.00	44.00	76.00	56.50
	Livestock attendant/ AI staff	42.00	40.00	34.00	22.00	34.50
	Local and others	4.00	8.00	22.00	2.00	9.00
3	Veterinary medicine availability					
	Near	56.00	50.00	42.00	66.67	53.67
	Away	15.33	20.00	35.33	10.67	20.33
	Far away	28.67	30.00	22.67	22.67	26.00
4	Deworming of adult animals					
	Regularly (every 6 months)	30.00	35.33	21.33	46.00	33.17
	Sometimes (at least once/year)	45.33	40.67	30.67	36.67	38.33
	Never	24.67	24.00	48.00	17.33	28.50

	Ectoparasite eradication					
5	Yes	74.00	68.00	45.33	80.67	67.00
	No	26.00	32.00	54.67	19.33	33.00
	Vaccination for					
6	Never	25.33	22.00	45.33	20.00	28.17
	Sometimes	28.00	27.33	22.67	22.00	25.00
	Vaccinate regularly	46.67	50.67	32.00	58.00	46.83
	Vaccination practiced against					
	Foot and Mouth Disease					
	Yes	82.00	76.00	49.00	90.00	74.25
	No	18.00	24.00	51.00	10.00	25.75
	Hemorrhagic Septicemia					
	Yes	13.33	15.33	8.00	22.00	85.33
7	No	86.67	84.67	92.00	78.00	14.67
	Black Quarter					
	Yes	3.33	6.00	0.00	10.00	4.83
	No	96.67	94.00	100.00	90.00	95.17
	Tetanus					
	Yes	7.33	38.00	23.33	8.00	19.17
	No	92.67	62.00	76.67	92.00	80.83
	Carcass disposal method					
8	Dump anywhere or in the river	42.00	50.00	57.33	19.00	42.00
	Buried	58.00	50.00	42.67	81.00	58.00
9	Insurance of animals			·		
	Yes	62.00	56.00	41.33	86.67	67.00
	No	38.00	44.00	58.67	13.33	33.00

### Conclusion

As comparatively to others, the farmers of Kolhapur district adopted better scientific health management systems followed by Sangli, Satara and Solapur districts respectively. This study will provide important parameters to be considered for determining health status of livestock which can be adopted as guidelines for scientific dairy management thereby increasing production and improvement of economic status of livestock owners.

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## References

- Arora AS, Kumar A, Bardhan D, Dabas YPS. Socio-Economic and Communication Variables Associated with Level of Knowledge and Degree of Adoption of Improved Dairy Husbandry Practices in U.S. Nagar District of Uttaranchal. Indian Journal of Dairy Science 2006;59(5).
- 2. Bardhan D, Dabas YPS, Srivastava RSL. An economic analysis of milk production from indigenous cows in Udham Singh Nagar district of Uttaranchal. Indian Dairyman 2005;56:31-38.
- 3. Biswas. Dairy cattle management profile in three agroclimatic zones of West Bengal, PhD thesis in IVRI Izzatnagar, Bareilly, Uttar Pradesh, India 2014.
- 4. Khatik GL. A study on training needs of tribal dairy farmers in Rajasthan. Ph.D. Thesis (Unpub.), National Dairy Research Institute (Deemed University), Karnal, Haryana, India 1994.
- Kerlinger NF. Foundation of behavioural research. Surjit Publications. New Delhi 741.
- 6. Kokate KD, Tyagi. Factors contributing to the level of breeding gaps in cattle of tribal milieu. Mah. J. Ext. Edu. 1983, 1994;**XIII**:209-216.
- 7. Sabapara GP, Desai PM, Singh RR. Kharadi VB.

- Constrains of tribal dairy animal owners of South Gujarat. Indian Journal of Animal Science 2012;82:538-542.
- 8. Kumar S, Jain A, Gupta AK. Dtuies on breeding, health care and milking management practices adoptated by the dairy in Shahdol district of MP. International Journal of Biological Research 2012;3(10):32-36.
- 9. Shinde. Socio- economics profile of dairy farmers in Solapur district of Maharashtra state. Indian Streams Research journal. 2011; 1:86-100.
- Subba N. Dairy cattle management practices in Sikkim and scope for improvement of productivity. Thesis, Ph. D. Indian Veterinary Research Institute, Izatnagar. India 2009, 1-120.