

“Adoption of Dairy Management Practices by Dairy Entrepreneurs of Self Help Group”

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ABSTRACT: A study on Adoption of dairy management practices by dairy entrepreneurs of self help group in Akola district of Maharashtra was undertaken during 2013-14. Sample consisted of 100 dairy entrepreneurs of self help group member selected proportionately from randomly selected from Akola district. The investigation was carried out in Akola Panchayat Samiti of Akola district with the objectives To study the adoption of improved dairy management practices by dairy entrepreneurs of self help groups and to study the relationship between selected characteristics of dairy entrepreneurs of self help groups and adoption of dairy management practices. Majority of respondents were adopted cleaning and sanitation of milk can (95.00%) and washing hind region before milking (95.00%) followed by washing hands before milking (90.00%). sprinkling water on body of buffalo in summer season (85.00%), providing clean and fresh drinking water (75.00%). The majority of respondents (70 .00%) had adopted keeping watch on estrous cycle and heat symptoms of buffalos or cow, feeding colostrum to newly born calf within half an hour of birth (60.00%). The fifty percent respondents were construction of shade in North South direction (58.00%). Majority of respondent did not adopt the important practices like, artificial insemination (100.00%), separate shed for milking (100.00%), and practicing full hand method of milking (100.00%). Results of the relational analysis revealed that age, education, annual income, herd size, experience in dairying, economic motivation and information sources were significantly associated with Adoption of dairy entrepreneurs.

Keywords: Adoption, Dairy Management Practices.

INTRODUCTION

Dairying is promising enterprise as far as its potential and prospects in India are concerned. Dairy development in India is the basic strategy for eradicating the rural poverty and bringing the rural poor above poverty line. The main thrust of dairy development is to provide opportunities and generate more income for the betterment of weaker section in the society in particular and to improve the nutritional standard of human beings by providing milk to consumers in general. Dairy is an instrument of changing the life style of rural households. It provides rural people employment throughout the year.

METHODOLOGY

The present study is based on the ‘Exploratory research Design’ of the social research. The Swarnajayanti Gramswarojgar Yojana was under implementation in all seven Panchayat Samiti of Akola District Out of these, Akola Panchayat Samiti was purposively select on the basis of larger number of dairy entrepreneurs of SHG’s in the Akola

Panchayat Samiti. Out of 196 villages 10 villages were identified by contacting DRDA and Extension Officer (SGSY) of Akola Panchayat Samiti., from the selected 10 villages having 13 SHGs, Thus, 100 dairy entrepreneurs of SHG’s having minimum milch animal constituted the sample respondents.

For measurement of adoption of dairy management practices such as breeding management, health management, general management and milk management practices were considered for this purpose. The score was given in three point continuums such as 2, 1 and 0 for complete adoption, partial adoption and no adoption respectively. The maximum and minimum score ranged between 44 and 0, respectively. The adoption score was converted into adoption index with the help of formula as below. The respondents on the basis of Adoption index were categorized by using (Mean ± 1 S.D.) Viz- Low (Up to 42.32), Medium (42.33 to 70), High (Above 70).

$$\text{Adoption index} = \frac{\text{Actual obtained adoption score}}{\text{Maximum obtainable score}} \times 100$$

RESULTS AND DISCUSSION

In order to ascertain the adoption of dairy management practices disseminated through SHG's distribution of the dairy entrepreneurs to their adoption of different dairy management practices have been furnished in Table 1.

A critical look at the table 19 revealed that in the breeding management, a majority of respondents (70.00%) adopted keeping watch on estrous cycle and heat symptoms of animal and 30.00 per cent respondent had partially adopted.

There was non-adoption of artificial insemination practice due to lack of knowledge, lack of veterinary facilities and long distance of artificial insemination centre in village.

In feeding management, the feeding colostrums to newly born calf within half an hour of birth was completely adopted by 60.00 per cent of respondents whereas partial adoption was amongst 30.00 per cent of respondents. The quantity of colostrum to be feed to newly born calf was completely adopted by 45.00 per cent of respondents and 40.00 per cent and 15.00 per cent respondents had respectively non adopted and partially adoption this practice. The feeding to pregnant animal was completely adopted by 50.00 per cent of respondents whereas 24.00 per cent respondents each had partial adoption and non adoption (26.00%) of this practice due to high cost of feeds and concentrate. There were 23.00 per cent of respondents who had complete adoption of feeding

Table 1
Distribution of respondents according to the adoption of different dairy management practices

Sr. No.	Particulars	CA	PA	NA
A)	Breeding			
1.	Keeping watch on estrous cycle and heat symptoms of cow/buffalo	70	30	00
2.	Practicing A.I. at proper time of heat (2 month after calving)	00	00	100
B)	Feeding			
3.	Feeding colostrums to newly born calf within half an hour of birth	60	30	10
4.	Quantity of colostrums (1/10 of body weight)	45	15	40
5.	Feeding of pregnant animal (12 to 15 kg green fodder, 5 to 6 kg dry fodder, 1 to 1.5 kg concentrate mixture)	50	24	26
6.	Feeding green fodder (15 to 20 kg.)	23	44	33
7.	Feeding dry fodder (5 to 6 kg.)	53	34	13
8.	Feeding of cow/buffalo 1 st four days after calving (2 kg bhusa, 1.5 kg jaggary, 5 kg green fodder, 5 kg dry fodder)	50	17	23
B)	Health			
9.	Practicing vaccination timely and regularly against the contagious diseases like HS, BQ & FMD	27	23	50
10.	Separating the diseased animals suffering from contagious diseases	20	12	68
C)	Milk			
11.	Washing hands before milking	65	23	12
12.	Washing of hind region before milking	95	00	05
13.	Practicing full hand method of milking	00	00	100
14.	Cleaning and Sanitation of milk can	95	05	00
D)	General			
15.	Construction of shed in North-South direction	53	00	47
16.	Providing clean and fresh drinking water to the animals	75	25	00
17.	Separate shed for milking	00	00	100
18.	Sprinkle water on body of cow/buffalo in summer season	85	15	00
E)	Record maintaining			
19.	Milk production record	40	00	60
20.	Animal health record	40	00	60
21.	Expenditure record	40	00	60
22.	Removing of hair of buffalo in one month	77	13	10

