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Studies on feeding and management practices adopted in livestock fodder camps during drought in Kaij Tahsil of Beed district

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Abstract

The present investigation was undertaken to study of feeding, management practices adopted for animal and constraints faced by owner in Livestock Fodder Camp. Five livestock fodder camp from kaij tahasil of Beed district (Maharashtra) were selected for collection of data, from each camp 40 respondents were selected i.e. total 200 respondents. The study revealed that 27.50%, 32.50%, 36.00% and 4.00% of the respondents were marginal, small, medium and large farmers respectively. Majority of livestock owners reared indigenous animal (94.50%) followed by cross breed (45.50%) and 5.00% farmer had non-descript animal. All the farmers in fodder camp provide feed and fodder as decided by state government i.e. large animals were fed with 15 kg green fodder, 6 kg dry fodder and 0.500 kg concentrates whereas small animals were fed with 7.5 kg green fodder, 3 kg dry fodder and 0.250 kg concentrates respectively. In management practices vaccination and health checking of animal were followed 100%, while cleaning and sanitation of camp and animal practiced by 91.50%. Artificial insemination technique was followed by 75.00% farmers, whereas 46.50% of respondent followed mating of animal at right time. In constrains, feeding, production, marketing, technical and health related constraints were faced by farmer in livestock fodder camp. Hence there is need to demonstrate scientific feeding and management practices, also management of fodder and water for summer season which is need for exploiting proper management of livestock.

Keywords: Feeding, management, constrains, livestock fodder camp

Introduction

Animal Husbandry and Dairying activities, along with agriculture, continue to be an integral part of human life since the process of civilization started. These activities have not only contributed to the food basket and draught animal power but also by maintaining ecological balance. Owing to conducive climate and topography, Animal Husbandry and Dairying sectors have played prominent socio-economic role in India. In Maharashtra state, the total number of livestock population is about 32.49 millions in which bovine (Cattle and Buffalo) population is about 21.07 million numbers which accounts to 65% of total livestock of Maharashtra¹. Drought can refer to “an extended period of months or years when a region notes a deficiency in its water supply whether surface or underground water, results in water shortage for vegetation, animals and human being.” Drought conditions can negatively affect agriculture, water supplies, energy production, and many other aspects of society. The impacts vary depending on the type, location, intensity, and duration of the drought. Feeding strategies during drought depend on the specific condition prevailing in any particular area. In general the farmer has to make decision based on economics, knowledge of nutrition, the availability of feed resources and his calculated guess on the length of drought. Livestock camps are the areas where the livestock are reared collectively under the control of either government or private agency to overcome the problem of drought. In India, generally livestock camps are controlled by state government. Livestock camp is the best measure to sustain in drought condition. Now a day there is severe water scarcity in Maharashtra especially in Beed, Osmanabad and Latur district of Marathwada region due to low rainfall and long interval in rainfall which resulted into very low availability of feed and fodder. By considering this situation, Govt. of Maharashtra has taken decision to provide feed and fodder in low cost for livestock of these district. For this purpose with the permission of District Collector, co-operative sugar factory, other factory, Agriculture Produce Marketing Committee, Gram Panchayat, NGOs, SHGs, etc. can open livestock fodder camp in these district.

Materials And Methodology

The data obtained for the study was collected by multistage random sampling technique. At first stage Kaij tahsil of Beed district was selected. From that five livestock fodder camp were selected namely Shree. Chatrapati Shetakari Bachat Gat, At.Adas, Swastik Group Sewabhavi Sanstha, At. Kaij, Jankalyan Bahu-uddeshiy Sewabhavi Sanstha At. Kaij, Jai Bajarangbali Gramvikas Mandal Krushnapur Sanchalit At. Koregao and Renuka Mata Krishi Vikas Pratisthan, Devgao Sanchalit At. Narewadi, Tq. Kaij, Dist. Beed. Forty numbers of farmers were randomly selected from each livestock fodder camp. Thus, the total sample size comprised of 200 farmers. The data in respect of enumeration of breed, existing feeding, management practices of cattle and constrains faced by farmer in camp by personal interview method from the well designed and pre-tested schedules.

Results

Socio-economic status of farmer

A) Distribution of farmers according to size of farm

It is observed from table 1 that, 27.50 percent of the respondents were marginal farmers, 32.50 percent of the respondents were small farmers, 36.00 percent of the respondents were medium farmers, 4.00 percent of the respondents were large farmers while 0.00 percent of the respondents landless labourers.

