Knowledge Level of Farmers about Improved Dairy Management Practices.

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ABSTRACT

The 38.18 per cent of respondents were belonged to middle age group. Majority of respondents (72.73 %) had medium family size. All respondents were having agriculture and dairy occupation as primary and secondary occupation respectively. Majority of respondents (84.54 %) obtained annual income more than Rs. 10,000/- from dairying. The study has revealed that almost all the respondents had complete knowledge about heat symptoms and its detection, insemination, management during and after parturition, foot and mouth disease. Majority of farmers have complete knowledge about feeding management for nourishment- 1/16 of body weight (92.73%), for milk Production- ½ of milk production(94.55 %), disease management anthrax (Kalpuli)- anthrax vaccine and Hemorrhagic Septicemia (Ghatsarpa) - alum ppt. HS vaccine (94.55 %), Black Quarter (farrya)- alum ppt. BQ vaccine(82.72 %). The negatively significant relationship was observed between age of farmers and their Knowledge level. The education and occupation of the farmers was highly significant with Knowledge level. The significant relationship was observed between size of family, land holding, source of irrigation and annual income of the farmer with their adoption level of dairy management practices. All the respondents focused the constraints lack of high cost of milch cattle, unavailability of true to type hybrid and local breeds, lack of guidance about preparation and use of value added feeds. Large majority of respondents faced the constraints of high market rates of concentrate feeds (90.00 %) and unauthentic insemination straw (79.09 %).

Key words: *Knowledge level; Improved dairy management practices; Constraints.*

The highest milk producer in the entire globe – India boasts of that status. India is otherwise known as the 'Oyster' of the global dairy industry, with opportunities galore to the entrepreneurs globally. Anyone might want to capitalize on the largest and fastest growing milk and milk products' market. The dairy industry in India has been witnessing rapid growth. The liberalized economy provides more opportunities for MNCs and foreign investors to release the full potential of this industry. .The Indian dairy industry has aimed at better mananamegemt of the national resources to enhance milk production and upgrade milk processing involving new innovative technologies. Multinational dairy giants can also make their foray in the Indian dairy market in this challenging scenario and create a win-win situation for both. Hence , This study was undertaken with following objectives 1.To study the socio-economic characteristics of respondents. 2. To study the knowledge of dairy management practices followed by the respondents.3.To show the relationships between Knowledge level with the socio-economic characteristics of respondents. 4. To study the constraints faced by the respondents in dairy management.

METHODOLOGY

The study was conducted in Radhanagri, Hatkanangale and Bhudargarh tahsil of College Development Block. In all 11 villages from College

Table 1
Socio-economics characteristics of respondents.

Sr. No.	Characteristics	No. of respondents (N=110)	Percentage
1.	**Age**		
	i. Young (up to 35 years)	30	27.27
	ii. Middle (36-55 years)	42	38.18
	iii. Old (56 & above)	38	34.55
2.	**Education**		
	i.Illiterate	11	10.00
	ii.Primary	21	19.09
	iii.Secondary & Higher secondary	68	61.82
	iv.Degree & above	10	09.09
3.	**Family size**		
	i.Small (up to 5 members)	10	09.09
	ii Medium (6-9 members)	80	72.73
	iii. Big (more than 9 members)	20	18.18

Table Count.

4.	**Occupation** a) Main i. Agriculture ii. Service	 110 --	 100.00 --
	b) Secondary Dairy Service	 110 --	 100.00 --
5.	**Land** i. Less than 1.00 ha. ii. 1.01 – 2.00 ha. iii. More than 2.01 ha.	 32 46 32	 29.09 41.82 29.09
6.	**Sources of irrigation** i. Well ii. Bore well iii. River iv. Canal	 50 52 34 02	 45.45 47.27 30.91 01.82
7.	**Annual income from dairy** i. Less than Rs. 5,000/- ii. Rs. 5,001/- to Rs. 10,000 /- iii. More than Rs. 10,001/-	 03 14 93	 02.73 12.73 84.54

Development Block were selected randomly. From these selected villages, 10 respondents from each village were selected randomly.

Socio-economic characteristics :

It is revealed from Table.1 that about 38.18 per cent of respondents were belonged to middle age group followed by old age group (34.55%). Regarding education 61.82 per cent of respondents were educated up to higher secondary and the same per cent of respondents were from joint families. Majority of respondents (72.73%) had medium family size. It is observed from table that all respondents were having agriculture and dairy occupation as primary and secondary occupation respectively. About 41.82 per cent of respondents were having land holding in between 1.01 to 2.00 ha and well and bore wells as major source of irrigation. Majority of respondents (84.54%) obtained annual income more than Rs.

Table 2

Distribution of farmers according to their knowledge of dairy management practices.