CA - Complete adoption PA - Partial adoption NA - Non adoption

of green fodder and 44.00 per cent had partial adoption. Over half of respondents (53.00%) had complete adoption of feeding of dry fodder and 34.00 per cent had partial adoption.

In health management, 27.00 per cent of respondents had complete adoption of practicing vaccination timely and regularly against the contagious diseases like HS, BQ & FMD vaccination of buffalo and 23.00 per cent had partial adoption. 20.00 per cent of respondents had complete adoption of separating the diseased animals suffering from contagious diseases and 12.00 per cent had partial adoption.

In milk management, washing of hind region before milking for clean milk production was adopted by 95.00 per cent of respondents. There were 65.00 per cent of respondents who had complete adoption of washing of hands before milking and 23.00 per cent of respondents had partial adoption. There was non-adoption of respondents practicing full hand method of milking. There were 95.00 per cent of respondents who had complete adoption of cleaning and sanitation of milk can.

Adoption level

The data with regards to the distribution of respondents according to their adoption level have been presented in Table 2.

Table 2
Distribution of respondents according to the adoption level

Sr. No.	Category	Respondent n=100	
		Frequency	Percentage
1	Low	19	19.00
2	Medium	57	57.00
3	High	24	24.00
	Total	100	100.00

It is seen that Table 2, that more than half of the respondents had medium level of adoption of dairy management practices (57.00%). While 24.00 per cent of the respondents had reported high level of adoption, with less than one fourth (19.00%) of the respondents showing low level of adoption of dairy management practices.

These finding clearly indicated that majority of dairy entrepreneurs were mediocre in adoption of dairy management practices. The findings are any conformity with the finding of Sharma and Intodia (1991) [1] and Chugh and Chand (1996) [2] who observed that majority of livestock keeper were in medium adoption category dairy management practices.

These findings are in accordance with the result reported by Narayan and Reddy (1992) [3], Kulkarni *et al.* (1990) [4], Ghurde (1997) and Korde (2004) [5] who reported that majority of the dairy entrepreneurs had medium level of adoption of dairy management practices.

Relationship between selected characteristics of self help groups and adoption of dairy management practices

The correlation analysis of adoption with personal, socio-economic, communication and psychological characteristics of the respondents have been furnished in the Table 3.

Table 3
Coefficient of correlation of characteristics of respondents with their adoption

Sr. No.	Variable	'r' Value
1.	Age	0.241*
2.	Education	0.214*
3.	Occupation	0.083 NS
4.	Land holding	0.014 NS
5.	Annual income	0.206*
6.	Herd size	0.204*
7.	Training received	0.118 NS
7.	Experience in dairying	0.201*
8.	Economic motivation	0.200*
9.	Marketing orientation	-0.138 NS
10.	Information sources	-0.210*
11.	Infrastructure facilities	0.136 NS
12.	Risk preference	-0.076 NS

** Significant at 0.01 level of probability

* Significant at 0.05 level of probability

NS - Non Significant

The perusal of the data displayed in Table 3. clearly indicates that selected characteristics of dairy entrepreneurs of self help group, viz., age, education, annual income, herd size, experience in dairying and economic motivation have positively significant relationship at 0.05 level of probability. Hence, the null hypothesis was rejected for these characteristics and concluded that these characteristics were correlated with adoption of dairy management practices.

Thus, an information source of dairy entrepreneurs was found to have negative and significant relationship with adoption of dairy management practices. It may be due to reasons that when a dairy entrepreneurs is exposed to different information source like radio, TV, printed materials and other medium of mass communications, his knowledge level may increase, which makes him to

have better understanding about the improved dairy management practices resulting in more adoption of these improved dairy management practices

Further, remaining characteristics of dairy entrepreneurs of self help group such as land holding, occupation, training received, market orientation, infrastructure facilities, and risk preference did not establish significant relationship with their adoption of dairy management practices. Hence, the null hypothesis was accepted with respect to these characteristics and concluded that these characteristics were not correlated with adoption of dairy management practices.

CONCLUSIONS

Majority of respondents were adopted cleaning and sanitation of milk can (95.00%) and washing hind region before milking (95.00%) followed by washing hands before milking (90.00%). sprinkling water on body of buffalo in summer season (85.00%), providing clean and fresh drinking water (75.00%). The majority of respondents (70.00%) had adopted keeping watch on estrous cycle and heat symptoms of buffalos or

cow, feeding colostrum to newly born calf within half an hour of birth (60.00%). More than half of the respondents were construction of shade in North South direction (58.00%). The finding of relational analysis revealed that out of 13 characteristics, 7 variables found to have significant correlation adoption of dairy management practices. Among the significant characteristics to age, education, herd size, annual income, experience in dairying, information sources and economic motivation. Were correlated at 0.05 level of significance. The null hypothesis was, therefore, rejected for these variables. The variables namely, land holding, occupation, training received, market orientation, infrastructure facilities, and risk preference did not show any significant correlation with adoption.

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