B) Distribution of farmers according to social class

It is observed from table 2 that, 29.50 percent of respondents were from Open category, 15.50 percent from OBC category, 6.50 percent from VJNT category, 0.50 percent from NT (B) category, 15.00 percent from NT (C) category, 20.00 percent from NT (D) category, 3.50 percent from ST category and 1.00 percent from SBC category.

C) Distribution of farmers according to Types of Animal

It is observed from table 3 that 94.50 percent of the farmers having indigenous animals there was no exotic animal present in camp. 45.50 percent respondents had cross breed animals, while 05.00 percent of respondents possessed non-descript animals, respectively on livestock fodder camp.

Adoption of feeding practices

Survey revealed that all the farmers provide feed and fodder as decided by state government. In the fodder camp large animals were fed with 15 kg green fodder, 6 kg dry fodder and 0.500 kg concentrates whereas, small animals were fed with 7.5 kg green fodder, 3 kg dry fodder and 0.250 kg concentrates respectively.

Management practices adopted by farmer in livestock fodder camp

It is observed from table 5 that, vaccination and health checking of animal were followed 100 percent in all categories of respondents. While cleaning and sanitation of camp and animal practiced by 91.50 percent, no respondent had made livestock insurance in camp. Artificial insemination technique was followed by 75.00 percent in marginal, small, medium and large farmers whereas, 46.50 percent of respondent followed mating of animal at right time.

Constrains faced by farmer in livestock fodder camp

From table 6 it is observed that, the majority problems faced by farmers were inadequate availability of the green fodder (100.00). This was more in case of all farmers in Livestock Fodder Camp. Whereas use of antibiotics and mineral mixture in feed i.e. 18.00 percent and 13.50 percent respondent respectively. Other constrains (76.50 percent) like insufficient amount of concentrate for milking animal and due to non availability of grazing land animal not got proper exercise so it increase the fear of dullness in animal. In case of production and marketing constraints, while 81.50 percent faced the problems of irregular milking of the cattle and buffalo. Whereas 67.00 percent of respondents faced problem of long dry spell in animal. 90.50 percent respondents faced the problem of low rate of milking. As the summer temperature is higher, 77.00 percent of respondent faced the problem of comfortless in summer season. In case of technical constraints, there was no problem in availability of Veterinary Aids because of weekly visit of veterinary Doctor in each Livestock fodder camp. 62.50 percent of respondent had problem in Artificial Insemination; there was non availability of improved feed material in livestock fodder camp all (100.00 percent) respondent had problem of improved feed material. 62.00 percent of the farmers have lack of knowledge about sterilization and hygienic condition of camp. The problem of availability of labour was faced by 42.50 percent respondents. Because of unhygienic condition in camp 39.00 percent of respondent had fear about spread of disease in camp. In case of Health related constraints 5.00 percent of respondent's animals had suffered from disease, whereas 88.50 percent of respondent didn't clean or filter the water which is used for drinking of animal. There is no problem of disposal of dung because dung was collected by livestock fodder camp owner for their own use or to handover to the Government. 92.00 percent of respondents did not use any method to maintain body temperature of their animals.

Table 1: Distribution of the farmers according to size of farm (N=200)

S. No	Category	B ₁	B ₂	B ₃	B ₄	B ₅	Total	Percent
1	Marginal farmers (up to 1 ha)	11	06	16	14	08	55	27.50
2	Small farmers (1 to 2 ha)	09	17	09	11	19	65	32.50
3	Medium farmers (2 to 10 ha)	19	17	13	10	13	72	36.00
4	Large farmers (more than 10 ha)	01	-	02	05	-	08	04.00
5	Landless labourers	-	-	-	-	-	-	-
	Total	40	40	40	40	40	200	100

Table 2: Distribution of farmers according to social class (N=200)

S. No	Particular	Marginal farmer	Small farmer	Medium farmer	Large Farmer	Percent
1.	Open	14 (25.45)	19 (29.23)	24 (33.33)	02 (25.00)	29.50
2.	OBC	07 (12.72)	14 (21.53)	09 (12.50)	01 (12.50)	15.50
3.	VJNT	04 (07.27)	03 (04.61)	06 (08.33)	-	06.50
4.	NT(B)	-	-	01 (01.38)	-	00.50
5.	NT(C)	09 (16.36)	06 (09.23)	14 (19.44)	01 (12.50)	15.00
6.	NT(D)	11 (20.00)	16 (24.61)	10 (13.88)	03 (37.50)	20.00
7.	SC	07 (12.72)	06 (09.23)	03 (04.16)	01 (12.50)	08.50
8.	ST	02 (03.63)	01 (01.53)	04 (05.55)	-	03.50
9.	SBC	01 (01.81)	-	01 (01.38)	-	01.00