Sr. No.	Dairy management practices	Knowledge (N=110)		
		Complete (%)	Partial (%)	No (%)
1.	**Housing/ barn**			
	i. Place-high, ample aeration, Sunlight	110 (100.00)	--	--
	ii. Manger-concrete	110 (100.00)	--	--
	iii. Space- 60-70ft^2/animal	89 (80.91)	21 (19.09)	--
2.	**Feeding management**			
	i. For nourishment- 1/16 of body weight	102 (92.73)	08 (07.27)	--
	ii. For milk production - ½ of milk production	104 (94.55)	06 (05.45)	--
	iii. Drinking water - 60-70 lit / day	110 (100.00)	--	--
3.	**Disease management**			
	i. .Anthrax *(Kalpuli)*- Anthrax vaccine	104 (94.55)	06 (05.45)	--
	ii. Black quarter *(farrya)*- alum ppt. BQ vaccine	91 (82.72)	19(17.28)	--
	iii. Hemorrhagic septicemia (*Ghatsarpa)*- alum ppt. HS vaccine	104 (94.55)	06 (05.45)	--
	iv. Mastitis *(Standah)*- Infusion with antibiotics	98 (89.09)	12 (10.91)	--
	v. Rinderpest *(Bulkandya)* - Tissue culture rinder pest vaccine	110 (100.00)	--	--
	i. Foot mouth disease Oxytetracyclin inj. & $KMnO_4$ 1 % washing	49 (44.54)	34 (30.91)	27 (24.55)

Table Count.

4.	**Management during and after parturition**			
	i. Expulsion of placenta - in to 12 hrs after parturition	110 (100.00)	--	--
	ii. Washing – Hind body, disinfectant, warm water	110 (100.00)	--	--
	iii. Feeding Feed concentrate and mineral mixture	110 (100.00)	--	--
	iv. Milking in ½ hr. after parturition	110 (100.00)	--	--
5.	**Breeding**			
	A) Heat symptoms and detection			
	i. Frequent urination	110 (100.00)	--	--
	ii. Restlessness/ Bellowing	110 (100.00)	--	--
	iii. Swelling of vulva	110 (100.00)	--	--
	iv. Attempt to mount other animals	110 (100.00)	--	--
	v. Clear shine discharge	110 (100.00)	--	--
	B) Insemination			
	i. Natural	110 (100.00)	--	--
	ii. Artificial	110 (100.00)	--	--
	C) Period for insemination			
	i. 12-16 hours in heat	110 (100.00)	--	--

Figures in parentheses indicate percentages

10,000/- from dairying.

Knowledge level of respondents about dairy management practices.

Knowledge : The data from the Table 2 revealed that almost all the respondents had complete knowledge about heat symptoms and its detection, insemination, management during and after parturition, foot and mouth diseases. Majority of farmers were having complete knowledge about feeding management for nourishment- 1/16 of body weight (92.73 %), for Milk Production- ½ of milk production (94.55 %), disease management Anthrax (Kalpuli) - Anthrax vaccine and Hemorrhagic Septicemia (Ghatsarpa) - alum ppt. HS vaccine (94.55 per cent), Black Quarter (farrya)- alum ppt. BQ vaccine(82.72 %).

Relationship between knowledge with the socio-economic characteristics of respondents.

Table 3

Relationship between socio-economic characteristics of dairy farmers and with their of knowledge about dairy management practices.

Sr. No.	Independent variables	Correlation coefficient (r)
1.	Age	-0.534**
2.	Education	0.740**
3.	Size of family	0.451**
4.	Occupation	0.725**
5.	Land holding	0.547**
6.	Source of irrigation	0.482**
7.	Annual income	0.544**

***Significant at 0.01 level of probability*

Constraints :

It is revealed from Table 4 that all the respondents focused the constraints of lack of high cost of milch cattle, unavailability of true to type hybrid and local breeds, lack of guidance about preparation and use of value added feeds. Large majority of respondents faced the constraints of high market rates of concentrate feeds (90.00 per cent) and unauthentic insemination straw (79.09 per cent).

Table 4

Distribution of respondents according to constraints faced by them

Sr. No.	Constraints	No. of Respondents (N= 110)	Percentage
1	High cost of milch cattle	110	100.00
2	Unavailability of true to type hybrid and local breeds	110	100.00
3	Lack of guidance about preparation and use of value added feeds	110	100.00
4	High market rates of concentrate feeds	99	90.00
5	Unauthentic insemination straw	87	79.09

CONCLUSION

The 38.18 per cent of respondents were belonged to middle age group . .Majority of respondents (72.73 %) had medium family size. It was observed that all respondents were having agriculture and dairy occupation as primary and secondary occupation respectively. Majority of respondents (84.54 %) obtained income more than Rs. 10,000/- from dairying. The data revealed that almost all the respondents had complete knowledge about heat symptoms and its detection, insemination, management during and after parturition, foot and mouth diseases. Majority of farmers had complete knowledge about feeding management for nourishment- 1/16 of body weight (92.73%), for milk production- ½ of milk production (94.55%), disease management Anthrax (Kalpuli)- Anthrax vaccine and Hemorrhagic Septicemia (Ghatsarpa)- alum ppt. HS vaccine (94.55%), Black Quarter (farrya)- alum ppt. BQ vaccine(82.72 per

cent). The negatively significant relationship was observed between age of farmer and their Knowledge level. The education and occupation of the farmers were highly significant with knowledge level. The significant relationship was observed between Size of family, land holding, source of irrigation and annual income of the farmer with their knowledge about dairy

Paper received on : May 27, 2013
Accepted on : September 17, 2013

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