(Figures in parenthesis shows percentage of respective farmers)

Table 3: Distribution of farmers according to Types of Animal (N=200)

S. No.	Component	Marginal Farmer	Small Farmer	Medium Farmer	Large Farmer	Percent
1.	Indigenous	53 (96.36)	60 (92.31)	69 (95.83)	07 (87.50)	94.50
2.	Exotic	-	-	-	-	-
3.	Cross Breed	19 (34.54)	27 (41.54)	40 (55.56)	05 (62.50)	45.50
4.	Non-descript	04 (7.27)	01 (1.54)	05 (6.94)	-	05.00

(Figures in parenthesis shows percentage of respective farmers)

Table 4: Feed and Fodder provided by farmer in livestock fodder camp

S. No	Feed	Large animal	Small animal
1.	Green fodder (kg.)	15	7.50
2.	Dry fodder (kg.)	6	3
3.	Concentrate (kg.)	0.500	0.250
4.	Other (kg.)	0	0

Table 5: Management practices adopted by farmer in livestock fodder camp (N=200)

S. No	Component	Marginal Farmer	Small Farmer	Medium Farmer	Large Farmer	Percent
1.	Sanitation of Camp and Animal	52 (94.54)	56 (81.15)	68 (94.44)	07 (87.50)	91.50
2.	Insurance of livestock	00 (00.00)	00 (00.00)	00 (00.00)	00 (00.00)	00.00
3.	Vaccination schedule followed	55 (100)	65 (100)	72 (100)	08 (100)	100.00
4.	Use of artificial insemination	46 (83.64)	51 (78.46)	47 (62.23)	06 (75.00)	75.00
5.	Mating at right time	27 (49.09)	29 (44.62)	33 (45.83)	04 (50.00)	46.50
6.	Health checking of animal	55 (100)	65 (100)	72 (100)	08 (100)	100.00

(Figures in parenthesis shows percentage of respective farmers)

Table 6: Constrains faced by farmer in livestock fodder camp (N =200)

S. No	Component	Marginal Farmer	Small Farmer	Medium Farmer	Large Farmer	Percent
A.	Feeding Constraints					
1.	Availability of ample quantity of Green fodder	55 (100)	65 (100)	72 (100)	08 (100)	100.00
2.	Use of feeding antibiotics of calf feed	11 (20)	14 (21.54)	08 (11.11)	03 (37.50)	18.00
3.	Use of mineral mixture in feed	07 (12.72)	04 (6.15)	14 (19.44)	02 (25)	13.50
4.	Other	46 (83.63)	52 (80)	48 (66.66)	07 (87.5)	76.50
B.	Production And Marketing Constraints					
5.	Irregular milking	45 (81.82)	54 (83.08)	60 (83.33)	04 (50.00)	81.5
6.	Long dry spell of animals	39 (70.91)	41 (63.08)	51 (70.83)	03 (37.50)	67.00
7.	Low rate of milk	53 (96.36)	58 (89.23)	62 (86.11)	08 (100)	90.50
8.	Comfortness of animal in summer season	49 (89.09)	53 (81.54)	47 (65.28)	05 (62.50)	77.00
9.	Other	32 (58.18)	26 (40.00)	32 (44.44)	02 (25.00)	46.00
C.	Technical Constraints					
10.	Availability of veterinary aids	-	-	-	-	-
11.	Artificial insemination	40 (72.73)	44 (67.89)	37 (51.39)	04 (50.00)	62.50
12.	Availability of improved feed material	55 (100.00)	65 (100.00)	72 (100.00)	08 (100.00)	100.00
13.	Knowledge about sterilization, hygienic condition in camp	36 (65.45)	48 (73.85)	33 (45.83)	07 (87.50)	62.00
14.	Availability of labour for management practices	32 (58.18)	22 (33.85)	29 (40.28)	02 (25.00)	42.50
15.	Other	16 (29.09)	26 (40.00)	33 (45.83)	03 (37.50)	39.00
D.	Health Related Constrains					
16.	Occurrence of disease in animal	03 (5.45)	02 (3.07)	05 (6.94)	0 (00.00)	05.00

17.	Cleaning / filtration of water	44 (80.00)	57 (87.69)	69 (95.83)	07 (87.50)	88.50
18.	Proper disposal of dung	-	-	-	-	-
19.	Maintenance of animal body temperature	51 (92.73)	57 (87.69)	70 (97.22)	06 (75.00)	92.00
20.	Other	5 (9.09)	03 (4.62)	9 (12.50)	04 (50.00)	10.50

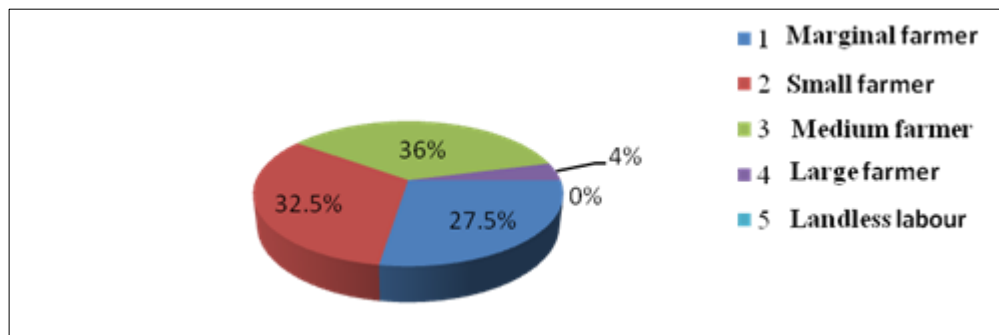


Fig 1: Percent share of farmers according to size of farm

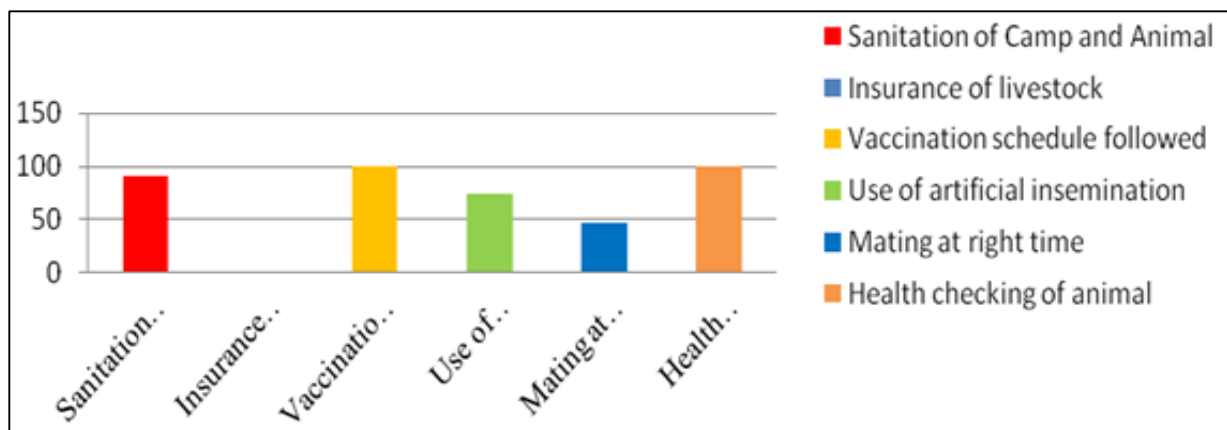


Fig 2: Percent share of farmers according to management practices adopted

Discussion

Singh *et al.* [2] reported similar results for green fodder. Patange *et al.* [3] and Bainwad *et al.* [4] reported that maximum 6.00 kg and 5.22 kg dry fodder were supplied during summer season.

Conclusion

Stall feeding was adopted as method of feeding due to non availability of grazing land in livestock fodder camp by all respondents. There were very less numbers of farmer who use of antibiotics and mineral mixture in feed. There is no problem in availability of Veterinary Aids and regular health checking because of weekly visit of veterinary Doctor in each Livestock fodder camp. All the farmers were provided feed and fodder as decided by Government of Maharashtra but it was not sufficient. Lack of adoption of scientific feeding and management practices by livestock owners were observed in livestock fodder camps.

Hence it may be concluded that there is need to demonstrate scientific feeding and management practices, also management of fodder and water for summer season which is need for exploiting optimum production and proper management of livestock.

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